

Encyclopedia *of*
Recorded Sound

Second Edition

Volume 1

A-L

Edited by

Frank Hoffmann

MUSIC / REFERENCE

The *Encyclopedia of Recorded Sound* covers the entire history of recorded sound, providing a research tool of unusual depth and breadth. Over 3,000 entries make up this comprehensive A-Z guide, including information on audio companies, genres, inventions, media executives, record labels and personalities, recording artists, sound engineers, and technical terms. From Edison cylinders to MP3s, from ABBA to Zappa, the second edition of this book updates and expands significantly on the first edition. Short, informational entries run alongside substantial original articles by important scholars in the field of sound recording. Drawing on a panel of experts, this research tool brings together a wealth of information for both student and specialist. The encyclopedia includes over 350 illustrations, a complete reference bibliography, and an extensive index.

ABOUT THE EDITORS

Frank Hoffmann is Professor of Library Science at Sam Houston State University in Huntsville, Texas. He has written dozens of articles and over 35 books, including *Popular American Recording Pioneers: 1895-1925* with Tim Gracyk and the CHOICE book award winner *The Literature of Rock* with B. Lee Cooper.

Howard Ferstler, Technical Editor, received his training in electronics courtesy of the United States Air Force. He worked for 35 years in the Florida State University library system. He is the author of *High Fidelity Audio-Video Systems*, *High Definition Compact Disc Recordings*, *The Home Theater Companion*, and *The Digital Audio Music List*. He is currently a columnist and reviewer for the audio magazine *The Sensible Sound*.

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Contents

Advisory Board *vii*

Acknowledgments *ix*

Introduction *xi*

The Encyclopedia *1*

Bibliography and Key to Citations *1219*

Contributors *1241*

Index *1245*

Advisory Board

B. Lee Cooper is Provost and Vice President for Academic Affairs at Newman University in Wichita, Kansas. He is the author of *Rock Music in American Popular Culture* (three volumes: 1995, 1997, 1999) and ten other books on teaching with contemporary sound recordings. Dr. Cooper received the ASCAP-Deems Taylor Award for Music Research Excellence in 1983. He is completing work on *The Popular Music Teaching Handbook*, which is to be published by the Greenwood Group.

Martin Elste, Curator, Musikinstrumenten-Museum, Staatliches Institut für Musikforschung PK, Berlin, is the author of, among many other books and articles, *Kleines Tonträger-Lexikon*, *Modern Harpsichord Music: A Discography*, and *Meilensteine der Bach-Interpretation 1750–2000*, which won the ARSC Award for Excellence in Historical Recorded Sound Research in 2001. Having been a record reviewer for *Die Zeit*, *Fono Forum*, *Klassik heute*, and *Fanfare*, he has served on the panel of the German Record Critics' Award since 1983 and was elected president in 2000.

Howard Ferstler, who received his electronic training courtesy of the USAF, is a retired Library Technical Assistant for Florida State University. He

is the author of *High Fidelity Audio-Video Systems*, *High Definition Compact Disc Recordings*, *The Home Theater Companion*, and *The Digital Audio Music List*. Over the years, Mr. Ferstler has contributed articles to *High Fidelity*, *Stereo Review*, *Audio*, *The Audiophile Voice*, *Consumer Guide*, *The American Record Guide*, and *Fanfare* and is currently a columnist, product reviewer, and record reviewer for the audio magazine *The Sensible Sound*.

Allen Koenigsberg teaches Ancient History and Classics at Brooklyn College in New York City and is the author of *Edison Cylinder Records, 1889–1912* and *The Patent History of the Phonograph*. For many years, he was the editor and publisher of *The Antique Phonograph Monthly*. His research website is located at www.phonobooks.com.

Kurt Nauck is the owner of Nauck's Vintage Records in Spring, Texas (www.78rpm.com) and author of the *American Record Label Image Encyclopedia*.

William Schurk is a Professor and Sound Recordings Archivist at Jerome Library, Bowling Green State University, Bowling Green, Ohio.

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INTRODUCTION

the labels have contributed to the problem by failing to adapt to the new technologies as well as adhering to unnecessarily exorbitant pricing policies.

The first edition of the *Encyclopedia of Recorded Sound in the United States* (Garland, 1993) attempted to document the rich breadth of record sound history by means of alphabetically arranged topics encompassing the key individuals, entities, and concepts of the field. Despite positive feedback from many quarters—scholars, librarians, reviewers, and recorded sound enthusiasts—the work was not without its weaknesses; most notably, a coverage bias for the pre-World War II period. For instance, the inclusion of entries for virtually all known recording artists for U.S. companies during the acoustic era (roughly 1890–1925) set a precedent that was virtually impossible to maintain given the proliferation of recording activity and grassroots independent labels following World War II. Furthermore, the first edition tended to focus on classical or European-derived art music, supplemented by a somewhat uneven coverage of jazz and other pop styles.

This second edition has attempted to redress these imbalances, presenting—in an objective mode—important information from all time periods and recorded sound genres and formats. New entries comprise more than sixty percent of the text; in addition, all entries retained from the first edition have been revised in some manner, including correcting and updating data. The second edition also includes illustrations; although not exhaustive in scope (i.e., supplementing each entry), they have

been selected to provide a representative cross-section of images (e.g., record label art, album cover art, photographs of key industry figures and artists, etc.) pertinent to recorded sound history. Another reflection of technological developments since the mid-1990s has been the inclusion of web site addresses for record companies and manufacturers; however, URLs (both official and fan-based) for performers have been omitted due both to the large numbers (easily located via web browsers) and rapid turnover of such sites.

The entries in this work are tied together by one feature: they all relate, in some manner, to recorded sound history in the United States. They include industry figures and scientists, record companies, manufacturers of audio equipment and software, relevant terms and issues, and notable recording artists spanning all genres, not only art music and the full spectrum of popular and ethnic styles, but spoken word, novelty, and documentary material. While the emphasis is on the recordings produced by these artists, key biographical details and summaries of their performing careers are also provided.

The time frame ranges from the earliest technological developments of the medium—including the experiments of Edison, Berliner, and other nineteenth-century inventors—to recent recording industry concerns such as the online transfer of music files, digital piracy, censorship, and the decline of brick-and-mortar retail outlets. Although the focus is on the United States, the impact of international personalities, organizations, and trends upon the domestic scene is also covered.

Introduction

The rich legacy of the recorded sound medium belies the fact that it has only been a little more than a century since Thomas Edison's famous recital of "Mary Had a Little Lamb" onto a primitive tinfoil cylinder in late 1877. Until Edison began utilizing solid-wax cylinders—which enabled recordings to survive multiple playbacks—their commercial potential remained severely limited. As a result, the first phonograph parlors—the earliest manifestation of the modern-day jukebox—opened in San Francisco in mid-1889. In early 1892, commercial recordings—produced by Edison's North American Phonograph Company and its regional affiliates, the Columbia, New Jersey, and Ohio Phonograph Companies—would be available for sale to the general public. Home sales picked up appreciably when Columbia introduced the first modestly priced phonograph, a spring-motored unit retailing for forty dollars in 1894.

The next quarter century would witness the recording industry developing into a major force within the entertainment business against the backdrop of constant technological changes (e.g., the appearance of the first commercial disc recordings in 1895, the production of two-sided records beginning in 1908) and the shifting fortunes of both the major record companies—Victor, Edison, and Columbia—and smaller competitors such as Brunswick, Emerson, Okeh, Pathé, and Vocalion, which entered the fray once the exclusive patent rights held by the "Big Three" expired in 1917. The rise of radio in the early 1920s, however, would cause a significant drop-off in record sales. The

implementation of electrical recording—made possible via the condenser microphone, the vacuum tube amplifier, and the electromagnetically-powered cutting stylus—revived the industry, with total record sales peaking at 140 million in 1927. However, the sensation created by "talking pictures," followed by the Great Depression, would send the industry into another tailspin.

The repeal of Prohibition in December 1933 would lead to the establishment of countless bars and lounges; these venues would feature jukeboxes, thereby providing a major market for the financially strapped record companies. The spectacular growth of the American economy during World War II and the post-war years—combined with the breakthroughs of rhythm and blues (and, by the mid-1950s, rock 'n' roll) into the pop marketplace—enabled the industry to achieve new levels of prosperity by the 1960s. Following another downturn in record company fortunes beginning in the late 1970s—the result of a nationwide recession and imprudent business practices (e.g., overproduction of marquee releases, issuing extravagant contracts to over-the-hill "prestige" artists)—the adoption of the compact disc, assisted by the promotional video phenomenon, revived the industry once again. With the onset of the twenty-first century, the industry faces perhaps its greatest threat: the appearance of computer-based applications making it possible to circumvent payment for the copyrighted material produced and distributed by record companies either by online file downloading or the duplication of discs. Many experts have argued that



A

AACM (ASSOCIATION FOR THE ADVANCEMENT OF CREATIVE MUSICIANS)/ART ENSEMBLE OF CHICAGO

Long-lived, Chicago-based jazz collective specializing in avant-garde music written by its members. The group was founded as a musician's cooperative in 1965 by pianist Muhal Richard Abrams (b. 19 Sep 1930), who envisioned it as an outgrowth of the local Black community; Abrams had previously spearheaded a rehearsal group to explore new music nicknamed "The Experimental Band" that formed the core of the original AACM ensembles. Open to a wide variety of nontraditional sounds, Abrams introduced into the group unusual musical instruments from toy whistles to clattering kitchen utensils.

The AACM was more of a school than a specific group; individuals who were influenced by Abrams quickly took his ideas to their own recordings. The AACM's first notable product was Roscoe Mitchell's 1966 album *Sound*, released by the Chicago jazz-blues label Delmark (408). The album is a rich exploration of sonic possibilities, created with very few preconceived ideas of what the individual musicians would do. Several of the players on this record went on to form the most famous group to grow out of the collective, the Art Ensemble of Chicago, initially featuring reeds players Mitchell and Joseph Jarman, trumpeter Lester Bowie, and bassist Mitch Favors; percussionist Don Moye joined in 1970. The group performed and recorded out of Paris from 1970 to 1972, and then returned home to Chicago. They formed their own label, AECO, in 1978, and also signed with the

European jazz label, ECM. In the mid-1980s, they signed with Disk Union (DIW), a Japanese progressive-music label. The group used avant-garde composition techniques, including silence, dissonance, and nontraditional sounds in both their live performances and on record. They remained together until 1993, when Jarman left to pursue an interest in Buddhism. The group soldiered on through Bowie's death due to liver cancer in 1999, and then performed as a trio. [Websites: <http://aacmchicago.org/>; [artensembleofchicago.com.](http://artensembleofchicago.com/)]

CARL BENSON

A/B COMPARISON

Typically done between audio components as a way to ascertain if one is superior to the other or if they are both essentially identical or different sounding. A refinement is the ABX testing device. The latter works by allowing known A and B components to be compared to an unknown X, which may be either A or B; depending on which listening trial is taking place, it allows for an easy-to-enforce, double-blind protocol to minimize participant prejudices.

See also Clark, David

HOWARD FERSTLER

A&B SWITCH

A control in a stereo amplifier that is used to channel the signal from a monaural record into both speakers

A&M RECORDS

for greater sound spread. It also removes one cause of rumble and noise in the playback by cancelling the vertical response of the cartridge.

A&M RECORDS

A firm established in 1962 by Herb Alpert, leader and trumpeter of the Tijuana Brass, with promoter Jerry Moss. The debut Tijuana Brass release, "The Lonely Bull," was the label's first notable hit, selling 700,000 copies. The group would go on to sell 13 million records in 1966 (a total exceeded only by the Beatles that year), thereby providing the needed capital to expanded A&M's roster of artists.

Sergio Mendes was another prominent A&M artist, beginning in 1966 with the album *Sergio Mendes and Brasil '66* (A&M 116 and #SP-4116). The label remained a middle-of-the-road company until the Monterey Pop Festival (1967), after which it signed Joe Cocker, The Move, Procol Harum, and other rock



Herb Alpert and Jerry Moss, founders of A&M Records, at the gates of the Chaplin Studios shortly after they purchased them for their corporate headquarters, July 15, 1970. © Bettmann/CORBIS

stars. During the 1970s, the label's major successes included a combination of middle-of-the-road pop acts, most notably the Carpenters and the Captain and Tennille, and soft-rock singer/songwriters like Cat Stevens. A&M also distributed Lou Adler's Ode label, which enjoyed great success in the early 1970s with Carole King, and Leon Russell's and Denny Cordell's short-lived Shelter imprint. Pop rocker Bryan Adams and British new-wavers the Police were the label's biggest stars of the 1980s, while Sheryl Crow was its major new signing of the mid-1990s. In 1989, Adler and Moss sold out to Polygram. In 1998, Polygram was purchased by Seagram, and its labels became part of the Universal Music Group. In 1999, during a consolidation of Universal's businesses, the A&M label was closed and its artists assigned to other labels within the group.

In 1995, Adler and Moss formed AIMo Sound to once again pursue an independent course. Key signings for the new label included the alt-rock band Garbage and alt-country singer/songwriter Gillian Welch. However, in 2000, the firm had also been sold to Universal Music Group, and Moss announced his retirement. [Denisoff 1986.]

See also Alpert, Herb

CARL BENSON

A&R (ARTISTS AND REPERTOIRE)

A major unit in contemporary record companies, reaching greatest significance in the large popular music firms of the 1950s. The A&R director is a talent scout and also the person who determines what will be recorded. In a small firm, this may be the label's owner; in modern large corporations, the A&R department is extensive, with many junior staff members assigned to cover different developing artists. Unlike an independent producer, the A&R man works directly for the label, oversees contracting, establishes budgets, and often pairs a producer with an artist (and sometimes produces the sessions).

As the record industry grew — and particularly as labels began to record popular music in addition to classical performers — certain executives in each firm would become known for their work as talent scouts or for supervising recording sessions. Ralph Peer was a famous executive at Victor in the later 1920s and 1930s, responsible for its country and blues recordings; he also maintained an independent business as a music publisher, and so worked in a quasi-independent manner from the company itself. John Hammond, a well-to-do jazz fan, worked as a semi-independent A&R man for a number of labels through the 1930s, primarily supervising sessions. After World War II,

this informal system was codified into the development of A&R departments, usually based on different musical genres. For example, when RCA opened a Nashville studio and office to record country artists, company executive Steve Sholes was put in charge of the operation.

The power of the A&R men grew during the 1950s. Mitch Miller of Columbia may have been the most successful, discovering and producing Frankie Laine, Johnnie Ray, Tony Bennett, Jill Corey, and Rosemary Clooney; Columbia sold 80,000,000 records by his stars between 1950 and 1956. After working for a series of smaller labels, John Hammond joined Columbia in the late 1950s, and began a nearly two-decade run discovering and nurturing talent, including Aretha Franklin, Bob Dylan, and Bruce Springsteen. From the mid-1950s in Nashville, Chet Atkins was instrumental in molding the so-called "Nashville Sound," a more modern, pop-influenced style; this led in turn to the development of countrypolitan under the lead of A&R men like Billy Sherrill.

As the recording industry began to consolidate in the 1970s, the A&R departments grew. In many cases this led to a less hands-on approach to the recording process, with more attention paid to bottom-line issues. Often, independent producers served as talent scouts for the companies, bringing new acts to the attention of the A&R staff. Nonetheless, a number of labels have continued to have a strong signing personality based on the thrust of their A&R departments.

Clive Davis, originally at Columbia in the mid-1960s and then at Arista from the early 1970s through 1999, and Mo Ostin, at Warner Bros. Records, were other label heads who played a strong role in shaping A&R policies, serving as de facto heads of new artist development. Artists like the Beatles and the Rolling Stones formed their own labels, primarily to manage their own recorded output, but also (at least initially) to help promote new artists who they felt were not adequately presented by the major labels.

By the century's end, the strongest A&R departments were those associated with specific musical genres beyond the general pop market. In country music, label executives like Tony Brown and Scott Hendricks; in rap, Sean "Puffy — Puff Daddy — P Diddy" Combs; in pop, Kenny "Babyface" Edmonds; and in jazz, Michael Cuscuna, to name just a few, played key roles in developing A&R in their areas within the context of working for much larger music conglomerates. [Denisoff 1986.]

A&R CAMBRIDGE

SEE ARCAM

A SIDE

The two sides of a double-sided disc are usually identified as A and B, with the A side being the featured selection. This term was applied to 78s, 45s, and LPs, but is no longer appropriate for CDs, which feature digitally programmable selections on what is, in essence, one playable side.

ABBA

Parlaying catchy melodies, richly-textured four-part harmonies, and slick production values to achieve worldwide chart success, the group epitomized the Euro-pop movement of the 1970s. Although widely reviled by the rock press at the time, they achieved legendary status in the 1990s, fueled by countless reissues of their classic recordings.

The earlier configuration of Abba arose in Stockholm, Sweden, when Bjorn Ulvaeus (guitar/vocals), Benny Andersson (keyboards/synthesizers/vocals), Agnetha Faltskog (vocals), and Norwegian native Anni-Frid Lyngstad-Fredriksson (vocals) began recording as Bjorn, Benny, Agnetha + Frida in 1971. Following a string of Swedish hits, the foursome — known as Abba by 1973 — set their sights on international stardom. "Waterloo" (Atlantic 3035; 1974; #6 US, #1 UK), winner of the prestigious Eurovision Song Contest, provided the initial breakthrough. Although the first two LPs, *Waterloo* (Atlantic 18101; 1974; #28 UK) and *Abba* (Atlantic 18146; #13 UK), were limited to marginal sales, the group gradually established momentum as a hit singles machine built around the songwriting and production talents of Ulvaeus and Andersson. Effervescent studio confectations such as "S.O.S." (Atlantic 3265; 1975; #15 US, #6 UK), "I Do I Do I Do I Do I Do" (Atlantic 3310; 1976; #15), "Fernando" (Atlantic 3346; 1976; #13), "Dancing Queen" (Atlantic 3372; 1976; #1 US, #1 UK), "Knowing Me Knowing You" (Atlantic 3387; 1977; #14 US, #1 UK), "The Name of the Game" (Atlantic 3449; 1977; #12 US, #1 UK), and "Take a Chance on Me" (Atlantic 3457; 1978; #3 US, #1 UK) — while somewhat formulaic and cloying in nature — proved irresistible to a large contingency of pop music enthusiasts. Beginning with *Greatest Hits* (Atlantic 18189; 1976; #48 US, #1 UK), album releases also enjoyed greater commercial success, albeit to a considerably greater extent in Europe than in the United States.

By the late 1970s, Abba had become such a bankable commodity that they were listed on the Swedish stock exchange. While changing musical trends (first disco, then the punk revolution) diminished sales somewhat, the hits — albeit in a sadder, more reflective mode, apparently the result of the breakdown of

ABBADO, CLAUDIO

the Ulvaeus-Faltskog (1979) and Andersson-Lyngstad (1981) marriages — continued up to the dissolution of the group in late 1982, most notably “Does Your Mother Know” (Atlantic 3574; 1979; #19), “The Winner Takes It All” (Atlantic 3776; 1980; #8 US, #1 UK), and “When All Is Said and Done” (Atlantic 3889; 1982; #27). All members remained active within the music industry; Faltskog and Lyngstad embarked on solo careers, while Ulvaeus and Andersson went on to cowrite (with lyricist Tim Rice) the 1980s musical, *Chess*.

Even long after the group’s heyday, Abba’s music has fans, both for its kitsch value as well as those who sincerely continue to enjoy it. In 1999, a new musical called *Mamma Mia* opened in Britain, constructed around Abba’s classic songs. It subsequently moved to Broadway, where it has had a long run.

FRANK HOFFMANN

ABBADO, CLAUDIO (26 JUNE 1933–)

Italian symphony and opera conductor, born in Milan. He studied in Milan and Vienna, and conducted in several Italian cities. In 1965 he conducted the Vienna Philharmonic Orchestra and became its principal conductor. He was also appointed artistic director at La Scala, and principal conductor of the London Philharmonic Orchestra from 1979 to 1983, and then its music director through 1988. In 1981, he organized the Chamber Orchestra of Europe, and a year later founded the La Filarmonica della Scala in Milan to present concerts at La Scala. Other major appointments included principal guest conductor for the Chicago Symphony from 1982–1986 and chief conductor of the Vienna State Opera from 1986–1991. On 8 Oct 1989 he succeeded Herbert von Karajan as music director of the Berlin Philharmonic Orchestra, where he remained through the 2001/2002 season. Abbado began to record in 1967. Among his outstanding recordings are the Mahler symphonies with the Chicago Symphony Orchestra and the Vienna Philharmonic.

ABBAS RECORDS (LABEL)

Founded in 1995 by Simon Eadon in anticipation of the demise of the recording department of the Decca Record Co., Abbas was created in order to provide continuing location recording facilities to people interested in maintaining the survival of the “Decca Sound.” No recording artists are contracted, but the company’s technical facilities are used by Decca, EMI, BBC, Hyperion, Warner, Philips, Arte Nova, Somm, Quilisma, and Classic FM. The company boasts the only two currently working ex-Decca

recording engineers who can trace their history back to the original Decca studios at Broadhurst Gardens, West Hampstead, where they were trained by the legendary Kenneth Wilkinson and James Lock.

HOWARD FERSTLER

ABBEY ROAD STUDIOS

An EMI, Ltd., recording complex in London, inaugurated 12 November 1931 with Edward Elgar conducting the London Symphony Orchestra in a performance of his *Falstaff*. Although Fred Gaisberg was opposed to the construction of the new facility, preferring to remain at the Hayes studios, Alfred C. Clark prevailed. That first studio (475 square meters) is still in use for the recording of orchestras and other large groups. It once held a Compton organ that was used by Fats Waller and other distinguished artists. As in many other older studios, it is constantly being updated and remodeled; the latest remodel occurred in the late 1990s to bring it up to date, particularly in terms of digital equipment. The remodeled studio was opened in June 2001. Studio 2 is a smaller hall (200 square meters) used for about 50 performers or fewer (it was here that the Beatles made their 1969 *Abbey Road* album; its control room was rebuilt in 1996). Studio 3 was for many years the smallest hall (105 square meters), used for chamber music and soloists as well as pop artists. Extensive upgrading of equipment in Studio 3 was completed in 1988, offering state-of-the-art technology for pop music; this studio was also used in 1990 for small-scale classical recordings. The studio features a kitchen and lounge area for relaxing between takes. In 2001, a new mixing console was added to the studio, particularly for surround-sound work, with 96 channels; it was the largest such console in a London studio. A small penthouse studio was added to the complex in 1980; it is currently used primarily as a control room, although it does have a small studio for recording. The studio complex also features two self-contained apartments for long-term stays by recording artists, as well as a garden restaurant and bar. [Southall 1982; technical details for the renovated Studio 3 are in *Gramophone*, May 1989, p. 1817; Website: www.abbeyroad.co.uk.]

CARL BENSON

ABC-PARAMOUNT/ABC RECORDS (LABEL)

An important pop/rock label of the 1950s and early 1960s, issued by the Am-Par Record Company. The American Broadcasting Co. and Paramount Theaters, Inc., were the parent firms. The label was founded in



The Beatles rehearsing in Abbey Road Studios, c. 1964. © Norman Parkinson Limited/Fiona Cowan/CORBIS

1955, and originally distributed children's recordings under the Mickey Mouse Club label. Other smaller labels were added to the mix, and finally, in 1958, the ABC-Paramount name was launched as a teen-pop label. The company's first major stars were teen posters like Danny and the Juniors and Paul Anka, who were heavily promoted through ABC TV's popular "American Bandstand" show.

In 1960, the label introduced a jazz subsidiary, Impulse!, which became known for recording young, progressive players. By the mid-1960s, the label had become simply ABC Records, and featured major acts including Ray Charles and B.B. King. Other smaller labels were added to the firm, beginning in 1966 with the purchase of Dunhill Records from producer Lou Adler, which had popular acts like the Mamas and the Papas. Later 1960s acts included rock performers like Steppenwolf and, in the early 1970s, Three Dog Night. In 1974, the Gulf & Western family of labels — including Dot and Blue Thumb — were purchased and added to the ABC list. However, this last purchase proved to be too much for the company to absorb, and in 1978 ABC's record operation was sold to MCA (now part of the Universal Music Group).

ABDUL, PAULA (19 JUNE 1962–)

Paula Abdul's career success had everything to do with timing — and the MTV phenomenon. She studied dance throughout her childhood, and — after attending college at California State, Northridge — became a Los Angeles Lakers cheerleader. Jackie Jackson noticed Abdul's skills in planning dance routines, and hired her to choreograph the Jacksons' "Torture" video. She went on to work in television and films as well as assisting many other artists in video production, most notably Janet Jackson, Duran Duran, the Pointer Sisters, and ZZ Top.

Abdul joined the roster of Virgin Records artists in the late 1980s. Her first album, *Forever Your Girl* (Virgin 90943; 1988), became one of the decade's best-sellers — seven million copies in the U.S., topping the *Billboard Top 200* chart and producing four number one singles: "Straight Up" (Virgin 7-98256; 1988), "Forever Your Girl" (Virgin 7-98238; 1989), "Cold Hearted" (Virgin 7-99196; 1989), and "Opposites Attract" (Virgin 7-99158; 1989). Despite widespread criticism of her singing, the LP succeeded due to catchy funk arrangements and flashy videos that effectively captured her stylish, energetic dance moves and girlish charm.

ABENDROTH, IRENE

To capitalize on Abdul's success, Virgin released an album of dance remixes of her hit recordings entitled *Shut Up and Dance* (Virgin 91362; 1990). The next album, *Spellbound* (Virgin 91611; 1991), maintained her upward career trajectory, reaching number one and spawning five hit singles. Subsequent releases have been less successful, but Abdul remains active both as a performer and choreographer. [Romanowski and George-Warren 1995.]

FRANK HOFFMANN

ABENDROTH, IRENE

(14 JUNE 1872–1 SEP 1932)

Polish soprano, of Austrian parentage, born in Wiedling (near Vienna). Her debut was in Vienna, in 1889. She recorded in Dresden (1902) for G & T (black label), singing arias from *Trovatore*, *Semiramis*, *Mignon*, *Nozze di Figaro*, and *Barbiere di Siviglia* (all in German), as well as Mendelssohn's "Auf Flügeln des Gesanges." The *Trovatore* aria, "Tacea la notte" (sung as "Ein unnennbares Sehnen"), is a favorite with collectors. [Riemens 1951.]

ABKCO RECORDS (LABEL)

SEE KLEIN, ALAN

ABOTT, BESSIE (1878–7 FEB 1919)

American soprano, born Bessie Pickens in Riverside, New York. Her debut was in Paris, 1901. Her first recordings were three duets with J. Abott made for Bettini in 1897; the first of which was "I Want You My Honey." She cut three Edison cylinders, beginning in August 1906 with the "Jewel Song" from *Faust* (#B23), followed by "The Last Rose of Summer" (#B56), and "Caro nome" (#B37). She began recording for Victor in December 1906, with "Qui sola vergin rosa" from *Martha* (#87003), and made a number of important Victor recordings, including the *Rigoletto* Quartet with Enrico Caruso, Louise Homer, and Antonio Scotti (#96000; 1907), and the "Queen of the Night Aria" from *Die Zauberflöte* (#88051; 1906). She died in New York.

ABRAMSON, HERB

(16 NOV 1920–9 NOV 1999)

Brooklyn native Herb Abramson, along with Ahmet and Nesuhi Ertegun, founded Atlantic Records in 1947. Their partnership was fueled by a shared love of jazz, blues, and gospel recordings.

In the early 1940s, Abramson started promoting jazz concerts in New York and Washington, D.C. In addition to financing the short-lived Jubilee and Quality labels with Ahmet Ertegun and record retailer Max Silverman. Between 1944–1947, he produced the likes of Billy Eckstine, Joe Turner, and the Ravens for National Records.

In 1947, Abramson and the Erteguns founded Atlantic to record contemporary jazz. Although Atlantic's initial releases focused on jazz, it soon found commercial success with rhythm and blues artists such as Ruth Brown, LaVern Baker, Clyde McPhatter and the Drifters, and Ray Charles. After a military stint from 1953–1955, Abramson administered Atlantic's subsidiary label Atco, whose early roster included Wynonie Harris, the Coasters, and Bobby Darin.

In 1957, he sold his Atlantic holdings for \$300,000 and concentrated on developing his own record companies — Blaze, Festival, and Triumph — with limited success. He then worked as an independent producer for Elmore James, Don Covey, Gene Pitney, Louisiana Red, Titus Turner, and other pop/R&B performers. His biggest hit as a producer came with Tommy Tucker's "Hi-Heel Sneakers" (Checker 1067; 1964; #11). The Rhythm and Blues Foundation gave him its Pioneer Award in 1998 in recognition of his achievements. He died in Henderson, Nevada.

FRANK HOFFMANN

ABSORPTION

In an acoustic system, the process through which all or part of the signal energy is transferred to an element of the system that comes into contact with the signal. Absorption is measured in "sabins"; one sabin represents one square foot of a perfectly absorptive surface.

AC-3

SEE DOLBY DIGITAL

ACADEMY CURVE

Formalized in 1938, it is the name of the standard motionpicture optical-audio track that has been around since sound first appeared in film. Not exactly high in fidelity by modern standards, the response is only flat between 100 Hz and 1,600 Hz. In the bass range the response is down 7 dB at 40 Hz (making it utterly useless for killer-sound action movies), and in the treble it is down 10 dB at 5 kHz and 18 dB at 8 kHz. The extreme attenuation of the higher frequencies was

designed to hide the high-frequency artifacts in early film sound production.

HOWARD FERSTLER

ACADEMY SOUND AND VISION

SEE ASV GROUP

ACCORDION RECORDINGS

Early recordings of the instrument were made by John J. Kimmel on Zonophone (1904) and Edison (1906) cylinders. Victor recorded Kimmel in August 1907, and later engaged several other accordionists; in their 1917 catalog there were about 70 accordion items, by Guido Deiro, Pietro Deiro ("Pietro"), and Pietro Frosini, as well as Kimmel. Many of the early accordion recordings were made either by Italian or Irish immigrants; Kimmel, who was actually of German extraction, was famous for his performances of Irish dance music.

In the later 78-rpm era the accordion was heard primarily in dance orchestras, particularly in tango and polka numbers. It was also a typical member of ensembles playing French popular music. Charles Magnante was a soloist who recorded for Columbia in the 1940s (set #C-53), performing arrangements of pieces like the "Blue Danube Waltz" and "Two Guitars." Anthony Galla-Rini was a Victor artist of the time who performed a similar repertoire. Dick Contino was a well-known soloist in the 1940s.



Novelty accordion LP from the late '50s/early '60s. Courtesy Frank Hoffmann

In the post-World War II era, the accordion fell into somewhat of an eclipse, associated with the kitschy music of Lawrence Welk and other older-styled bands. However, with the emergence of world music in the 1980s and 1990s, the accordion returned both in traditional settings and in more experimental bands. As in earlier decades, Irish musicians have led the way, including noted players like Joe Burke (recording for Shanachie and Green Linnet labels). Scottish revivalist Phil Cunningham has helped repopularize the piano accordion both in the folk-rock group Silly Wizard and on his own. Eclectic performing groups like Brave Combo include accordion in their mix of instruments performing Mideastern, Eastern European, and other musical styles.

The limited classical repertoire for the instrument has been explored by a few artists, such as Yuri Kazakov, Robert Young McMahana, Julia Haines, and William Schimmel. Pauline Oliveros has composed and performed several works for accordion. Her composition, "The Wanderer," was recorded for the Lovely Music label (#1902) by the Springfield Accordion Orchestra. [rev. Carl Benson; Walsh 1971/5.]

ACE (LABEL)

Jackson, Mississippi-based label founded in August 1955 by former record sales representative Johnny Vincent, which did most of its recording in New Orleans. The label is best-known for its mid-to-late 1950s hits, including Huey "Piano" Smith's "Rockin' Pneumonia & Boogie Woogie Flu" and "Don't You Just Know It" (#9, 1958; Ace 545), and Frankie Ford's "Sea Cruise" (#14, 1959; Ace 554). The later song was actually recorded by Smith's band with his vocal, but then Vincent recut the vocal with the (white) singer Ford, in a successful bid to get airplay for it on mainstream radio. Perhaps the label's biggest star was Jimmy Clanton, who had Top 10 hits in 1958 with the #4 pop/#1 R&B "Just A Dream" (Ace 546), 1959's "Go, Jimmy, Go" (Ace 585), and his last major hit, 1962's #7 "Venus in Blue Jeans" (Ace 8001). In 1962, finding it difficult to get its product to market, the label signed a distribution deal with the larger Vee-Jay label, but beset by its own problems, Vee-Jay was soon going under and the deal fell apart by 1965. Vincent got out of the record business until he revived it in 1971 to reissue his earlier hits, licensing many of his masters (and his label name) to Ace Records UK. He continued to issue reissues in the U.S. through the 1980s. In 1997, an ailing Vincent sold the label to the British company Music Collection International. Vincent also operated the Teem label for budget LP reissues during the late 1950s through the early 1960s.

CARL BENSON

ACE RECORDS UK (LABEL)

ACE RECORDS UK (LABEL)

Named for the legendary U.S. R&B/pop label of the 1950s and early 1960s, Ace was founded by ex-music promoters/managers Roger Armstrong and Ted Carroll in 1975 as a business selling records out of a street stall in London's SoHo neighborhood. The label began by licensing 1950s and 1960s rock, surf music, swamp pop, and related styles for reissue on LP. It has grown to be one of the biggest reissue companies in the world, with several related labels, beginning in 1982 with the opening of the subsidiary Kent label for R&B reissues, as well as a distributor for Fantasy Records's group of labels in the UK. [Website: www.acerecords.co.uk.]

CARL BENSON

ACERBI, GIUSEPPE (1871-?)

Italian tenor, born in Codogno. He studied in Milan with Marziani, Blasco and Rossi. He made his debut in 1899 at the Gaffurio in Lodi in *Rigoletto* and *Traviata*. He was not satisfied with his performances and decided to resume his studies. In 1901, he made his new debut at the Municipale in Piacenza in *Lucia di Lammermoor* with Isabella Svicher and Giuseppe Pacini. This time the result was remarkable; in spite of the presence of famous singers he was object of true fanaticism. In 1905, he signed his first important contract with the Comunale in Bologna where he sang in *Madama Butterfly* with Salomea Krusceninski. He recorded many operatic records of roles he never sang on stage. He made 30 records for G & T in Milan during 1905 and 1906. They were arias from the popular Italian repertoire of the time.

FRANCOIS NOUVION AND GUY MARCO

ACETATE DISC

SEE LACQUER DISC

ACID JAZZ

Acid jazz represents a synthesis of jazz fusion, funk, hip-hop, and urban dance music. Its improvisational, percussion-heavy, and predominantly live orientation came largely from jazz, whereas its dedication to an ongoing rhythmic groove was derived from funk, hip-hop, and other popular genres.

The term entered the vernacular in 1988 when adopted as the name of a U.S.-based independent record company, and, at the same time, employed as the title of an English-compilation series consisting of reissued 1970s jazz-funk material. The evolution of

the form is closely aligned with the continuing cross-fertilization of a wide range of related styles, most notably alternative dance, ambient house, bass and drums, club/dance music, house, jazz-rap, soul-jazz, trip-hop, and trip jazz.

Due to this ongoing cross-pollenization, acid jazz artists bring many differing perspectives to their recorded work. One of the most popular bands within the genre, the Stereo MC's, moved from the British hip-hop style in the late 1980s to a more organic, jazz-inflected amalgam of hip-hop and soul-funk with the release of their most popular LP, *Connected* (4th & Broadway 514061; 1992; #2 UK, #92 US). Courtney Pine came from the opposite side of the fence, bringing his hardcore jazz sensibilities directly into African-American dance culture; his *Underground* (Talkin' Loud; 1997) melded steamy live grooves with a battery of technological effects.

FRANK HOFFMANN

ACKERMAN, WILLIAM (16 NOV 1949-)

Acoustic guitarist and founder of Windham Hill Records; pioneer of "new age" music. Although an accomplished acoustic guitarist whose solo albums incorporate elements of folk, jazz, and European classicism, Ackerman's greatest impact has come from founding Windham Hill Productions. The company — which includes Lost Lake Arts Records, Magenta Records, Open Air Records, Rabbit Ears Productions, and Windham Wind Records — has dominated the new age genre since the late 1970s.

Born in Germany, Ackerman started out as a carpenter, forming Windham Hill Builders in the early 1970s in Palo Alto, California. He also found time to compose guitar music for theatrical productions at nearby Stanford University. As a result, friends encouraged him to record his material. The resulting album, *The Search for the Turtle's Navel* (Windham Hill 1001; 1976), was originally distributed privately in the Palo Alto area as a cassette. Anne Robinson, then Ackerman's girlfriend and later his wife, was his partner in the venture. After the couple divorced, Robinson remained active with the label.

Ackerman soon expanded his base of operations, handling business matters as well as producing other artists, including Alex de Grassi, Liz Story, and George Winston, whose *Winter* (Windham Hill 1025; 1983; #54) was the label's first big seller, spending 178 weeks on the *Billboard* album charts through 1990. Although Ackerman would relinquish CEO duties in 1986, he has remained active with the company as artist and repertoire head. In 1992, he sold his share of the company to the Bertelsmann Music Group

(BMG) conglomerate. Shortly thereafter, BMG purchased the remaining shares in the label, and closed its separate offices in 1996.

Although Ackerman's own LPs have not hit the mainstream pop charts, they have continued to sell moderately well over the years. His work often features only subdued steel-string guitar instrumentals; however, it is sometimes accompanied by spare violin, cello, piano, and English horn parts.

FRANK HOFFMANN

ACKTÉ, AINO (23 APR 1876–8 AUG 1944)

Finnish soprano, born in Helsinki. She studied at the Paris Conservatory, and made her debut with the Paris Opéra as Marguerite on 8 Oct 1897. Her Metropolitan Opera debut was also in *Faust*, on 20 Feb 1904. She had a great success in Covent Garden as Salomé — in the first English performance of the opera (1910) — attracting praise from the composer. Her other major roles were as Gilda, Nedda, and the Wagnerian heroines. Ackté recorded first for Zonophone in Paris in 1902, singing "Le baiser" (#1998) and the "Jewel Song" from *Faust* (#1999). A year later she made five discs for G & T, and in 1904–1905 she did four others for the same label. She also recorded for Fonotipia in 1905, and made an Edison Diamond Disc in London, "Salce, salce" (#83014; 1913, reissued by IRCC), but did not work for any other American labels. Most of her later career was spent in Finland, where she helped to found the national opera company in 1911. She died in Nummela, Finland.

ACME CABINET CO.

A New York firm, maker of the Eufonola disc player.

ACO (LABEL)

One of the labels issued by the Vocalion Gramophone Co., Ltd., of London, between November 1922 and August 1927. The material was dance, comedy, and popular songs. Many of the early matrices came from the Guardsman label. [Badrock 1965 (label list); Rust 1978.]

ACOUSTIC

The name given to a recording made without electrical technology. As extensive electrical recording began in 1925, the period up to that time is usually identified as the acoustic era.

See also Acoustic Recording

ACOUSTIC COMPENSATOR

A device in a binaural sound system that adjusts the signal path lengths so that they are properly matched.

ACOUSTIC FEEDBACK

A recording situation where the sound from a speaker system is picked up by the microphone feeding it, re-amplified to the same loudspeaker, picked up by the microphone again, and so forth. With each complete cycle, the signal becomes larger until the loop rapidly runs wild and produces the squeal often accidentally heard during programs that feature sound reinforcement.

HOWARD FERSTLER

ACOUSTIC GENERATOR

A transducer that converts electrical, mechanical, or other energy into sound.

ACOUSTIC HORN

SEE HORN

ACOUSTIC RECORDING (ALSO KNOWN AS MECHANICAL RECORDING)

The method of recording in which all energy comes from the sound waves themselves; it was used from the earliest days of Edison and Berliner until the onset of electrical recording in 1925. Sounds to be recorded were sung, played, or spoken into a horn, which activated a diaphragm attached to a stylus. The stylus transferred the vibration patterns to the surface of a cylinder or a disc. To concentrate this acoustic energy sufficiently for the stylus to etch a usable pattern it was necessary for singers and performers to direct their vibrations into a large collecting horn; this requirement favored strong sound producers, and worked against inclusion of weaker vessels like string instruments. Great ingenuity was applied in the acoustic recording studio to overcome these inherent obstacles. Horns were varied in diameter for different sound sources; they were wrapped with tapes to counter their own resonance; they might be used in clusters, running to a single tube which moved the diaphragm. For a few recordings, Edison used one brass recording horn 125 feet long and five feet in diameter at the bell. Different thicknesses of diaphragm were used depending on the volume of sound being handled — thinner for weak sounds, thicker for heavy sounds.

ACOUSTIC RESEARCH (AR)

As there was no volume control device to regulate acoustic recording, artists had to be positioned in the studio in ways that would bring their contributions to the diaphragm in proper balance. Brasses were placed at some distance from the recording horns, and French hornists had to play with their backs to the conductor to put their tones on the right track to the horn. Bass drums did not record well, and were usually omitted; tubas typically played the parts written for double basses. (However the string bass can be heard on early jazz recordings, such as Victors of 1917, and dance band discs.

A recording orchestra in the acoustic studio had to squeeze into a tight formation around one or more horns, a requirement that mitigated against large ensembles; thus an orchestra of 60 musicians might be reduced to 30 for the recording session. Military bands often recorded with a group of about 15 of their membership. Problems of blend and balance were dealt with by moving the musicians here and there, now closer and now farther from the sound collector. Cellos were mounted on movable platforms.

For an experienced musical listener, the resulting reproduction of a familiar work could be embellished by memory and imagination — techniques used even in later sophisticated eras of recording to achieve “concert hall realism.” For the many persons who listened to orchestras only on cylinder or disc, the impression gained of the symphonic world of music must have been as imprecise as that of Queen Victoria’s appearance derived from a pioneer postage stamp.

ACOUSTIC RESEARCH (AR)

Founded in 1954, in Cambridge, Massachusetts, by Edgar Villchur and Henry Kloss. The company’s first product was the AR-1, the first acoustic suspension loudspeaker. It was followed shortly later by the AR-2, a lower-priced version. These relatively small, “bookshelf” loudspeakers helped to make stereo a popular reality by the late 1950s. They had superb bass-frequency performance at a time when other speakers with deep-bass capability were refrigerator-sized behemoths. AR also developed and patented the dome direct-radiator tweeter, and the highly acclaimed AR turntable appeared a bit later on. AR products became extremely popular, and by 1966 AR held a 32 percent market share in the domestic loudspeaker market. By the 1970s AR products were incorporated into well over a million hi-fi systems, recording studios, opera houses, and concert halls the world over.

In 1967 the company was sold to Teledyne, Inc., a Fortune-500 aerospace company headquartered in California. AR subsequently opened manufacturing

sites in Bedfordshire, England, and in Amorsfort, Holland. In the early 1990s AR was sold to International Jensen, Inc., of Chicago, and finally to Recoton, Inc., of Florida.

See also Loudspeaker

HOWARD FERSTLER

ACOUSTIC SUSPENSION

The principle was developed by Edgar Villchur in 1953 (patented in 1956) in his effort to reduce the most common problem with speakers of the day: excessive bass distortion. The first commercial product to use this system was the Acoustic Research model AR-1, introduced in October 1954. In simplest terms, the acoustic-suspension speaker uses the elastic body of air in a sealed speaker enclosure as the primary “restoring force” for the speaker cone, rather than the mechanical suspension of the speaker itself. It resembles the principle of a vacuum, where the outward movement of the cone reduces pressure and the inward movement increases pressure against the speaker cone. The entrapped air is linear for this small change in pressure, and the result is greatly improved linearity and reduced harmonic distortion. A secondary dividend is that the enclosure must be relatively small to work properly, and this made the small acoustic-suspension bookshelf speaker commercially acceptable for most households.

See also Bass Reflex System; Loudspeaker

HOWARD FERSTLER

ACOUSTICAL ELEMENTS

Parameters in an acoustical system that are analogous to electrical elements.

See also Mechanical Electrical Analogies

ACOUSTICAL LABYRINTH

A kind of loudspeaker enclosure in which a maze-like folded passage is added behind the speaker to improve its bass response without promoting unwanted resonance of the enclosure.

ACOUSTICS

The science or physics of sound. Often the term is used in a narrow sense, to describe the sound qualities of a room or auditorium.

See also Acoustic; Audio Frequency; Hearing; Pitch

ACTUELLE (LABEL)

A lateral-cut disc marketed in Britain and the U.S. from 1921 to 1930 by the Pathé Frères Compagnie (London) and the Pathé Frères Phonograph Co., Inc. (New York). Material was classical, dance music, race, and jazz. Among the New York recordings were numbers by Red Nichols, Duke Ellington, and the Original Memphis Five. The California Ramblers appeared under the pseudonym of Golden Gate Orchestra. Maurice Chevalier was heard on masters cut in Paris. The disc label itself was hexagonally shaped, brown and tan, with the red Pathé rooster. Much of the Actuelle list was issued also on the Perfect label.

ACUFF, ROY (15 SEP 1903–23 NOV 1992)

American country music singer, fiddler, songwriter, and publisher; born in Maynardville, Tennessee. Originally planning to be a professional baseball player, he was obstructed by a tendency to sunstroke, and turned to music. He was fiddler in a touring group during 1932, then in 1933 appeared on Knoxville (Tennessee) radio and in 1936 made his first records, for the Conqueror label: "Weary River" (Conqueror #9434) and his composition "The Precious Jewel" coupled with "Broken Heart" (Conqueror #9741). He moved to the major labels, Vocalion, Okeh — "Great Speckle Bird" (his composition; Okeh #04252), "Wreck on the Highway" (Okeh #06685), and "Night Train to Memphis" (Okeh #06693) — and Columbia. "Wabash Cannon Ball" was probably his greatest hit. Acuff's total record sales have been estimated at over 30 million discs.



Roy Acuff reissue album. Courtesy Frank Hoffmann

After 1940 he was a regular artist on Grand Ole Opry, helping to make that program the principal country music forum. He went into publishing in 1942, with Fred Rose, forming Acuff-Rose, which became one of the largest music publishers in the U.S. Acuff was also part owner of Hickory Records, which issued many of his own performances. Columbia, Capitol, Hilltop, and Hickory issued LP albums of his songs in the 1960s.

Acuff and his group remained a traditional mountain string band until the end of the 1950s, when he began to use some electronic instruments. But he kept his country style of singing. In 1962 he was elected to the Country Music Hall of Fame, and in 1991 he was a recipient of the National Medal of Arts. He died in Nashville.

ACZEL, PETER (30 MAY 1926–)

Born in Budapest, Hungary, and immigrating to the United States in 1939, Aczel is a graduate of Columbia College of Columbia University, where he studied physics and mathematics as well as the liberal arts. He also did some postgraduate work at Middlebury College in Vermont and the Sorbonne in Paris. He came to the world of audio via Madison Avenue, where he had been a copywriter and creative director for two decades, with at least 25 percent of his accounts in audio at all times (Fisher, Garrard, Pioneer, among others). At the end of 1976 he left the advertising business to start *The Audio Critic*, a strictly objectivist audio journal devoted to measurements in depth and blind listening tests. Between 1981 and 1987 he put *The Audi Critic* on a back burner to start Fourier Systems, the first loudspeaker manufacturing operation to use fully computerized protocols for the design of crossover networks and bass enclosures. The company was ahead of its time in many ways, but still went out of business after 5½ years. Having resumed publication of *The Audio Critic* at the end of 1987, Aczel continues to publish it to this day, albeit somewhat irregularly. He is a life member of the Audio Engineering Society.

HOWARD FERSTLER

**ADAMI (CORRADETTI), BICE
(16 MAR 1875–1969)**

Italian soprano who made records for the Gramophone Co. in 1899–01, and for G & T in Milan in 1901. Recent research shows that she made the first recording for the Gramophone Company's Italian subsidiary, which opened in 1899, a record of "Voi lo sapete." Bauer 1947 lists 23 arias from the Italian repertoire.

ADAMINI, ARTURO B.

Her husband was the noted tenor, Ferruccio Corradetti (1864–1934), and their daughter, (Iris) Adami Corradetti (1903–June 26, 1998), became, in turn, a well-known opera star.

ADAMINI, ARTURO B.

Tenor, one of the first to record operatic material; he made Edison cylinder #4276 in 1898, “La donna è mobile.” His other Edisons were Spanish and Italian songs. They are listed in Koenigsberg 1987.

ADAMS, SUZANNE

(28 NOV 1872–5 FEB 1953)

American soprano, born in Cambridge, Massachusetts. She studied in Paris and made her debut at the Opéra as Juliette on 9 Jan 1895, staying with the company for three seasons. She was Juliette again for her first appearance at Covent Garden in 1898, and also in her Metropolitan Opera debut on 4 Jan 1899. Her other famous roles were Marguerite, Nedda, Gilda, and Micaela. She gave two command performances for King Edward VII. Ill health forced an early retirement in 1904. Her death came in London.

Adams made five Bettini cylinders in 1898, four solos (the first being the “Jewel Song”) and a *Traviata* duet with Giuseppe Campanari. She then recorded for G & T Red Label in London, 1902 (the discs were issued a year later in the U.S. on Victor Red Seal), doing the “Jewel Song” (#3291), the “Waltz” from *Romeo et Juliette* (#3293), and three songs. She performed the same numbers plus two others for Columbia in 1903.

ADAPTEC

A California-based computer software company, Adaptec is best known for its compact disc burning programs, most notably Easy CD Creator. Due to its user friendly features and the decision of leading CD-RW drive manufacturers such as Hewlett Packard and Ricoh to bundle OEM versions of Easy CD Creator with their various models, Adaptec enjoyed considerable success from the mid-1990s into the first decade of the 21st century.

ADD-A-PART RECORDS

A type of recording in which a vocal or instrumental part of the score is omitted, to enable the listener to participate in the ensemble. It seems that the earliest specimens were practice discs issued by the

Tilophane Co. in Austria in 1935. Parlophone made aria records without the voice parts in 1938. Columbia issued such records under the name Add-a-Part, covering an extensive repertoire in the mid-1940s. The missing parts were graded as easy, medium, or difficult to play. Add-A-Parts were no longer carried in the 1947 catalog. In the LP era, a label named Music Minus One offered a series of rhythm accompaniments for singers or soloists to complete. There was a similar German series, Spiel Mit (DGG, 1948). Recent practice discs concentrate on the popular music field, providing rhythm backups in various genres (e.g., releases by the Ventures in the 1960s on the Dolton label). The Music Minus One label is perhaps the leader in the field of this type of recording.

ADLER, LOU (13 DEC 1933–)

As a talent manager, concert promoter, songwriter, producer, record-label executive, and motion-picture entrepreneur, Lou Adler was a notable tastemaker in popular music during the 1960s and 1970s. He remains best known as a major instigator of the West Coast Sound, a soft-rock style that cuts across folk-rock, surf, and car songs, and the singer/songwriter tradition.

Born in Chicago, Adler grew up in the hard-scrabble Boyle Heights District of East Los Angeles. He broke into the music business as comanager (with trumpeter Herb Alpert) of the surf-pop duo, Jan and Dean. He and Alpert formed a songwriting/studio production team, working for such labels as Colpix and Dimension. Their compositions included “Only Sixteen,” a hit for Sam Cooke in 1961 (Keen 2022; 1959; #28).

On his own, Adler formed Dunhill Records in 1964. The controversial protest song, Barry McGuire’s “Eve of Destruction” (Dunhill 4009; 1965; #1) — penned by in-house songwriters P.F. Sloan and Steve Barri — was the label’s first hit. Dunhill’s long-term success was assured when the Mamas and the Papas placed a string of singles high on the charts, including “California Dreamin’” (Dunhill 4020; 1966; #4), “Monday Monday” (Dunhill 4026; 1966; #1), “I Saw Her Again” (Dunhill 4031; 1966; #5), “Words of Love” (Dunhill 4057; 1966; #5), “Dedicated to the One I Love” (Dunhill 4077; 1967; #2), and “Creeque Alley” (Dunhill 4083; 1967; #5). He also continued work as an independent producer; his biggest success in the mid-1960s was with Johnny Rivers. Adler cowrote the number one hit, “Poor Side of Town” (Imperial 66205; 1966) with Rivers.

Selling the Dunhill label to ABC-Paramount for a substantial profit in 1966, Adler was a prime mover in

arranging the Monterey Pop Festival. Considered perhaps the greatest rock festival ever, from the musical standpoint, it launched the careers of Jimi Hendrix, Janis Joplin, and the Who stateside, and spurred planning for future extravaganzas. Adler showed considerable business acumen in securing film and recording rights for the event; the profits derived from these avenues exceeded all expectations.

In the meantime, Adler founded Ode Records, which clicked immediately with Scott McKenzie's "San Francisco (Be Sure to Wear Flowers in Your Hair)" (Ode 103; 1967; #4). Later successes included progressive rock group Spirit and Brill Building songwriter Carole King. King's *Tapestry* (Ode 77009; 1971; #1 15 weeks), produced by Adler, became one of the top-selling albums of all time, while elevating the singer/songwriter trend to a major genre.

Beginning in the 1970s, Adler shifted his emphasis to filmmaking, helping the British production, *Rocky Horror Picture Show*, become an American cult staple in the mid-1970s. He also signed Cheech and Chong to a series of comedy films. As with the Monterey Pop Festival, he placed considerable emphasis on the production of soundtrack LPs.

Adler's activities in the pop music world have been limited since the mid-1970s, although he has continued to work with children's and gospel music artists.

FRANK HOFFMANN

ADLER (MAX) PHONOGRAPH CO.

A German manufacturer of cylinder and disc players in the early 20th century, located in Berlin. Its cylinders were on the market as early as June 1901. The firm was still active until 1916, after which no information is available. Among the model names were Adler, Baby, Monarch, and Luxus. The Exhibition soundbox was used. One portable was in folding box-camera style: the tone arm fit into an opening in the cover, and there was a drawer in the cover that opened out on one side to form a horn; the turntable was composed of three spokes that opened out to hold the record. This odd model was only seven inches by four inches by seven inches in size. *TMR* #27 and #28 (1974) reprinted some of the Adler 1905/06 catalog.

ADULT CONTEMPORARY

A term developed by radio consultants in the 1970s to describe a playlist format that consists of "softer" rock and pop music to appeal to an older, largely female listening audience. Artists in this category would include

James Taylor, Carole King, Celine Dion, Faith Hill, Barry White, and others who specialize in ballads and midtempo rock songs. Specialized charts were developed to track sales for this genre. Radio stations in the 1990s began to promote this format using call letters featuring "EZ" (such as "EZ 101" in the New York area), a play on the earlier term, "easy listening" originally used to refer to recordings of pop tunes by instrumental ensembles in lush arrangements. So-called "lite" stations also tend to feature this style of music.

CARL BENSON

ADT

SEE AUTOMATIC DOUBLE TRACKING (ADT)

AEOLIAN CO.

A firm established in 1878 in New York by William B. Tremaine, originally known as the Mechanical Orguette Co. From this company there developed the Orchestrelle Co. of Westfield, New Jersey (also headed by Tremaine), and then the Aeolian Organ and Music Co. in New York, ca. 1888. The company advertised itself at one time as the "largest manufacturer of musical instruments in the world." A London branch opened on Regent Street in 1899; the Aeolian Co., Ltd., was registered in November 1903, which became the Orchestrelle Co., Ltd., on 1 July 1912.

After a period of making automatic organs and piano rolls, the Aeolian Co. moved into the player piano market, specializing in the Duo-Art instrument, an inner player and reproducing piano. Mergers and acquisitions were numerous after 1903, when the Aeolian Weber Piano and Pianola Co. was founded. Among the other firms controlled by Aeolian were Chilton Piano Co., Mason and Hamlin, George Steck and Co., Stroud Piano Co., Technola Piano Co., Votey Organ Co., Weber Piano Co., and Wheelock Piano Co. in the U.S.; in addition there were the Aeolian Co., Ltd., in Britain and Aeolian Co., Ltd., in Australia. The Pianola player was among the most popular of its time, lending its name in generic fashion to other makes of player piano. It was used in Steinway pianos, as well as in the instruments of other makers cited in this article. Piano rolls were sold under the name of Melodee. There were 15,308 selections available on these rolls in 1905.

A gramophone was produced in 1912 under the name of Aeolian-Vocalion; it played both vertical-cut and lateral-cut discs. It had a "tone control" system called the Graduola invented by an Australian, F.J. Empson. Discs were made as well, from 1918, under

AEOLIAN CO.

several names: Aeolian, Aeolian Vocalion, Broadcast, and Aco.

Aeolian Hall, located at 29 W. 42nd St., New York, was a famous concert hall, venue of the premiere (by Paul Whiteman) of "Rhapsody in Blue" on 12 Feb 1924.

There were factories in Worcester, Massachusetts; Meriden, Connecticut; New York City; and Garwood, New Jersey. In 1932 a merger with American Piano Co. resulted in the Aeolian American Corp.; this became the Aeolian Corp. in 1964. [Andrews 1980/10; Cole 1970; Hoover 1980.]

AEOLIAN CO., LTD.

The London branch of the Orchestrelle Co., of New Jersey (later the Aeolian Co. of New York), registered in November 1903. Aeolian organs were the principal product offered. Concerts were staged at Aeolian Hall, 131-137 New Bond Street. Aeolian Co., Ltd. was taken over by the newly registered Orchestrelle Co., Ltd. in July 1912, but the Aeolian firm continued to trade under its own name. In October 1915 the Vocalion gramophone with its novel Graduola "tone control" was put on the market in six different models, and a special salon was installed in Aeolian Hall to demonstrate it. In 1917 the Aeolian Co., Ltd., absorbed the Orchestrelle Co., Ltd. The Aeolian Vocalion record was introduced in Britain in 1920; and the Guardsman record, formerly pressed by Aeolian for the Invicta Record Co., Ltd., was acquired from Invicta and marketed in 1922. Another label issued from 1922 was Aco, a low-cost record.

With the purchase by Brunswick-Balke-Collender Co. of American Vocalion records from the Aeolian Co. in November 1924, the British firm sold its record business to a newly established entity, the Vocalion Gramophone Co., Ltd. The new firm continued to sell records — Vocalion label and Aco label — into 1927. [Andrews 1980/10.]

AEOLIAN VOCALION (LABEL)

This was the name given by the Aeolian Co. to its vertical-cut discs, first announced in the U.S. in May 1918, and in U.K. in December 1920. Aeolian was dropped from the title in 1920, and Vocalion was sold to Brunswick in 1924. After March 1920 all production was lateral cut. Because Aeolian entered late into the disc field, the firm had difficulty signing classical artists and produced much dance music and popular instrumental items. There were many series, identified by brown, pink, red, green, and red disc labels.

See also ACO (label); Broadcast (label)



Aeolian-Vocalion label issued c. mid-teens by the Aeolian Company. Courtesy Kurt Nauck/Nauck's Vintage Records

AEROPHONE DISQUE (LABEL)

A French record, also sold in Britain from September 1911. It was a 10-inch double-sided disc, vertical cut.

AF

SEE AUDIO FREQUENCY

AFRICAN-AMERICAN OWNED LABELS

Although African-American artists have contributed immeasurably to the history of sound recording, few were actually able to participate in the business themselves as label owners. Nonetheless, a few pioneering executives were able to establish unique labels that came to define entire genres of music, and since the rap explosion of the 1980s, more Black-owned labels (or at least labels managed by Blacks that are marketed through the major media companies) have arisen than were previously known.

The market for Black music was discovered in the early 1920s with Mamie Smith's recording of "Crazy Blues," released in August 1920 on the Okeh label. Soon, Victor, Columbia, and smaller competitors like Paramount established "race" divisions to record Black entertainers for the Black record-buying market. Many middle-class Blacks who could afford record players were dismayed that their people were being represented by this often bawdy popular musical form. So a group of investors (including Black composers and writers)

gathered behind music publisher Harry Pace — who had partnered with famed blues songwriter W.C. Handy to form one of the first Black music publishers, Pace & Handy — in January 1921 to found a record label, Black Swan. It was named for the 19th century Black opera singer, Elizabeth Taylor Greenfield. Fletcher Henderson was the label's first A&R man, and composer William Grant Still its music director.

Although originally formed with the high-minded idea of recording classical music, Black Swan soon discovered that it had to enter the blues market to survive. Henderson brought a young nightclub singer to the label named Ethel Waters, and she became a cash cow for the label from her first recording, "Down Home Blues" in 1921. Henderson led her backup band "The Black Swan Troubadours," on a successful tour that fall. The label took the motto "The Only Genuine Colored Record — Others Only Passing for Colored." However, while Pace enjoyed some success with Waters and other blues singers like Alberta Hunter, he could not compete with the major labels who were also focusing on the blues market, and he sold his masters to Paramount in 1924.

Black musicians continued to work as A&R men in the recording industry through the 1920s, 1930s, 1940s, and 1950s. After World War II, with the advent of the LP and independent pressing plants, it was possible once again for smaller labels to proliferate, and thus for Black-owned labels to come to the fore. One of the first was the Chicago-based Vee-Jay Records, founded in 1953 by deejay Vivian Carter and her husband, Jimmy Bracken. The label became known for its roster of R&B vocal groups and blues musicians, and by 1960 had its own lavish headquarters and a well-known studio band. However, the great success of their white vocal act the Four Seasons in the early through mid-1960s led to the label's downfall when the group sued over nonpayment of royalties.

Perhaps the most famous Black-owned label is Motown. Founded by ex-boxing promoter/sometime songwriter Berry Gordy, the little label from Detroit was founded in 1959. Gordy developed a strong house band, a stable of songwriters, and nurtured his acts, teaching them how to perform, selecting their material, and grooming them for pop acceptability. Motown's sound was so identifiable during the 1960s that it gave its name to an entire musical style, combining upbeat rhythms, catchy songs, and vocal group harmonies with just enough of a funky edge to give the music a presence on both R&B and pop charts.

The other major purveyor of 1960s soul was Stax Records out of Memphis, Tennessee. Although founded by a white business woman, Estelle Axton, and her brother, Jim Stewart, the label was coowned from the mid-1960s by ex-deejay Al Bell, who did much to

broaden its base as a Black-owned business. Key producer/songwriter Isaac Hayes, and many members of the label's house band, were also Black, as were most of its hit-making artists.

In the mid-1950s, New York R&B singer Sylvia Robinson founded a string of labels with her entrepreneur-husband, Joe, under the "All Platinum" corporate umbrella. Their most famous label, however, came in the early 1970s, named for the Sugar Hill neighborhood of Harlem. Clued in to the success of rap by their son, they recorded the song "Rapper's Delight" in 1979, which helped launch the new style. They would later add hip-hop to the label's offerings, and even purchase the Chess catalog, but by the mid-1980s the small label was overextended, and it went bust in 1985.

In 1983, Black rap entrepreneur Russell Simmons founded Def Jam Records with white producer Rick Rubin. The company quickly became very successful, with a roster of key mid-1980s rap stars, notably "gangsta" rappers Public Enemy. Rubin and Simmons split by the early 1990s, and Def Jam eventually became part of the Polygram conglomerate (now Universal Music Group).

While it was common for small entrepreneurs to found their own labels in the past, nowadays it is more likely for producers to have production deals with major labels that enable them to have their own "label-within-a-label." For example, in 1989, popular producer Kenny "Babyface" Edmonds formed a production company called LaFace Records with his partner, L.A. Reid (Mark Rooney). The duo produced popular artists like Janet Jackson through their company, and the recordings were then released on a major label. Similarly, Sean "Puffy/Puff Daddy" Combs founded Bad Boy Entertainment in 1993 in a partnership with Clive Davis's Arista label. This trend continues to today, with other major Black producers forming their own production companies and then marketing their output through either their own "labels" or directly to the majors.

CARL BENSON

AFRIKA BAMBAATAA (10 APR 1960–)

Pioneer hip-hop artist, born Kevin Donovan in the Bronx, New York. He took the name of a 19th-century Zulu chief meaning "affectionate leader." While the deejay Kool Herc is widely credited with creating hip-hop, Afrika Bambaataa led the way in disseminating it worldwide. His vision incorporated deejays, rappers, singers, studio producers, break-dancers, and graffiti artists into one youth culture movement. Known as the "Master of Records," due to his unrivaled disc collection, he experimented with recorded musical

AGUILERA, CHRISTINA

elements such as Latin rock, European disco, funk, punk, and the German electro bands such as Kraftwerk in order to create the ultimate dance environment. Although his primary creative medium was the club and street dances, he produced many important 12-inch singles and albums during the 1980s, most notably "Planet Rock" with Soulsonic Force (Tommy Boy 823; 1982), "Renegades of Funk" with Soulsonic Force (Tommy Boy 839, 1983), "Unity" with James Brown (Tommy Boy 847; 1984), *Planet Rock: The Album* (Tommy Boy; 1986), and *Warlock and Witches, Computer Chips, Microchips and You* (Profile; 1996). While no longer in hip-hop's innovative vanguard, he has remained in high demand as an elder statesman of the genre, working parties and raves and often making radio station appearances.

FRANK HOFFMANN

AGUILERA, CHRISTINA (18 DEC 1980–)

Christina Aguilera came along at the perfect time in pop music history; with preteens possessing more disposable income than ever before, teen-idol recording stars became a hot commodity in the 1990s. Furthermore, Hispanic performers captured an increasing share of music industry revenue during this decade. Add Aguilera's striking good looks, exuberant singing style, accomplished stage skills, and a major-label promotional budget, and chart success would seem to have been a foregone conclusion.

Although born in Staten Island, New York, due largely to her father's military career, Aguilera traveled widely as a youth until the family settled in Wexford, Pennsylvania. After starting out in Pittsburgh area talent shows, she appeared on the TV series *Star Search* at age eight and garnered a cast slot on *The New Mickey Mouse Club* four years later. Her recording career commenced with a hit single in Japan, "All I Wanna Do," a duet with Keizo Nakanishi. She next recorded "Reflection" for inclusion on the soundtrack of the animated feature, *Mulan* (1998).

Signing a recording contract with RCA in 1998, her debut album — *Christina Aguilera* (RCA 67690; 1999; #1) — would sell more than 10 million copies over the next year, propelled by two number one singles, "Genie in a Bottle" (RCA 65692; 1999) and "What a Girl Wants" (RCA 65960; 1999). Aguilera's superstar status was affirmed by an invitation to perform at the Super Bowl XXXIII Halftime Show and a 1999 Grammy award for best new artist.

Aguilera was widely compared to Brittany Spears, another Mickey Mouse Club alumnus and teen-pop phenomenon. Aguilera's vocal skills were generally conceded to be far superior to Spears, but many found

her reliance on tricks (such as extended melismas and full-throated belting) to mar her style. The two ran neck-and-neck in the sex-symbol contest, both projecting a combination of adolescent innocence packaged in eye-grabbing, revealing costumes. While insisting on wholesome values, both persistently sold sex as the main ingredient of their stage (and video) image.

With import singles and albums flooding the market, two more albums were issued domestically in 2000, *Mi Reflejo* (RCA), a Spanish-language collection geared to her huge Hispanic following, and *My Kind of Christmas* (RCA). The following year she collaborated with Lil' Kim, Mya, and Pink in the chart-topping single, "Lady Marmalade" (Twentieth Century-Fox 497 561–2; 2001; from the film soundtrack to *Moulin Rouge*), formerly a number one hit for Labelle in 1975. In fall 2002, Aguilera continued to change her image from adolescent seductress with the release of her album, *Stripped* (RCA 68037), featuring a topless cover shot emphasizing her new body piercings. A sensitive ballad, "Beautiful" (RCA 60687), was a major hit from the record in early 2003.

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AIR SUSPENSION

SEE ACOUSTIC SUSPENSION

AIRPLANE RECORDINGS

SEE AVIATION RECORDINGS

AIX RECORDS (LABEL)

A division of the AIX Media group and located in West Hollywood, California, AIX Records specializes in recording and mastering high-resolution digital, and mixing in both 2-channel stereo and 5.1-surround sound for DVD-Audio. Begun by Mark Waldrep in 1987, primarily as an authoring, mastering, and production facility, and expanded into a full-service record company in 2000, AIX pioneered the release of DVD-Video titles produced and released in the USA. The current AIX catalog includes jazz, blues, folk, bluegrass, and classical artists. [Website: www.aixrecords.com.]

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AJAX (LABEL)

A record produced by the Compo Co., Ltd., a Berliner office in Lachine, Quebec, from about 1923. The

headquarters office for Ajax was in Chicago; recording was done in New York. Masters and files of Compo were later in New York, then in Montreal. Material recorded was jazz, country, blues, and "race," and the roster included some important artists such as Mamie Smith, Rosa Henderson, and Fletcher Henderson. Masters from various Plaza labels were used for some issues. There was no recording after July 1925. [Kendziora 1966 gives a complete label list; Rust 1978; Rust 1980.]

AKG ACOUSTICS

In business for over five decades, and part of Harman International since 1993, AKG is one of the world's leading manufacturers of high-quality microphones, headphones, and accessories as well as of OEM and telecom products. With over 1,400 international patents to its credit, the company has accumulated special know-how in designing electroacoustic transducers. Products for the optimum recording and reproduction of sound, both of the human voice and musical instruments, are designed and manufactured in close cooperation with professional users.

HOWARD FERSTLER

ALABAMA PHONOGRAPH CO.

One of the affiliated firms of the North American Phonograph Co., located in Anniston, Alabama, operating in 1890. Charles A. Cheever was president.

ALADDIN RECORDS (LABEL)

Aladdin Records was established in late 1944 by the Mesner brothers, Eddie and Leo. The Los Angeles-based label was initially named Philo; however, a lawsuit forced a name change in 1946.

Although releases spanned jazz (on the Jazz West and Intro subsidiaries), gospel, and classical (on Orefeo), Aladdin focused on rhythm and blues. Its artist roster included Amos Milburn, Charles Brown, Joe Turner, Shirley & Lee, and the Five Keys. The label's album and singles releases are among some of the most highly valued with record collectors.

The scarcity of many Aladdin, Jazz West, and Intro LPs is due in part to the Mesner's formation of budget subsidiary Score in 1957. Many jazz and R&B recordings remained in print for a relatively short time prior to being deleted and reissued on Score with a retail price of \$1.98. It is likely that a number of albums intended for Aladdin instead debuted on Score.

Although the Aladdin name has remained in use, the company ceased to exist as a business entity when

the Mesners sold their catalog to Imperial in 1962. The rights to these recordings now belong to the EMI Records Group; in fact, many LP compilations have featured material culled from Aladdin, Imperial, and Capitol.

FRANK HOFFMANN

ALBANESE, LICIA (22 JULY 1913-)

Italian soprano, born in Bari. She made her debut as a last-minute substitute in Milan's Teatro Lirico, then made a formal debut in Parma on 10 Dec 1935. In both appearances she sang Cio-Cio-San, a role that she made her own throughout her career at the San Carlo Opera, La Scala, and the Metropolitan Opera (where she sang first on 9 Feb 1940, and remained for 26 years). Her other great roles were Mimi, Violetta, Marguerite, Desdemona, and Tosca. She last appeared at a Town Hall (New York) benefit concert on 5 Feb 1975.

Her Mimi was recorded in Victor's complete *Boheme* (#VM-518-519) with Beniamino Gigli ("O soave fanciulla" receives a particularly brilliant performance, with both singers holding high Cs at the end); she sang another complete *Boheme* with Jan Peerce, under Toscanini, on LP (Victor #LM6006). "Un bel di" from *Madama Butterfly* was recorded on Victor #11-9254, and on LP she recorded excerpts from the opera with Jan Peerce; but she did not take part in a complete recording of the work. *Tosca* was not recorded complete with Albanese, but her "Vissi d'arte" is on Victor #11-9115. "Ave Maria" and "Salce" from *Otello* represent her Desdemona role (Victor #11-9957). Albanese recorded the complete *Traviata* with Jan Peerce and Toscanini (Victor LP #6003), and the "Sempre libera" aria (Victor #11-9331).

ALBANI, EMMA, DAME (1 NOV 1847-3 APR 1930)

Canadian soprano, born Marie Louise Cécile Emma Lajeunesse near Montreal. She studied in Italy and took an Italian stage name, making her debut in Messina in 1870 as Amina in *Sonnambula*. In the same role she had debuts in Covent Garden (1872) and the New York Academy of Music (1874); then she was heard at the Metropolitan Opera on 23 Dec 1891 as Gilda. She sang opera only until 1896, thereafter devoting herself to concertizing. She was named Dame of the British Empire in 1925. Albani died in London.

Among her special roles were Elsa and Elisabeth, which she was first to sing for London performances; as well as Lucia, Desdemona, and Elvira in *Puritani*. Unfortunately, she made only a few recordings. Her

ALBANY (LABEL)

first, probably lost, was an attempt by Edison's representative, Colonel George Gouraud, to record at the 1888 Handel Festival at the Crystal Palace. (Some white wax cylinders from the Handel Festival survive, at the Edison National Historical Site; they are not yet fully identified.) Her extant material — only seven titles — was made for G & T (1904) and Pathé (1907). "Ombra mai fu" from *Senso* was the earliest and perhaps the finest of these (G & T #53325; reissued on IRCC #182, 1941; and HRS LP #3008, 1950). [Ridley 1959.]

ALBANY (LABEL)

Albany Records was formed in the 1990s with a particular emphasis on direct marketing via the Internet. The label's catalog — which consists exclusively of compact disc titles — focuses on classical music, particularly in these genres: chamber, choral, instrumental, opera, orchestral, organ, and vocal. Albany specializes in American art music composers, including titles featuring the works of Amy Beach, William Bolcom, Stephen Foster, Morton Gould, Roy Harris, Charles Ives, George Perle, Tobias Picker, and Walter Piston. [Website: www.albanyrecords.com.]

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ALBUM

Originally the name of the holder for two or more 78s, or by extension for the discs themselves. Later the term was applied to a single 45 rpm or 33 1/3 rpm LP in a sleeve, or to a disc with more than one piece on a side. The modern compact disc, DVD-A disc, DVD music disc, and SACD disc, as installed in a jewel or snap case, would not normally be called an album, and multi-disc compendiums are usually called "sets," so the term is rapidly becoming archaic. It has not been established when the earliest albums appeared on the market. In April 1909 English Odeon marketed an album with four double-sided records, for 16 shillings. The content was a performance of the *Nutcracker Suite* by the London Palace Orchestra under Hermann Finck. In 1910 Odeon offered another four-disc album, *Midsummer Night's Dream*. The Bubble Books (copyrighted 1917) may have been the earliest U.S. albums. Victor issued boxed language sets during World War I. Classical music album sets were sold widely after the war. There were numerous albums on the American market by 1924, nearly all of them European imports. It appears that the Roycroft Album, by the English Singers, was the first nonclassical multi-disc issue; this was a 12-record set sold in 1928.

REV. HOWARD FERSTLER

ALBUM COVER

A term loosely applied to all packaging for discs, whether singles or parts of album sets, with particular reference to the graphic art involved. Most 78 rpm singles were offered in plain wrappers, possibly with advertising of the label's other records; 78 rpm albums often had portraits of the performers or composers, or reproductions of art works. LP popular and jazz albums began to show livelier scenes, including psychedelic art on rock covers, and eventually there emerged the notion of the cover as an "artistic statement." With the *Sgt. Pepper's Lonely Hearts Club Band* album by the Beatles (1967) the cover was said to be "as important as the recorded material itself. The Beatles extended the theme of the album to the cover, and the 'total-package' idea was born." [Denisoff 1986, p.189] On popular albums this idea often led to controversy, with nudity or representations of violence bringing organized opposition. In the 1980s offensive graphics became scarcer. In the classical field, album art has remained limited to artist portraits, evocative photographs, pictures of the instruments, and representations of paintings. An exhibition of the album cover as art, said to be the first of its kind, was presented at the Galerie Beaumont, Luxembourg, in 1989. [Denisoff 1986; Garlick 1977.]

ALBUM NUMBER

The number assigned to an album (set) of discs by the manufacturer. In the 78 rpm era individual disc numbers bore no relation to the album numbers (e.g., Decca's 1946 *Ink Spots* album is #A-477, while the discs themselves are numbered 23632 to 23635). Closer relationship between album and disc numbers can be found in LP issues (e.g., Columbia's *Dave Brubeck Quartet — Jazz Impressions of New York* has album number CS 9075, and the disc within has the same number; a monophonic version, however, carried the album number CL 2275.) Album numbers can vary with the country of issue: for example, CBS #D2 37852, *Rondine*, was made in Holland and issued in Europe in 1983; the USA-Canadian release has a different prefix, #12M 37852. The single disc carries the same number as the album. Angel's three-disc album of the Mozart string quartets, issued under their Seraphim label, is #SIC 6028, while the discs are numbered consecutively by side: #YRX-X-1405 to #YRX-X-1410.

See also **Automatic Sequence**; **Manual Sequence**

ALBUM ORIENTED ROCK (RADIO)/AOR

AOR arose in the early 1970s as part of a concerted effort by radio executives — in collusion with the major record labels — to standardize FM playlists.

Taking the Top 40 format dominating AM radio, AOR consisted of tight, scaled-down song rotations, usually one or two selections preferred by the artists themselves (or the listening audience, if the street-level verdict was unanimous in nature) from the best-selling rock albums of the day. It was geared to album, rather than 45 rpm single, sales; many of the playlist selections were never released as singles.

AOR has never constituted a stylistic grouping; playlist inclusions have always been defined by radio programmer decisions. The artists enjoying heavy AOR rotation representing a wide range of musical genres. Nevertheless, some general characteristics of AOR have been discerned by industry observers. J.D. Considine termed it "hard pop"; that is, "hard, because its sound derives from the contours of hard rock and heavy metal; pop, because its formal structure is oriented toward popsong melodicism, not the sprawling, riff-based jamming of traditional heavy metal." He adds that critics of the category dismiss it as entertainment (as opposed to "music"), whereas supporters have pointed to its propensity for selling records. AOR was also widely criticized for its tendency to bar Black artists from playlists.

The genre peaked in popularity during the mid-1970s. The emergence of other commercially viable radio formats in the late 1970s and early 1980s — most notably disco, country pop, rock 'n' roll oldies, adult contemporary, and college radio/alternative — severely compromised its front-running status. AOR's appeal was also diminished by the decline of mainstream rock acts such as Bad Company and the Doobie Brothers. The format remains a radio fixture, albeit in a secondary role — both within radio and in relation to other media broadcast outlets — as a hit-making entity.

FRANK HOFFMANN

ALC

SEE AUTOMATIC LEVEL CONTROL

ALDA, FRANCES (31 MAY 1883 [SOME SOURCES GIVE 1879]–18 SEP 1952)

New Zealand soprano, born Frances Davies in Christchurch. Alda played both piano and violin as a child, and in her teens was singing with a light opera company. Taken to England to study, she sang for King Edward VII. Her debut was at the Opéra Comique, Paris, in *Manon* on 15 Apr 1904, under her new stage name, Frances Alda. Jules Massenet, composer of *Manon*, taught her the role. She went on to perform in Brussels and then made her Covent Garden debut with

Enrico Caruso in *Rigoletto*. At La Scala in 1908 she sang the premiere of *Louise*. She began with the Metropolitan Opera in the 1908/1909 season, and remained with company to 1929, missing only one season. Alda married the Metropolitan's director, Giulio Gatti-Casazza, in 1910 (divorced 1929). She died in Venice.

Her recording career began in 1910 with Victor; she made all her records for that label. By 1917 there were 35 solo items by Alda in the Victor catalog, plus a notable duet with Enrico Caruso ("Miserere" from *Trovatore*, #89030, #8042), a trio and four quartets. Among her finest recordings are "O mio babbino caro" from *Gianni Schicchi*; "Ah! dunque ei m'amerà" from *Loreley*; "L'altra notte in fondo al mare" from *Mefistofele*; "Sul fil d'un soffio etesio" from *Falstaff*; and "Un bel di" from *Madama Butterfly*. These were included in LP transfer issued by Court Opera Classics (CO 383) in 1979. [Favia-Artsay 1951.]

ALDRIDGE, SALMON & CO., LTD.

A firm registered in Britain in 1902, but originally established in Bombay, India, in the 1840s as general merchants. The U.K. offices were in London. In July and August 1907 agreements with E. ? Sabine and Thomas Frederick Bragg led to the opening of a record department which they named the Universal Talking Machine Co. It sold Columbia, Pathé, and Favorite labels.

ALEXANDER, GEORGE (9 JULY 1867–2 MAR 1913)

American baritone, born Clifford Alexander Wiley in Baltimore. His repertoire was primarily light opera and concert songs. He made his first recordings for Zonophone in 1902, and then made his first Columbia record 1903; the song was "Three Roses Red" (Columbia 1098). Although he made a few Victor discs in 1903 (all out of the catalog by 1908), he worked almost exclusively for Columbia, making more than 50 cylinders and 75 discs by 1907; some of his records were still marketed in 1927. Alexander died in New York.

ALIASING (DIGITAL)

In digital-audio recording systems, this phenomenon involves the problem of unwanted frequencies created when sampling a signal of a frequency higher than half the sampling rate. When the sample interval is too large, the spectrum copies overlap, the signals are mis-recognized, and a low-pass filter cannot recover the signal exactly. In other words, aliasing will occur when the sample rate is smaller

ALIGNMENT

than twice the signal bandwidth. Consequently, aliasing is a form of distortion.

See also **Oversampling**

HOWARD FERSTLER

ALIGNMENT

In a tape recorder, the position of the tape head with respect to the tape. If alignment is imprecise there will be distortion and/or reduced output; this is more critical with cassette decks than with reel-to-reel recorders because of the cassette tape's narrow recording tracks. Some cassette decks have built-in alignment equipment. Test tapes are used to check accuracy of alignment.

ALL-AMERICAN MOHAWK CORP.

A Chicago manufacturer of radios and phonographs, selling combination radio-phonographs from \$245 to \$425. The product trade name was Mohawk-American. The company was active in the later 1920s.

ALLEN, WALTER C.

(2 NOV 1920–23 DEC 1974)

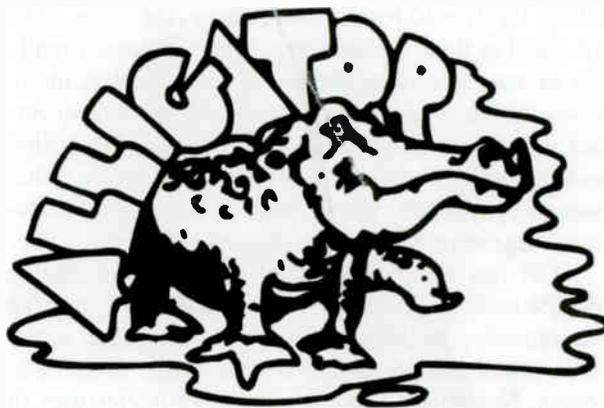
Ceramic engineer, member of the engineering faculty at Rutgers University, New Jersey; also a jazz researcher, discographer, and member of the executive committee of the Rutgers Institute of Jazz Studies. He was the author of books on King Joe Oliver (written with Brian Rust) and Fletcher Henderson. At the time of his death in Point Pleasant, New Jersey, he was preparing a revised edition of the Oliver book. Allen was a tireless advocate of high standards in biographical and discographical research in the jazz field.

ALLGEMEINE ELEKTRIZITÄTS GESELLSCHAFT (AEG)

A German firm responsible for early work on tape recorders. In 1931, pursuing an interest in Pflüger's tape machine, AEG developed the Magnetophon, which solved the old problems of slip-free constant speed tape transport and of recording head design. Among researchers at the firm were Erwin Meyer, Emil Mechau, Richard Keller, Theo Volk, and Veronika Oexmann.

ALLIGATOR RECORDS

Urban blues label based in Chicago founded by Bruce Iglauer in 1971, then just 23 years old. Iglauer was a rabid blues fan who moved to Chicago after finishing college to pursue his favorite band, Hound Dog Taylor



Alligator Records's logo. Courtesy Alligator Records

and the House Rockers. He worked briefly as a shipping clerk at Delmark Records, and tried to convince label owner Bob Koester to record the band. Koester declined, so Alligator released its first album, a live album recorded for \$900. He continued to release about an album a year, promoting and selling the records out of his car. In 1975, the label signed Koko Taylor, one of the great female blues singers, and her first record garnered the company its first Grammy nomination. Three years later, guitarist Albert Collins, who had previously recorded for ABC/Bluesville and other major labels, was signed. His first Alligator album was reviewed in *Rolling Stone*, greatly enhancing the label's visibility as a major player in the blues scene. The 1980s saw the label branch out into Cajun music, signing Clifton Chenier, and, in 1984, blues rock, with the signing of Johnny Winter and Roy Buchanan. The label continued to grow, celebrating its 20th anniversary in 1991 with an all-star tour headlined by Taylor that was the subject of a documentary film and 2-CD set; a 25th anniversary record set followed in 1996. By the turn of the century, Alligator boasted of being "the largest independent contemporary blues label in the world," with a back catalog of over 170 releases. It continues to sign young rising players as well as working with its stable of legendary performers. [Website: www.alligator.com.]

CARL BENSON

ALLISON, ROY (6 MAY 1927–)

Noted speaker designer, writer, and researcher. He became involved with electronic matters during U.S. Navy service and later at the University of Connecticut's school of electrical engineering. Early in his audio career, Allison was editor of *Radio Communication*, *TV and Radio Engineering*, and *Communication Engineering* magazines, audio editor of *High Fidelity* magazine and editor of *Audiocraft* magazine.

In 1959 he joined Acoustic Research, Inc. He became chief engineer in 1962 and became plant manager in 1964. In 1967 he became vice president in charge of research and development. In 1974, after leaving AR, he helped to found Allison Acoustics, RDL, and RA Labs. He has published numerous professional-level and hobby-related articles and wrote a book, *High Fidelity Systems*. He has been a fellow of the Audio Engineering Society since 1973.

His most important later articles, published in both technical and consumer-oriented journals, deal with speaker/room interactions. He is responsible for defining the "Allison Effect," which involves mid-bass cancellation artifacts between loudspeaker systems and room boundaries, and is also responsible for some highly regarded speaker driver and loudspeaker system designs.

See also **Boundary Effects; Loudspeaker; Room Acoustics**

HOWARD FERSTLER

THE ALLMAN BROTHERS (BAND)

Built around a twin lead guitar framework featuring Duane Allman's bluesy slide work and Dicky Betts's lyrical country-inflected stylings, as well as a double-drummer lineup — both relatively new to rock at the time — the Allman Brothers Band, along with San Francisco groups such as the Grateful Dead and Quicksilver Messenger Service, helped create the jam-band phenomenon. Formed in Macon, Georgia, the Allmans also anticipated the 1970s southern rock genre.

Comprised of veteran group and session players (Duane Allman was particularly in demand, making substantial contributions to Derek and the Dominoes's *Layla* in addition to many hits by Muscle Shoals artists such as Wilson Pickett and Aretha Franklin), the band — also consisting of keyboardist/guitarist Gregg Allman (considered to be a premier soul singer), bassist Berry Oakley, and drummers Butch Trucks and Jai Johanny Johanson — steadily built up a following through recordings. Early LPs included *The Allman Brothers Band* (Atco 308; 1969; #188), *Idlewild South* (Atco 342; 1970; #38), *At Fillmore East* (Capricorn 802; 1971; 13), *Eat a Peach* (Capricorn 0102; 1972; #4;), and *Brothers and Sisters* (Capricorn 0156; 1972; #1), featuring virtuoso performing and a deft blend of country and blues-based material.

Despite the motorcycle deaths of Duane Allman (1971) and Oakley (1972) and internal disagreements between Betts and Gregg Allman (which resulted in several breakups during the 1970s and 1980s in which members pursued side projects), the band has survived into the 21st century, primarily on the strength of live

performances. Their shows have been documented on many recordings, both official releases — *Wipe the Windows – Check the Oil – Dollar Gas* (Capricorn 0177; 1976; #75), *Live at Ludlow Garage 1970* (Polydor 843260; 1990), *An Evening With the Allman Brothers Band* (Epic 48998; 1992; #80), *2nd Set* (Epic 66795; 1995; #88), *Fillmore East 2/70* (Grateful Dead; 1997), and *Peakin' at the Beacon* (Epic; 2000) — and countless bootlegs.

By the 1990s the band had caught on with alternative rock fans who were aware of their influence on modern-day improvisational groups such as the Phish, Bela Fleck and the Flecktones, Widespread Panic, and the Dave Matthews Band. Although no longer an innovative force on recordings, the Allmans have received many industry awards in recent years, including induction into the Rock and Roll Hall of Fame (1995) and their first Grammy award (1996 Best Rock Instrumental Performance) for "Jessica."

FRANK HOFFMANN

ALPERT, HERB (31 MAR 1935–)

For a time in the mid-1960s, Herb Alpert's records were outselling those of the Beatles; during the week of May 21, 1966, he had five albums in the Top 20 of the *Billboard Top LP's* chart (including three of the top eight positions). However, he also made a significant impact with the record industry as a businessman, writing and producing many hits as well as forming A&M Records — one of the most successful artist-owned labels ever established — with Jerry Moss.

Born in Los Angeles, Alpert began his recording career with RCA as Dore Alpert shortly after a stint in the army. He would then sign with Dot Records in 1959, again with no real success. Teaming up with future music business mogul Lou Adler, he help write such best-selling recordings as Sam Cooke's "Only Sixteen" (1959) "Wonderful World" (1960). The duo adopted the moniker Dante and the Evergreens to record a cover of the Hollywood Argyles's "Alley Oop" (1960). He would produce tracks for the likes of Jan and Dean.

In 1962, Alpert combined with Moss to found A&M Records; his group, the Tijuana Brass, recorded the firm's first hit for only \$65, "The Lonely Bull" (A&M 703; 1962). A&M would go on to be recognized as the largest independent label worldwide. By the early 1970s its roster would include such artists as Joe Cocker, the Carpenters, Free, Spooky Tooth, and Sergio Mendes.

It took a few years for Alpert's own recordings with the TJB to peak commercially. His debut release, *The Lonely Bull* (A&M 101; 1962; #24), established the group's trademark sound, a light, punchy blend of mariachi music, mainstream easy listening pop, and



Herb Alpert and the Tijuana Brass's album with typical mid-'60s cover art. Courtesy Frank Hoffmann

pre-smooth jazz. Follow-up albums — *Herb Alpert's Tijuana Brass, Volume 2* (A&M 103; 1963; #17), *South of the Border* (A&M 108; 1965; #6), and *Whipped Cream & Other Delights* (A&M 110; 1965; #1) — garnered increasingly greater sales. The latter LP, on the strength of the hit single, “A Taste of Honey” (A&M 775; 1965; #7), and an eye-catching cover featuring model Dolores Erickson covered only with shaving cream, elevated Alpert to the top of the pop scene. “A Taste of Honey” — with its catchy stop-and-start bass drum figure — would go on to win 1995 Grammy awards for record of the year, best non-jazz instrumental performance, best instrumental arrangement, and best-engineered record.

For the remainder of the 1960s, the TJB remained a hot commercial property, doing well with *Going Places* (A&M 112; 1966; #1), *What Now My Love* (A&M 4114; 1966; #1), *S.R.O.* (A&M 4119; 1966; #2), *Sounds Like* (A&M 4124; 1967; #1), *Herb Alpert's Ninth* (A&M 4134; 1967; #4), and *The Beat of the Brass* (A&M 4146; 1968; #1). Although public expectations limited the extent of his musical explorations, Alpert attempted some incremental variations on the group's formula, most notably the vocal ballad, “This Guy's in Love with You” (A&M 929; 1969; #1). By the late 1960s, however, his music was deemed out of step with the more serious tone of the times, and TJB albums gradually fell out of favor.

During the 1970s Alpert attempted a number of approaches to retool his sound, including an Afro-jazz fusion collaboration with Hugh Masekela (*Herb Alpert/Hugh Masekela*; Horizon 728; 1978; #65).

After aborting a try at recording TJB hits disco style, he used the remaining studio time to explore a jazz-pop mode more suited to his personal tastes. One of these takes, a slow-down dance song cowritten by his cousin, “Rise” (A&M 2151; 1979), reached number one on the *Billboard Hot 100*.

Alpert's subsequent releases have met with mixed success, his biggest success coming with “Diamonds” (A&M 2929; 1987; #5), which featured a guest vocal by then-emerging star Janet Jackson. Since selling A&M to PolyGram in 1990 for more than \$500 million, he has turned his attention to a wide range of projects. In addition to forming a new label with Moss, Almo Sounds, in 1994, he has exhibited his expressionist paintings, coproduced Broadway musicals such as *Angels in America* and *Jelly's Last Jam*, and established a philanthropic organization, the Herb Alpert Foundation.

See also **A&M Records**

FRANK HOFFMANN, JAMES B. LANSING

ALTEC LANSING

SEE LANSING, JAMES B.

ALTERNATIVE ROCK

Alternative rock encompassed a wide array of styles; the prime unifying feature consisted of an aversion to the pretensions of 1960s art rock. This alienation was initially expressed through the punk explosion. The movement was reconfigured during the postpunk era of the 1980s as an autonomous independent subculture centered around college radio and urban community clubs and mass media. The Athens, Georgia-based band, R.E.M., emerged in the mid-1980s as the most commercially successful exponent of indie musical values. The grunge sound, centered in Seattle in the late 1980s, proved seminal in convincing major record labels to again promote loud rock played by youth sans glitter or spandex. While grunge's leading band, Nirvana, disbanded prematurely as a result of leader Kurt Cobain's 1994 suicide, the scene continued to flourish on the strength of other talented area bands such as Pearl Jam, Soundgarden, Screaming Trees, Alice in Chains, and Sunny Day Real Estate.

The alternative sound changed the essential nature of rock from a mass youth music to a particularized, anti-commercial music of bohemia, social marginals of various kinds, and the avant-garde. Not since the days of bebop jazz had pop music been so inclined to anti-pop statements.

By the mid-1990s, however, alternative rock as a whole had become increasingly mainstream in nature.

Now referred to as “modern rock” on the radio and in trade publications, the genre was heavily pervaded by power pop (e.g., Teenage Fanclub, the Rembrandts), AOR hard rock (e.g., Foo Fighters, Stone Temple Pilots), and hip-hop (e.g., Faith No More, Red Hot Chili Peppers).

FRANK HOFFMANN

ALTHOUSE, PAUL

(2 DEC 1889–6 FEB 1954)

American tenor, born in Reading, Pennsylvania. He made his debut at the Metropolitan Opera as Dmitri on 19 Mar 1913, and sang there (with some interruptions) until 1940. His roles were from the Italian and Wagnerian repertoires, as well as his debut role in *Boris Godunov*. Althouse was a well-known teacher, whose pupils included Eleanor Steber and Richard Tucker.

He made five Edison cylinders in 1913–1914, the first being “All Hail Thou Dwelling” (“Salut demeure”) from *Faust* (#28195). That aria, and two other numbers, were also on Edison Diamond Discs. He then recorded for Victor; there were eight arias by him in the 1917 Victor catalog. In 1917–1918 he recorded patriotic and concert numbers for Pathé. Althouse died in New York.

ALTO SALES CO.

A San Francisco firm that was manufacturing, in 1912, the “Alto Brake,” a self adjusting automatic-stop for disc players.

AMATO, PASQUALE

(21 MAR 1878–12 AUG 1942)

Italian baritone, born in Naples. His debut was in Naples in 1900; he sang first at the Metropolitan Opera on 20 Nov 1908 as Germont and remained with the company until 1921. He recorded first for Fonotipia in Italy, making 60 sides in 1907–1910. His first Victor recordings were made in 1911; within five years he had made 16 opera solos, plus duets with Enrico Caruso, Geraldine Farrar, Johanna Gadski, Frieda Hempel, Marcel Journet, and Margarete Matzenhauer. He took part in the *Lucia* Sextette recording (Victor #96201) with Caruso, Luisa Tetrizzini, Journet, Josephine Jacoby, and Angelo Bada; this disc sold for \$7, the highest price in Victor’s catalog. Amato’s voice was shown at its best in recordings of the “Toreador Song” (Victor #88327), “Di provenza il mar” (Victor #88-474), and “O vecchio cor che batti” from *Due Foscari* (Victor #88438, #V-15-1005; 1913). He recorded for Columbia in 1916.



Pasquale Amato in the 1917 Victor catalog. Courtesy Jerald Kalstein

Although he left the Metropolitan because of ill health in 1921, Amato continued singing in Europe, South America, and in the U.S. In 1924 he was in Berlin, and made records for Homochord; these were also issued by the Italian label Phonotype. All the LP reissue labels carried his acoustic recordings.

In 1928 he appeared in a Vitaphone film entitled *A Neapolitan Romance*, singing “Torna a Surriento” and the “Toreador Song”; unfortunately only the video segment of the film has survived. Amato died in Jackson Heights, New York. [Kenyon 1973.]

AMBASSADORS

An American dance band of the 1920s, known by many names on various record labels. Leaders included Louis Katzman and Willie Creager; among the vocalists were Ernest Hare, Irving Kaufman, and Gene Austin. They began to record with “Tell Me a Story” (Vocalion #14620; 1923). The last known record was “Song of Siberia” (Vocalion #15832; 1929). [Rust 1989.]

AMBEROL

A new cylinder material, and label of the same name, introduced in the U.S. by Thomas Edison in November

AMBEROLA

1908. With 200 threads per inch instead of 100/inch, it could play four minutes (the Crystol, a British counterpart manufactured by Edison Bell, was said to play five or six minutes). The material was a waxlike metallic soap compound, fragile and quick to wear. A special sapphire point reproducer was used to play the records; this was incorporated in the Amberola phonograph. In 1912 Edison improved on the formula and offered the much more effective Blue Amberol. The name Amberol was selected from several alternatives, despite the lack of amber in the record, because it was thought to suggest the popular amber products of the day — notable for their beauty and quality.

"William Tell Overture," played by the Edison Concert Band, was the first Amberol number issued. A total of 1,157 items were released in the popular series through November 1912; there were also 40 concert records and 121 grand opera records. Among the artists represented were Albert Spalding, Riccardo Martin, Anna Case, Blanche Arral, Leo Slezak, Sarah Bernhardt, Maria Galvany, and Lucrezia Bori. [Koenigsberg 1987; Petersen 1975.]

AMBEROLA

SEE EDISON RECORD PLAYERS

AMBIANCE (ALSO AMBIENCE)

In sound recording, the environment in the recording studio or hall, and likewise the acoustic conditions in the playback room. Ambiance, in contrast to ambient sounds, may be incorporated (intentionally or not) in the recorded program.

See also **Reverberation; Surround Sound**

HOWARD FERSTLER

AMBIANCE EXTRACTION

Used in some home-based surround-sound processors, it basically involves removing out-of-phase information from a two-channel soundtrack and converting it for use in the surround channels. In the early 1960s, David Hafler developed one of the original extraction systems, a passive, unamplified hookup for a group of four loudspeakers hooked up to a two-channel amplifier, which steered out-of-phase components in a stereo recording to a set of rear loudspeakers, which were themselves wired to deliver a kind of ersatz stereo effect. This process, called Dynaquad, was marketed as a product by Hafler's Dynaco company. In the late 1960s, Peter Scheiber, at that time a professional bassoonist, filed a U.S. patent for an encoder/decoder matrix system that

would turn out to be a major competing format for quadrasonic sound in the early 1970s. Later, Dolby Laboratories cited many of Scheiber's patents in the creation of the Dolby surround system.

See also **Hafler Circuit**

HOWARD FERSTLER

AMBIANCE SYNTHESIS

Used in some home-based surround-sound processors, particularly those that employ digital circuitry, it basically involves synthesizing new ambiance from the in-phase information on a two-channel soundtrack and sending it to the surround channels. It differs from ambiance extraction by not making primary use of the recorded ambiance on a recording, except in the front speakers.

HOWARD FERSTLER

AMBIENT SOUND

A term first coined by U.K. experimental pop musician and producer Brian Eno. In a 1978 essay he described a new form of music in which the listener might "swim in...float in...get lost inside." The essay appeared on the sleeve of *Music for Airports*, the first ever ambient album (although Eno had refined his style on the preceding *Discreet Music*). The arrival of the synthesizer fuelled ambient music further most notably on recordings by Kraftwerk and Jean Michel Jarre. The acid house, rave and techno scenes which ignited in the late 1980s and early 1990s developed ambient music further. 'Ambient house' was pioneered in groundbreaking music by The Orb, Youth, The KLF and 808 State who fused ambient ideas with mellow dance beats. Now almost unrecognizable from the tones and drones found on *Music for Airports*, ambient became a mainstream phenomena post-millennium in the form of 'chill out'. An updated version of ambient house for the Ibiza generation, chill out unwittingly got sucked into the mainstream via a public saturation of compilation albums. By its very nature ambient music will evolve further. Eno himself describes its offshoots and developments as "like Chinese Whispers — unrecognizable but intriguing."

IAN PEEL

AMBIOPHONICS

An effective, but primarily sweet-spot-oriented, surround-sound technique developed by Ralph Glasgal that involves a highly refined degree of two-channel

crosstalk cancellation, coupled with surround-channel ambiance synthesis.

HOWARD FERSTLER

AMCO (LABEL)

An American label of the mid-1920s, that "derived its meager catalog from Grey Gull" (Rust). Examples are rare, but the material was not distinguished. [Rust 1978.]

AMERICAN (LABEL)

SEE *AMERICAN RECORD Co.*

AMERICAN ENGINEERING STANDARDS COMMITTEE

SEE *AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)*

AMERICAN FEDERATION OF MUSICIANS OF THE UNITED STATES AND CANADA (AFM)

A trade union founded in 1896 under the name American Federation of Musicians (the current name was adopted in 1965). The union engages in collective bargaining with firms in the recording, radio, television, and film industries. Its most historic action in the recording field was a strike called by federation president James C. Petrillo in August 1942, effecting a ban on record making by all instrumentalists (except harmonica performers). The dispute, inspired by Petrillo's concern that jukeboxes were putting live musicians out of work, brought most American record production to a quick halt, so that hit songs from Broadway and Hollywood went unrecorded except for curious arrangements by all-vocal groups trying to sound like orchestras.

In September 1943 Decca reached agreement with Petrillo, attracting artists away from Columbia and Victor; these companies reached agreement with the union in November 1944. As part of the agreement, a percent of the sales of every record sold went to the AFM for the benefit of unemployed musicians.

AMERICAN FOLKLIFE CENTER

In 1928 the Archive of Folk-Song (from 1981 the Archive of Folk Culture) was established in the Library of Congress to collect recordings, printed and manuscript materials on folksong, folk music, folk

tales and related materials. With the passage of the American Folklife Preservation Act, Public Law 94-201 (1976), the U.S. Congress established the American Folklife Center, which incorporated the Archive in 1978, in the Library of Congress. Although the center is located in the library and it is under the general supervision of the Librarian of Congress, it is fiscally and administratively a separate institution of the federal government. Alan Jabbour was named the first director; in 2000, he was replaced by Margaret Bulger. The combined unit has multiple functions and diverse collections: "preserving and presenting American folklife" is a central goal, met through research, documentation, preservation, exhibitions, publications, etc. A reading room in the Library of Congress is the focus of communication with researchers.

A recording laboratory was established in the library in 1941, and folk recordings have been issued periodically. Special attention is devoted to the archive of field cylinders, one of the largest of its kind in the world. Publications of the center include a quarterly newsletter, *Folklife Center News*, and *Folklife Annual*. The Archive of Folk Culture issues a series of *Finding Aids* (descriptions of the collections in the archive's library), and *Reference Aids* (bibliographies, discographies, and directories). An active reference service is maintained, as well as a fieldwork program. [Website: www.loc.gov/folklife/.]

See also **Federal Cylinder Project**

AMERICAN GRAMAPHONE (LABEL)

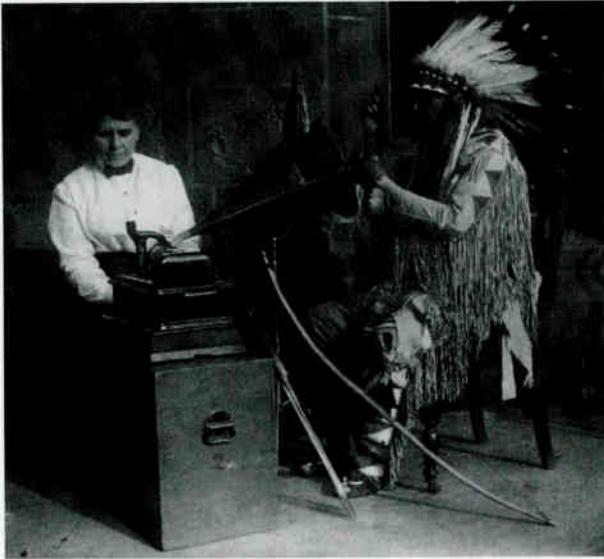
SEE *MANNHEIM STEAMROLLER*

AMERICAN GRAMOPHONE CO.

Emile Berliner's early firm, established on 20 Apr 1891 in Washington, D.C. It engaged only in research and development, with no sales reported. A coin-op was one of the devices patented. The company was replaced by the United States Gramophone Co. in April 1893.

AMERICAN GRAPHOPHONE CO. (AGC)

A firm established in Washington, D.C., on 28 Mar 1887 (incorporated 15 May 1887) through an agreement arranged by James O. Clephane, Andrew Devine, and John H. White with Volta Graphophone Co. AGC made business machines as a licensee for the Volta Co., which was holder of the Bell and Tainter patents. The general manager, and later president, was Edward D. Easton, and manager of the Bridgeport plant (opened



Using a cylinder machine, Frances Densmore records a Blackfoot Indian singing, 1916. © Corbis

1888) was Thomas Hood Macdonald. In 1888 Jesse Lippincott, who paid \$200,000 for AGC stock, became the personal licensee of the company, with rights to sell instruments and supplies, but he had to pay royalties to the company on his sales. A favorable contract with North American Phonograph Co. required North American to buy 5,000 cylinder machines per year from AGC, but this arrangement proved to be impractical since by 1891 the graphophone was losing out to the Edison phonograph in the marketplace. North American, forced by American Graphophone to meet its purchase obligation, collapsed in 1894. In the following year a group headed by Easton took control of American Graphophone and merged it with Columbia Phonograph Co., which had been a licensee of North American. Thereafter AGC concentrated on research and manufacturing, while Columbia handled sales and distribution. Showrooms were opened in Boston, Chicago, Philadelphia, and St. Louis.

A long patent litigation with Edison ended in a cross-licensing agreement on 7 Dec 1896. Market success was achieved with the Graphophone Grand player, developed by Macdonald, in 1898. The important industry figure Frederick M. Prescott was an officer in the company in 1899–1900. AGC had a legal mastermind, Philip Mauro, who brought patent actions against various parties in the recording industry; he won injunctions against Hawthorne & Sheble (to stop them from unauthorized conversions of Edison machines into Graphophone Grands), Frank Seaman, and Emile Berliner. An early attempt to enter the disc field was stopped (1899) by a Berliner suit; but AGC was able to produce discs 1902–1906, using the patents of Joseph

Jones. They also sold (1905) the “Twentieth-Century” graphophone, with a six-inch mandrel. At that time there was a general reorganization of the Easton interests, and AGC was absorbed into the Columbia Graphophone Co. [Klinger; Wile 1974; Wile 1990.]

See also American Talking Machine Co.; Columbia; Vitaphone

AMERICAN HOME RECORDER CO.

A New York firm, which made the first U.S. home disc recorder, marketed in August 1920.

AMERICAN MULTINOLA CO.

SEE MULTINOLA

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

A private, nonprofit organization with offices located in New York City and Washington, D.C., ANSI was first established in 1918 as the American Engineering Standards Committee. Later it was called the American Standards Association (1928), and still later the United States of America Standards Institute (1966). It took its present name in 1969. One of its purposes is to act as clearinghouse for norms and specifications developed voluntarily by organizations in the safety, engineering, and industrial fields. Another is to enhance both the global competitiveness of U.S. business and the U.S. quality of life by promoting and facilitating voluntary consensus standards and conformity assessment systems, and safeguarding their integrity. It also represents the U.S. in international standardization work. There were over 1,000 members in 2000, with an annual operating budget of approximately \$16 million. [Website: www.ansi.org.]

REV. HOWARD FERSTLER

AMERICAN ODEON CORP.

European Odeon Record discs were first sold in the U.S. during 1908–1911, on the Fonotipia label, distributed by Columbia. In 1921 the American Odeon Co., which had been set up after World War I in New York, arranged with Okeh to distribute European recordings on the American Odeon Record label, and also to record in New York. There were popular discs and “red label” classics (reissues of recordings made in 1906–1909) by stars like Emmy Destinn and John McCormack. Columbia purchased Odeon in 1926, and used the label name for some issues in 1930–1931.

FRANK ANDREWS

AMERICAN PHONOGRAPH CO.

The original name of the North American Phonograph Co., for a short period only: 28 June 1888 to 14 July 1888.

**AMERICAN PHONOGRAPH CO.
(DETROIT)**

A firm operating in 1908, it was an Edison distributor with a sales territory of Michigan plus sections of Ohio and Indiana.

**AMERICAN PHONOGRAPH CO.
(NEW YORK CITY)**

A firm incorporated in 1910; five years later it announced its Autophone, which could play 12 cylinders consecutively.

AMERICAN PHONOGRAPH RECORD CO.

A short-lived cylinder maker, operated by several prominent recording artists at the turn of the century. One of the singers was Harry Macdonough; others were Steve Porter, William F. Hooley, and S.H. Dudley. They produced a brown wax cylinder named Perfection, and offered to record songs on demand. [Walsh 1943/11.]

AMERICAN PIANO CO.

A conglomerate established in June 1908 in New York, bringing together Chickering & Sons, William Knabe, and the various interests of Foster-Armstrong. In 1922 the company also acquired Mason & Hamlin. A player piano department opened in 1909, selling the Ampico mechanism, and in 1913 the American Electric player piano, which operated from a mains circuit or storage battery, could transpose, and had expression controls. American Piano was maker of the Rythmodik [sic] music rolls, which included performances by Harold Bauer, Leopold Godowsky, and Ferruccio Busoni. The name was changed to American Piano Corporation in 1930, marking some adjustments in retail operations. In 1932 the firm merged with the Aeolian Co. to form the Aeolian American Corp.

AMERICAN QUARTET

SEE PREMIER QUARTET

AMERICAN RECORD CO.

A firm set up in 1904 by Odeon, through Hawthorne & Sheble, with Frederick Marion Prescott; the plant was

in Springfield, Massachusetts. J.O. Prescott, brother of Frederick Prescott, was manager. In October 1904 the first records were announced, in two sizes: 10 5/8 inches (the same size as the German Odeons) and seven inches. They were double-sided discs.

Reciprocal arrangements were made with the International Talking Machine Co. mbH, the Berlin producer of Odeon records, so that each firm could use the other's material. The U.S. discs came to be referred to as "Indian Records" because of the depiction of an American Indian on the label, although the word "Indian" never appeared on the record, which was styled "American Record Co." The discs themselves were made of a blue material. In March 1905 the 10 5/8 inch-discs were available both single- and double-faced, selling for \$1 and \$1.50, respectively. The general offices moved to Springfield in 1905, leaving the recording laboratory and the foreign sales department in New York, managed by J.O. Prescott. A Chicago office opened at 189 La Salle St. in September 1905. A phonograph was marketed by Chicago's Rudolph Wurlitzer Co., a machine named the "American Indian."

The first exports to Europe arrived in Britain in September 1905, styled "American Odeon Record," and the shipments continued until January 1906. The records were all of the 10 5/8 inch size. By October 1905 there were worldwide sales. The 10 5/8-size was dropped in favor of a 10-inch size.

Although business was good, the firm was in legal trouble. Columbia claimed infringements of its Jones patents in the recording and manufacturing processes. After a setback in a lower court, Columbia won a decree of injunction in the U.S. Court of Appeals on 14 Jan 1907, and American Record Co. ceased production of records. The company's recording laboratories in New York were leased to Sonora Phonograph Co. A British entrepreneur purchased the matrices, and pressings therefrom appeared in U.K. on such diverse labels as Britannic, Burlington, Defiance, The Leader, Pelican, Pioneer, and probably others. J.O. Prescott went on to a career in Japan, and later in Turkey.

FRANK ANDREWS

AMERICAN RECORD CORP. (ARC)

A firm established in August 1929 in New York, resulting from a merger of interests. The companies involved, each of which retained its own corporate identity, were Scranton Button Works, Regal Record Co. (New York), and Cameo Record Corp. A British firm, Crystalate Gramophone Record Manufacturing Co., Ltd., was involved because it held a controlling

AMERICAN RECORDING LABORATORIES

interest in Cameo. ARC was capitalized at \$9 million. Louis G. Silver was the first president, and representatives of Scranton, Crystalate, and Cameo were board members.

Under the agreement, Regal and Cameo undertook recording and sales, while Scranton did the manufacturing and pressing. The main office of ARC was at 1776 Broadway, New York. Its plants were in Scranton, Auburn (New York), Framingham (Massachusetts), and Glendale (California). Its labels were Regal Records, Cameo Records, and Perfect. In 1931 ARC purchased the Brunswick recording enterprise from Warner Brothers, and named it Brunswick Record Corp. (Brunswick's interests in Britain were sold to Decca.) ARC thus owned the Brunswick label and Brunswick's associated labels Melotone and Vocalion. Later, as the Depression crushed the record industry, ARC also acquired the Banner, Lincoln, Paramount, American Pathé, and Romeo labels. Its principal purchase was the Columbia assets from Grigsby-Grunow, Inc., in 1933.

ARC maintained market momentum through chain store sales of low-priced discs, by providing a series of intermission music records to theatres, and by supplying jukebox operators. The firm sold 17 million discs of all types in 1931. In late 1938 the Columbia Broadcasting System bought ARC, with some rights going to EMI, Ltd. [Andrews 1981/2.]

AMERICAN RECORDING LABORATORIES

A firm incorporated in May 1918 in Passaic, New Jersey. It engaged in personal recording services. In February 1921 it was acquired by Phonograph Recording Laboratories. Hartwick W. Walt was managing director. The firm issued a set of five exercise records in October 1922, sold at \$7.50.

FRANK ANDREWS

AMERICAN RECORDING STUDIOS

A recording studio founded in 1965 by Chips Moman and Tommy Cogbill in Memphis, Tennessee. It rose to prominence as one of the shapers of the "Memphis Sound." Moman was a leading producer, working on sessions for Stax and Atlantic Records; an argument with Stax's owner led him to strike out on his own in 1965. He formed his own band to work at American Recording Studios, and recorded there many leading pop and R&B singers, including Dusty Springfield (the famous *Dusty in Memphis* sessions), Elvis Presley's 1969 "comeback" sessions, Wilson Pickett, the Box Tops, and Neil Diamond, to name just a few.

In 1972 he left Memphis and relocated his studio to Atlanta. He subsequently moved to Nashville, returning to his hometown in 1985. His new studio, 3 Alarm, was first used for the "Class of '55" session that reunited Johnny Cash, Roy Orbison, Carl Perkins, and Jerry Lee Lewis; Moman released it on his own American Recording label after all the major labels rejected it. The studio was closed by the end of the decade, and Moman had returned to Nashville to work as an independent producer.

CARL BENSON

AMERICAN SINGERS

A male quartet, active from ca. 1927 into the 1930s. Charles Harrison organized the group and sang first tenor. Other members were Redferne Hollinshead, second tenor (later replaced by Lambert Murphy); Vernon Archibald, baritone; and Frank Croxton, bass. Their earliest recording was an Edison Diamond Disc of January 1928, consisting of "Why Adam Sinned" and "When the Little Ones Say 'Good-Night.'" (#52179). They made three other Edison Diamond Discs, and later recorded for Victor, making a notable disc of "On the Banks of the Wabash," and "Dear Old Girl" (#22387; 1930). The quartet made a Victor record with Rudy Vallee and his orchestra of "To the Legion" and "Songs of the Navy" (#24075; 1930). In the 1930s the group was more active on the radio and on stage than in the studio. [Walsh 1962/10; Walsh 1972/5.]

AMERICAN SOCIETY OF COMPOSERS, AUTHORS AND PUBLISHERS (ASCAP)

A performing rights association founded in 1914 that gradually assumed strong control over the emerging radio industry with respect to copyrighted works. Today, the society may negotiate and sue in the name of members, and it makes royalty distributions as well. Agreements are enforced in part through a complex system of program sampling. Licensing terms introduced in 1940, demanding large fees for playing records on the air, led to resistance by the broadcasters, and the formation of the rival Broadcast Music, Inc. (BMI). However, ASCAP is the only U.S. performing rights organization created and controlled by composers, songwriters, and music publishers, with a board of directors elected by and from the membership. ASCAP protects the rights of its members by licensing and distributing royalties for the nondramatic public performances of their copyrighted works. ASCAP's licensees encompass all who want to perform copyrighted music publicly, although the organization

makes giving and obtaining permission to perform music simple for both creators and users of music. The ASCAP board of directors, consisting of writers and publishers, votes on the admission of new members. Today, ASCAP has a membership of more than 120,000 U.S. composers, songwriters, and publishers of every kind of music, and hundreds of thousands worldwide. [Website: www.ascap.com.]

HOWARD FERSTLER

AMERICAN STANDARDS ASSOCIATION

SEE AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

AMERICAN TALKING MACHINE CO.

A firm established in 1898 by Albert T. Armstrong, licensed by the American Graphophone Co. It achieved prominence as maker of the Vitaphone disc player and its red discs. Having lost a patent case brought by Berliner it ceased operations in 1900.

AMERICAN TALKING MACHINE CO. (LONDON)

A firm operated by John Nottingham, active ca. 1903. It was an unlicensed outlet for Edison products, Columbia, and other imports.

AMERICAN TALKING MACHINE CO. (NEW YORK CITY)

A firm in operation in Manhattan in 1896, selling cylinder records. Henry C. Spencer was manager.

AMET, EDWARD H. (1860–1948)

Inventor of a spring motor for Edison's phonograph (Class M) in 1894; he was the first to receive any patent (U.S. #462,228; filed 28 Jan 1891; granted 3 Nov 1891) for a spring-driven phonograph motor. Later he introduced double-mainspring models, and portable two- or four-mainspring coin-ops. He also developed the Metaphone ("Meta" being an anagram for Amet's name; it was later called the Echophone) in 1895; it was the first cylinder phonograph with a distinct tone arm. It sold for only \$5 (Edison and Columbia machines were then sold for \$30-\$40). However, Amet had to suspend manufacture of his player after only a few months because of court action taken by American Graphophone Co. He was also a pioneer in early sound motion pictures, using Lambert cylinders synchronized

with the film. He received 11 U.S. patents in the sound recording field. [Koenigsberg 1990; Paul 1985.]

AMMONS, ALBERT

(23 SEP 1907–2 DEC 1949)

Chicago-born jazz pianist, famous for his 1936 recording of Pinetop Smith's "Boogie Woogie" (Salabert #12001; reissued in Columbia set C-44: *Boogie Woogie*), "Shout for Joy" (Columbia #35961; 1939), and "Bass Goin' Crazy" (1942) were later hits. Ammons was one of the three boogie woogie pianists featured by John Hammond in his famous "From Spirituals to Swing" concert held at Carnegie Hall in 1938. In 1941 he made an important series of duets with Pete Johnson. He died in his hometown eight years later.

AMOS, TORI (22 AUG 1963–)

Born Myra Ellen Amos, she was admitted to the world renown Peabody Conservatory in Baltimore as a five-year-old. Disinclined to conform to the school's classical piano study regimen, the North Carolina native was expelled at age eleven.

Adopting the name Tori in her late teens and migrating to Los Angeles, she was signed by Atlantic Records in 1987. An eponymous album (Atlantic; 1988), featuring her hard-rock backing band, was a commercial and critical failure.

Amos reemerged as an idiosyncratic singer-songwriter on *Little Earthquakes* (Atlantic 82358-2; 1993). Its international success, with sales of more than 2 million, cemented her persona as a socially conscious rock poetess. Follow-ups — including the EP *Crucify* (Atlantic; 1993) — her slowed-down version of the Nirvana hit, "Smells Like Teen Spirit," revealed a talent for radically reworking outside material; *Under the Pink* (Atlantic 82587-2; 1994; #12; platinum), which entered the British charts at number two; the ambitious *Boys for Pele* (Atlantic 82662-2; 1996; #2; platinum); *Sons From the Choirgirl Hotel* (Atlantic 83095-2; 1998; #5); the two-disc (one live) *To Venus and Back* (Atlantic; 1999; #12); and *Strange Little Girls* (Atlantic 83486-2; 2001) — enabled her to develop one of the most loyal followings within the music business. During the 1990s, bootleg copies of her concerts circulated widely on a scale equaled only by the likes of Pearl Jam, Phish, and the Grateful Dead.

Amos has also contributed much time to social causes, helping found the Rape, Abuse, and Incest National Network in 1994. She continues to chair RAINN's board and helps raise money through

AMPEX CORP.

pay-per-view downloads on the Web, ticket auctions, and benefit concerts.

FRANK HOFFMANN

AMPEX CORP.

An American electronics firm, located in Redwood City, California. Established in 1944 by Alexander M. Poniatoff in San Carlos, California, it pioneered high-quality tape recorders and related equipment in the U.S. in the late 1940s and early 1950s, and maintained its preeminence for several decades. The Ampex 300 series was widely found in recording and broadcast studios, and the ATR-102 tape deck became recognized as the state of the art in analog magnetic recording technology. Among the company's many firsts include the first multitrack audio recorder, introduced in 1954, the first videotape recorder in 1956, and a broadcast-quality color video recorder in 1964. Ampex was also a pioneer producer of magnetic tape. Since the mid-1960s, the company has increasingly focused on high-end products for broadcasters, recording, and more recently digital storage. [Website: www.ampex.com.]

AMPHION QUARTET

SEE *HARMONIZERS QUARTET*

AMPICO

An electrically operated inner-player that was built into various makes of piano, manufactured by the American Piano Co. The Marque-Ampico was foot operated. Sergei Rachmaninoff was an exclusive recording artist on the Ampico reproducing piano, which was a major competitor to Duo-Art and Welte-Mignon.

AMPLIFICATION

The process or mechanism that increases signal magnitude. The effectiveness of amplification is a dimensionless ratio known as gain. In electrical systems, it is the ratio of the output voltage or power to the input voltage or power. Nonelectrical amplification is possible in playback machines. Edison achieved this with a type of mechanical advantage device, using a lever and a floating weight principle in his phonograph reproducers. The idea was to increase the pressure of the stylus on the record and thus to increase diaphragm movement amplitude.

See also **Amplifier; Higham Amplifier; Open Loop Gain**

AMPLIFIER

An electronic device that increases the strength of a signal input, drawing the necessary power from a source other than the signal itself. The signal may be received from a tuner (in a radio), a cartridge (in a phonograph), a tape deck, a microphone, a digital source, or a preamplifier. Signal strength may be increased hundreds or even thousands of times. Since a standard audio amplifier provides the necessary power to operate the loudspeaker, it is also called a power amplifier. Where there is a separate preamplifier, or voltage amplifier, its function is to magnify the signal voltage from the source and pass it to the amplifier for further enhancement as needed to drive the loudspeaker. The more recent commercial amplifiers incorporate the preamplifier function into one unit, the integrated amplifier. Modern amplifiers are often combined with input devices into receivers, which are basically integrated amplifiers with tuners.

Lee De Forest invented the electronic amplifier in 1907. His device was a three-electrode vacuum tube, which he named the "audion." Later amplifiers used triodes, pentodes, or beam-power tubes; the design effort has been directed toward high efficiency and low distortion. Distortion could be practically eliminated by use of beam-power tubes in a push-pull circuit and the application of negative feedback.

Most modern amplifiers are tubeless, solid-state (transistor) devices. When they appeared in the 1960s, these newer designs demonstrated superiority over tube amplifiers, and over the next few decades they eclipsed what tubes had to offer. Solid state offered low measured distortion in combination with much higher power output, greater reliability, and cooler operation. While typical tube amplifiers at the beginning of the solid-state era had 20–75 watt per channel output norms, solid-state devices of the middle 1970s had already surpassed 200 watts per channel. Manufacturers such as CM Labs, Dynaco, Kenwood, Marantz, and McIntosh competed in the power race, which peaked around 1971 with the Carver 350 watt/channel Phase Linear Model 700. In the last two decades the number of companies making amps of even greater power, including some with as many as five 200-watt channels for home theater use, has proliferated. From the mid-1990s on, A/V receivers with power outputs of more than 100 watts in each of five channels were available in medium price ranges.

Another advantage of solid state was in its use of differential circuits. These had been found in tube amplifiers also, but they functioned better in the stable thermal environment of solid state. By converting differential output to a single output, with the so-called current mirror, extra gain was achieved and thus more

feedback was possible. Concerns over the type of feedback that offered the most pleasing result developed in the 1970s and continued through the 1980s: for the issues. Recent systems have operated successfully to reduce distortion further, among them cascoding and Class A. The cascode is a pair of transistors acting together; one provides high voltage gain while shielding the other from voltage changes; the second provides voltage and current gain. Giving high gain, high linearity, and broad bandwidth, the cascode system has found a place in contemporary amplifiers.

Class A operation originated in tube systems, and was carried into solid-state systems around 1968, and still can be found in some designs. It removes switching distortion in transistors, while keeping the transistors thermally stable; it leads to a strong output power. High cost has kept Class A devices out of the mass market.

Pulse-width modulation amplifiers, known also as digital amplifiers or Class D amplifiers, were marketed by Sony and others in the late 1970s, with moderate success, and some subwoofer systems also use amps of this kind. "Current dumping" designs have been more widely accepted; they have been made by Nakamichi, Quad, Technics, and Threshold. In the late 1980s, "high current" amplifier design became a topic of discussion and experiment, beginning with the work of Finnish audio engineer Matti Ojala. This design orientation is most useful in connection with electrostatic, rather than dynamic, loudspeakers; most contemporary amplifiers have enough current to drive common speaker loads to high volume levels in normal sized rooms.

Many amplifiers have no controls at all, other than maybe an on/off switch. Controls on an integrated amplifier or receiver may include: balance control, filter switch, input selector, loudness compensation, mode selector, monitor, phase reverse control (phasing switch), tone control, and volume control. Receivers designed for home theater use will have even more controls. Amplifiers are compared with respect to their channel separation, frequency response, hum, distortion, bandwidth power output (in watts), and signal-to-noise ratio. Distortion is specified as a percent at given power output, frequency, and load impedance (e.g., 0.1 percent at 100 watts, at 1 kHz, and driving an 8-ohm load), and comparisons must be made at equal power outputs, frequency range, and load impedance to be meaningful. A 30-watt power output per channel is sufficient for most musical purposes with typical speaker systems (particularly if we are talking about five-channel surround-sound systems), but more power is desirable for playback at very high volume levels (definitely possible with home theater use), or in unusually large rooms, or if the speakers are unusual-

ly inefficient. The effect of the amplifier's power output is related to the impedance of the loudspeaker(s) attached to it. In general, the lower impedance, the more current it draws from the amplifier. Under some conditions, low-impedance loads may cause some solid-state amplifiers to run too hot or generate excessive distortion.

The most common measurement of amplifiers involves the continuous output into a given load, over a given bandwidth, at a specific impedance. The amount of extra power delivered by an amplifier on musical peaks is its dynamic headroom, and the importance of this with musical playback will depend upon just how much power an amp can deliver at a steady state. If steady-state power is already adequate, the headroom issue is academic. A proper audio amplifier will exhibit a frequency response of 20 Hz–20,000 Hz, with only a fraction of a dB (decibel) variation over that range, although some units have a considerably wider bandwidth. Channel separation will typically be in excess of 50 dB, which, since 30 dB is more than adequate for musical or home theater situations, means that most amps are subjectively perfect in this area. A good amp will have intermodulation distortion levels of less than 0.5 percent, and will have a signal-to-noise ratio of at least 65 dB, and probably considerably more than that. [Rosenberg 1983; Sweeney 1988 (includes extensive technical data and diagrams of solid state systems).]

See also **Feedback**

GUY MARCO, REV. HOWARD FERSTLER

AMPLIPHONE (I)

A kind of Muzak for homes, advertised in *TMW*, 1906. Subscribers were wired into a central playback point; they could hear continuous music at the touch of a button, apparently with nonmusical entertainment interspersed.

AMPLIPHONE (II)

A coin-op offering 10 disc selections, marketed in 1932 by the Mid-West Automatic Phonograph Co.

AMPLITUDE

In a vibratory movement, the distance from the equilibrium position to either point of maximum displacement is called the amplitude of the vibration. One cycle includes movements to both displacement points and back. The amplitude determines the intensity of a sound.

AMPLITUDE/FREQUENCY DISTORTION

AMPLITUDE/FREQUENCY DISTORTION

SEE *DISTORTION*

ANALOG RECORDING

The process using an electronic signal whose continuously varying waveform resembles that of the original sound. An analog recording pattern may be the cuts in the groove of a disc, or the arrangement of magnetized particles on a tape.

See also **Digital Recording; Disc; Electrical Recording; Magnetic Recording; Recording Practice**

ANCONA, MARIO

(28 FEB 1860–23 FEB 1931)

Italian baritone, born in Livorno. His debut was in Trieste in 1889. In 1893 he gave his first performances at Covent Garden and at the Metropolitan Opera, singing Tonio in *Pagliacci*. Later he appeared with the Chicago Civic Opera, the Manhattan Opera, and on stages around the world. Ancona made 23 Bettini cylinders during 1897–1899, singing the standard baritone parts. In 1904 he made 12 records for G & T, in Milan and London. Later he went to Pathé (1905–06) and Victor, where he made 19 Red Seals in 1906–1909; only three remained in the 1917 Victor catalog. His most popular recording was “A tanto amor” from *Favorita* (Victor #88063; 1907); this was reissued as IRCC #130. He died in Florence.

ANDANTE (LABEL)

Web-based classical music label founded in 2001. Founded by French lawyer/classical music fan Alain Coblenche, Andante is an ambitious project including a website, streamed audio of radio broadcasts, reference sources, and a CD company specializing in lavishly packaged reissues of archival recordings. The label works in partnership with major orchestras, drawing on their archives; the orchestras share the costs but earn much higher royalty on sales than in a traditional arrangement. The website has attracted much critical attention and Coblenche has grand plans to issue 1,000 CDs over the next decade. [Website: www.andante.com.]

ANDEM, JAMES L.

American record industry executive. He was president of the Ohio Phonograph Co. ca. 1890–1896, and general manager of its successor firm, the Edison Phonograph Co. (Ohio) from May 1897 to 1899. At the 1891 convention of the National Phonograph Association he was

elected treasurer. Andem's Ohio company was active in pursuing the entertainment uses of the new phonograph, particularly through coin-op rentals.

ANDERSON, LAURIE (5 JUNE 1947–)

Laurie Anderson was one of the most visible avant-garde artists of the 1980s. Despite her association with the experimental rock scene, Anderson's greatest contributions have fallen within the realm of performance art, particularly the integration of a wide range of media, including film and video, computer technology, dance, the fine arts, visual projections, the spoken word, and written language as well as music.

Born in Chicago, Anderson started out teaching art history and Egyptian architecture at the City College of New York in the early 1970s. Within a year, she had begun mounting multimedia performances in museums, concert halls, and art festivals. In 1977, she recorded “It's Not the Bullet That Kills You—It's the Hole” (Holly Solomon Gallery 004), a seven-inch single with an extremely limited circulation. “O, Superman” followed (One-Ten 005; 1981), an eleven-minute piece incorporating oscillating synthesizer chords and a wry commentary half-spoken/half-sung in an oftentimes electronically treated voice. Picked up by Warner Bros. (#49876) it reached number two on the U.K. charts, generating support for work on a full-length album.

Anderson's resulting LP, *Big Science* (Warner Bros. 3674; 1982; #29 UK), was adapted from her eight-hour-long multimedia work, *United States*. It displayed her minimalist credo in full flower, with particular attention focused on her intelligent lyrics and Anderson's hypnotic violin playing. The follow-up, *Mister Heartbreak* (Warner Bros. 25077; 1984; #93 UK, #60 US), was her most commercially accessible album, featuring collaborations with high-profile progressive rock musicians such as Peter Gabriel and Adrian Belew. The release of *United States Live* (Warner Bros. 25192; 1985) — a complete, albeit somewhat edited, performance of the by-then legendary project filling five long-playing discs — served to blunt her commercial momentum.

Seemingly oblivious to the dictates of the marketplace, Anderson continued to issue provocative recordings at regular intervals while also engaged in scoring films, writing, producing videos, and various other activities. Her LPs have included the satirical concert film, *Home of the Brave* (Warner Bros. 25400; 1986), the more melodic (including more natural singing by Anderson) *Strange Angels* (Warner Bros. 25900; 1989), *Bright Red* (Warner Bros. 45534; 1994; featuring production work by Eno and musical contributions from Lou Reed), *The Ugly One with the Jewels & Other Stories from the Nerve Bible* (Warner

Bros. 45347; 1995), and *Life on a String* (Nonesuch 79539; 2001).

FRANK HOFFMANN

ANDERSON, MARIAN
(27 FEB 1902–8 APR 1993)

American contralto, among the first African-American artists to achieve world distinction on the concert stage. She was born to poor parents in Philadelphia. After singing in church, she won a contest in 1923, which enabled her to compete in another contest in 1925. Victorious in the second contest, she was given an appearance with the New York Philharmonic. In 1929 she made her Carnegie Hall debut, and then made an acclaimed European tour, singing concert numbers and Negro spirituals. When she was refused the use of Constitution Hall in Washington, D.C., by the Daughters of the American Revolution, Eleanor Roosevelt arranged for her to sing at the Lincoln Memorial; her concert there on Easter Sunday 1939 essentially broke the racial barrier in the U.S. against Black performers. She was the first of her race to sing at the Metropolitan Opera (albeit only one time), as Ulrica in *Ballo in maschera* on 7 Jan 1955. Among her Victor recordings, the most durable have been her spirituals, especially "Go Down, Moses" (Victor #1799; 1924), and the Brahms *Alto Rhapsody* with the San Francisco Symphony Orchestra (Victor #11-8983/4; 1945). Victor released a CD of Anderson performances in 1990 (#GD87911). In 1991 Anderson received a Grammy lifetime achievement award. Anderson died in Portland, Oregon.

ANDERSON (W.R.) CO.

A New York firm that initiated distribution of the Domino label in 1916. (This label had no connection with the Domino produced by Plaza in the 1920s.)

ANDO, YOICHI (1939–)

A noted audio researcher and expert on acoustics, professor Ando is currently a member of the department of global and human environmental science, graduate school of science and technology, Kobe University, Japan. At Kobe, he has been studying room acoustics, in particular the forecasting of subjective impressions based upon binaural acoustic measurements, and the relationship with evoked potentials of the brain stem and the acoustic planning of buildings. Among other publications, Dr. Ando authored the book, *Concert Hall Acoustics*.

HOWARD FERSTLER

ANDREA, INC.

A firm located in Long Island City, New York. It manufactured radios, phonographs, and audio equipment during the 1920s.

ANDREWS SISTERS

Three sisters, born in Minneapolis: LaVerne on 6 July 1915, Maxine on 3 Jan 1918, Patti on 16 Feb 1920. They were the most celebrated popular ensemble of the late 1930s and 1940s, starting in vaudeville and night-clubs and then going into radio work in 1937. A hit record, "Bei mir bist du schoen" (Decca #1562; Brunswick #23605; 1937) led a long list of best sellers. Other outstanding discs were "Beer Barrel Polka" (Decca #2462; 1939), "Pennsylvania 6-5000" (Decca #3375; 1940), "Boogie Woogie Bugle Boy" (Decca #3598; 1941), and "Strip Polka" (Decca #18470; 1942). Discs made with Bing Crosby were notably successful; "Ciribiribin"/"Yodelin' Jive" was the first and one of the best (Decca #2800; 1939); the favorite was "Pistol Packin' Mama" (Decca #23277, coupled with "Victory Polka." The sisters appeared in 17 motion pictures from 1940 to 1948. The team broke up in 1953, got together again briefly in 1956, then went into semiretirement



The Andrews Sisters, c. 1940. Courtesy David A. Jasen

ANDREWS, W.D.

with occasional appearances until the death of LaVerne on 8 May 1967. Maxine died on 23 Oct 1995.

ANDREWS, W.D. (CA. 1858–1929)

American record industry executive. He was president of the Eastern Talking Machine Jobbers Association on its organization in 1906; and reelected in 1907. He was first vice president of the Talking Machine Jobbers National Association when it was formed in 1907, and was elected to that post again in 1909.

ANECHOIC ENVIRONMENT

Literally, without echo. An anechoic situation exists with acoustic signals produced by a source are not reflected back to it. Because the ground is reflective, true anechoic conditions would only exist outdoors and at a fairly high altitude. Anechoic chambers that have special acoustic materials on the walls to absorb reflections, are only that way down to lower-midrange frequencies.

HOWARD FERSTLER

ANGEL (LABEL)

A subsidiary of EMI/Capitol Records founded in 1953 when the firm purchased the Cetra-Soria label from Dario Soria. Soria continued to work for the firm through 1961. EMI continues to use the Angel name



Angel Records label, c. mid-'60s. Courtesy Frank Hoffmann

for its classical recordings. [Website: www.angel-records.com.]

ANGEL (TRADEMARK)

An angel writing with a quill on a disc was designed and registered as a trademark in U.K. in 1898 (and in U.S. in 1901) by Theodore B. Birnbaum. The Gramophone Co., established in 1898, used the Angel trademark until 1909, when Nipper replaced it. Angel Records revived it in 1953. It is seen today on EMI advertising, the little angel seated on a gleaming compact disc. Aside from Nipper, the canine RCA symbol, it was perhaps the best known record industry trademark worldwide, with variants in many countries. [Petts 1973 illustrates 22 angelic manifestations.]

See also Deutsche Grammophon Gesellschaft (DGG)

ANGELICA

A German phonograph marketed in England in 1906. [Chew 1981 (illus.).]

ANGELOPHONE (LABEL)

A disc record made by Angelico, a firm with offices in New York and London, ca. 1919. It was seven inches in diameter, and vertical cut. Nothing is known about the items issued. [Rust 1978.]

ANGELUS

A German phonograph marketed in England in 1906. [Chew 1981 (illus.).]

ANGLO-ITALIAN COMMERCE CO.

An Italian agency for Frederick Marion Prescott. It was associated with the International Zonophone Co. after that firm was acquired by G & T in July 1903. In most other countries the Zonophone agents were loyal to Prescott and switched to his Odeon records. The company was located at 6 Via Dante, in Milan. It was for this firm that Enrico Caruso made seven Zonophone discs and three cylinders in 1903.

FRANK ANDREWS

ANIMAL IMITATIONS

There was considerable novelty interest in this genre in the early cylinder days, primarily in whistlers doing bird calls. As late as 1917 Victor carried 12

animal numbers in its catalog, including "Barnyard Serenade," by Len Spencer (#4596; 1905 — reissued as #16779); "Dog Fight," #16107; and "Morning in Noah's Ark," by Pryor's Band (#4499; 1907 — reissued as #16022 and #16955). In "Donkey and Driver," violinist Charles D'Almaine made appropriate sounds on a Stroh violin (#2770; 1904 — reissued as #16169).

See also **Whistling Recordings; Wildlife Sounds on Records**

ANIMAL SOUNDS

SEE WILDLIFE SOUNDS ON RECORDS

ANIMALS, THE (ERIC BURDON AND)

The Animals, thanks in large part to Eric Burdon's powerful, gritty vocals, were one of the most authentic-sounding rhythm and blues revival groups of the British Invasion. The band was also one of the few First Wave acts to make a successful transition from mainstream pop to progressive rock in the late 1960s.

All members of the Animals' original lineup — Burdon, organist Alan Price, lead guitarist Hilton Valentine, bass guitarist Bryan "Chas" Chandler, and drummer John Steel — came from working-class families in the Newcastle, England, area. After becoming the top pop band in their home town in 1962–1963, the group — feeling that a more dramatic name would increase their chances for a commercial breakthrough — dropped the Alan Price Combo moniker in favor of "the Animals" (taken from audience remarks that they played like a bunch of wild animals). The Animals relocated to London in late 1963, where club dates and television appearances (beginning with BBC's "Saturday Club," 27 Dec 1963) led to a record contract with British Columbia. (Their recordings in the U.S. were released on MGM.)

The band's second single, "House of the Rising Sun" (MGM 13264; 1964), a Price arrangement of an African-American folksong, reached number one in both England and the United States. Although Price's fear of flying and loss of the spotlight to Burdon led to his departure (he was replaced by a classically-trained organist, Dave Rowberry), the Animals remained a top-selling singles act through the mid-1960s with hits such as "I'm Crying" (MGM 13274; 1964; #19), "Don't Let Me Be Misunderstood" (MGM 13311; 1965; #15), "We Gotta Get Out of This Place" (MGM 13382; 1965; #13), "It's My Life" (MGM 13414; 1965; #23), and "Don't Bring Me Down" (MGM 13514; 1966; #12).

By mid-1966, with competing artists such as the Beatles and the Beach Boys releasing increasingly sophisticated material, Burdon opted to reorganize the band around more talented musicians such as guitarist/violinist John Weider, guitarist Vic Briggs, bass guitarist Danny McCulloch, and drummer Barry Jenkins. Although now focusing on album releases — including *Winds of Change* (MGM 4484; 1967; #42), *The Twain Shall Meet* (MGM 4537; 1968; #79), *Every One of Us* (MGM 4553; 1968; #152), and *Love Is* (MGM 4591; 1969; #123) — complete with socially relevant lyrics and extended instrumental jams, Eric Burdon and the Animals (as they were now billed) continued to produce best-selling singles, most notably "See See Rider" (MGM 13582; 1966; #10), "When I Was Young" (MGM 13721; 1967; #15), "San Franciscan Nights" (MGM 13769; #9), "Monterey" (MGM 13868; 1967; #15), and "Sky Pilot" (MGM 13939; 1968; #14).

Ever conscious of prevailing trends, Burdon broke up the group with psychedelia on the wane and formed the funk-oriented War. After the top-selling recording, "Spill the Wine" (MGM 14118; 1970; #3), War left Burdon to pursue mainstream funk success. Burdon pursued a solo career. The original members of the Animals reformed in 1976 to record *Before We Were So Rudely Interrupted* (United Artists 790; 1977). A later reunion resulted in *Ark* (I.R.S.70037; 1983) and the live *Rip It to Shreds* (I.R.S.70043; 1984). From the mid-1980s onward, the group performed largely in various rock revival tours. In 1994, the Animals were inducted into the Rock and Roll Hall of Fame.

FRANK HOFFMANN

ANKER (LABEL)

Records issued by a German company, the Anker Phonogram GmbH, from about 1908. Originally the firm was Richter and Co., Berlin; it also traded as the National Phonogram Co. Among its artists were Felix Senius (tenor) and Julia Culp (contralto). The label was successful in Britain, its name anglicized to Anchor. The Anker firm merged with Kalliope Musikwerke AG in March 1913. [Andrews 1988.]

ANNOUNCEMENTS

Spoken introductions on cylinders or discs, common in the 19th and early 20th centuries. For example [from Brooks, 1978] "The following record taken for the Columbia Phonograph Company of Washington, D.C., entitled 'The National Fencibles March,' as played by the United States Marine Band." Edison's

ANSELMI, GIUSEPPE

announcers included Arthur Collins and Edward Warren Meeker. Len Spencer did many announcements for Columbia. The identification function of the announcement was displaced by the arrival of disc labels and molded cylinder markings, and few are found after 1908 (on the earliest Edison Amberols). [Brooks 1978.]

In the modern era, announcements have occasionally been added as a humorous touch to recordings. For example, Moby Grape's *Wow* (Columbia; 1968) included directions to change the turntable speed from 33 1/3 to 78 rpm between tracks, and the Jim Kweskin Jug Band included — at the end of side 1 of *See Reverse Side for Title* (Vanguard) — the following brief phrase, sung in 4-part harmony: "Now is the time to turn the record over" (it was even credited as a composition on the album's sleeve). When CDs replaced LPs, many people missed the ritual of turning over the record. Tom Petty on his first solo album, *Full Moon Fever*, featured a spoken announcement on the CD only, after the 6th song, that this would be the point where the LP would need to be turned over.

ANSELMI, GIUSEPPE (6 OCT 1876–27 MAY 1929)

Italian tenor, born Antonio Giuseppe Anselmi in Catania. After his operatic debut in Athens, 1896, he sang throughout Europe. During 1907–1910 he made 139 records for Fonotipia in Milan, beginning with "Sogno soave e casto" from *Don Pasquale* (#62183; 1907). The outstanding effort was "Quando le sere" from *Louisa Miller* (#62166). In 1913–1915 he sang six numbers for Edison Diamond Discs, the first being "Cielo e mar" (#83004). Anselmi retired in 1917, and died twelve years later in Zoagli, having bequeathed his heart to the Madrid Conservatory in gratitude for the reception given him by Spanish audiences. His complete Edison recordings are available on CD on *Three Edison Tenors* (Marston 1621).

ANSERMET, ERNEST (11 NOV 1883–20 FEB 1969)

Swiss conductor, born in Vevey. While teaching mathematics in Lausanne, in 1906–1910, he studied music and then became a conducting student of Felix Mottl and Artur Nikisch. In 1918 he organized the Orchestre de la Suisse Romande in Geneva, and conducted it for 50 years. He was a guest conductor with most of the major world orchestras, concentrating on works by Russian and French composers. He made recordings as early as 1929, but did not become an important

recording artist until 1946 when he contracted with Decca. His acclaimed rendition of *The Fire Bird* was made with the London Philharmonic on 78 rpm (Decca #ED30) and on LP with his own Suisse Romande (London #LL-889). More than 100 of his recordings subsequently appeared on LPs issued by the London label. He died in Geneva.

ANSI

SEE AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

ANSONIA (LABEL)

A record made by the Ansonia Phonograph and Record Co., Inc., of New York, in 1920–1921. It appeared to be overpriced compared to Victor and Columbia releases of the day, which may explain its early demise. [Rust 1978.]

ANTHES, GEORG (1863–1923)

Tenor, known to record collectors for his appearance on a Mapleson cylinder; the performance (*Lohengrin*) from which the extract was recorded took place on 19 Jan 1903. Anthes had made his Metropolitan Opera debut in the role on 28 Nov 1902.

ANTHOLOGIE SONORE (LABEL)

An important series initiated in 1933, pressed in Paris by Pathé-Marconi; interrupted by World War II, then resumed and continued into the 1950s. Musicologist Curt Sachs was the first artistic director and author of the program notes. Most of the repertoire recorded was from the Middle Ages and Renaissance. In many cases they were the first recordings of the early dances, chansons, ballades, madrigals, and church music. Works of the 18th century also appeared. A particularly notable issue was the *Mass* of Guillaume de Machaut (records 31 and 32).

ANTHOLOGIES

Early efforts to compile sets of 78-rpm albums on educational and historical themes date from the 1930s, when Parlophone issued *200 Years of Music*, consisting of 12 10-inch records that covered music history to the time of J.S. Bach. Curt Sachs, the distinguished musicologist, was editor; he also directed the most important of the historical sets, *Anthologie sonore*. The *Columbia History of Music*, edited by

Percy Scholes, was issued in Britain 40 10-inch discs from 1930 to 1939. *Two Thousand Years of Music* was a similar set by Parlophone, issued in 1931–1938. *The Carnegie Set* was a major venture of the Carnegie Foundation. On LP, the publisher W.W. Norton and the Haydn Society (label) joined to issue sets that accompanied Norton's printed anthologies: *Masterpieces of Music before 1750* (Haydn #9038-39-40) and *A Treasury of Early Music*. Victor's *History of Music in Sound* (18 LPs, issued 1958–1960) was designed to accompany the *New Oxford History of Music*. With the flowering of the LP record, historical anthologies proliferated. Active labels included Telefunken, Deutsche Grammophon, Nonesuch, and L'Oiseau Lyre. [Miller 1972; Rust 1980.]

ANTHONY, HARRY (1870–1954)

American tenor, born John Young in New York City. He specialized in gospel songs, primarily in duets with Charles William Harrison. Their first recorded duet was for Edison in May 1905: Longfellow's "Excelsior," set by the composer Michael Balfe (#8935). They began gospel singing in October 1905 with cylinder #9109, "When the Mists Have Rolled Away." In 1910 they made "See the Pale Moon" for Victor (#5780); they also made Columbia cylinders from December 1906, and U-S Everlasting cylinders in 1910 and 1912. Anthony and Agnes Kimball recorded the "Miserere" in 1912 for Edison Diamond Discs (#80002). After 1912 Anthony and Harrison did little work together, except for some Edison talking pictures that were shown in 1913–1914.

Anthony made tone tests for Edison with the Criterion Quartet, and sang also with other groups. In 1918 he took the place of John Bieling with the American Quartet. Anthony and Harrison were brought together again by Columbia in 1926 to make an electric recording of "Almost Persuaded" and "Softly and Tenderly" (#611D). Anthony died in New York City in 1954. [Walsh 1945/7-8-9.]

AOL/TIME WARNER INC.

Large media and entertainment conglomerate, created by the merger of Time Warner (itself created in 1990 through the merger of Time, Inc. and Warner Communications) and the America Online (AOL) internet service in 2000. Time, Inc. was a major publisher of magazines (Time, Life, People, Money, Fortune) and had entered the cable television market in 1972 with its Home Box Office. Warner originated with Warner Brothers studios, one of the principal

Hollywood enterprises of the 1930s. Among its many music holdings are a number of major labels, including Warner Bros., Atlantic, Elektra, Nonesuch, and many more, as well as the electronic music service MusicNet, which it co-owns with the BMG label group. In 2003, the company was renamed Time Warner, Inc., although the online service of America on Line (AOL) remained part of its holdings. Late in 2003, the company's recording labels were sold to an independent investor group led by Edgar Bronfman, the Seagrams heir who had previously owned Universal (and its music holdings). Warner Bros. publishing remained part of Time Warner in this deal.

AOR

SEE ALBUM ORIENTED ROCK (RADIO)

APEX (LABEL)

One of the records issued by the Compo Co., Ltd., Lachine, Montreal; Compo was the Berliner establishment in Canada. The Apex trademark, covering talking machines and records, was in use from 21 June 1921, and the earliest Apex records appeared in 1921 or 1922. Some of the material was original with Compo, such as the series of French language items. Other series came from Gennett masters, from Plaza, Pathé, and Okeh. The label had a long life, until at least 1954. [Kendziora 1962/1.]



Apex label. Courtesy David A. Jasen

APGA (LABEL)

APGA (LABEL)

A French company whose full name was L'Association Phonique des Grands Artistes, established in Paris in 1906. It made discs of 27 centimeters in diameter, larger than the usual 10-inch size. Artists were French, Belgian, and Italian; several, such as Lucien Muratore and Léon Melchisedec, were prominent. The company went out of business in 1913. [A label list and other details appeared in *Record Collector*, March 1954.]

APOLLO (I)

A line of disc players marketed in London in 1909 by Craies and Stavridi. Models included hornless portables (the Dulcephone), advertised as “shut up entirely and require no carrying case.” The Dulcephone was eight inches high, 13 1/4 inches long, and 10 3/8 inches wide. It evolved into the Dwarf model two years later. There were also consoles and table models. Some models used a hot air motor.

APOLLO (II)

A push-up player made by Melville Clark Piano Co., capable of handling any size piano roll. It featured a “transposing mouthpiece” that apparently adjusted the speed of the roll to sound in different keys.

APOLLO (LABEL) (I)

A British label, actually a stencil of Edison Bell discs or Kalliope Musikwerke discs.

APOLLO (LABEL) (II)

An American label of the early 1920s, issuing material from the Rialto masters.

APOLLO (LABEL) (III)

An American label of the late 1920s, releasing Pathé material.

APOLLO (LABEL) (IV)

A New York label established 1943 in Harlem's Rainbow Music Shop, specializing in race and jazz material. “Rainbow Mist” with Coleman Hawkins was an early hit. By 1946 the firm had expanded nationwide, with several subsidiary labels. Apollo continued well into the LP era, but is not a CD label. [Rust 1978.]



Apollo label from the mid-'20s. Courtesy Kurt Nauck/Nauck's Vintage Records

APPLE RECORDS

In seeking to get greater control over their recordings and careers, the Beatles formed Apple Corps in 1967. The company was originally envisioned to have several divisions, including a record label and recording studio; a film arm; and a clothing store. The Beatles themselves took the rather utopian view that artists, if left in control of their own work, would be happier and more productive than working for a gigantic corporation. The Beatles's own recorded output, beginning with the famous White Album of 1968, was released on Apple; individual band members also issued their own experimental recordings, including John Lennon/Yoko Ono's *Two Virgins* and *Life With the Lions* and George Harrison's *Wonderwall Music* and *Electronic Sounds*. Some of these records were issued on a shortlived subsidiary label, the playfully named Zapple Records. Apple recordings were pressed and distributed by EMI/Parlophone in the U.K. and by Capitol in the U.S. Both had previously issued the Beatles's recordings on their own labels. Artists initially signed to Apple included the Modern Jazz Quartet and singer/songwriter James Taylor. However, the label and business in general quickly fell into disarray; none of the Beatles were interested in running the business, and the group itself was beginning to break up. The London boutique was closed and all the clothing given away. The label itself survived in name at least for the initial solo projects of the Beatles, but was more or less inactive thereafter. After a sweeping settlement with EMI and Capitol over past royalty abuses — as well as several



A and B side labels for the Beatles's Apple Records. Courtesy BenCar Archives

lawsuits among themselves — the surviving Beatles and Yoko Ono revived Apple Corps in the mid-1990s to oversee the issuing of the Beatles 3-part *Anthology* CD set, TV series, and book.

CARL BENSON

ARANGI LOMBARDI, GIANNINA
(20 JUNE 1891–9 JULY 1951)

Italian soprano and mezzo-soprano, born near Naples (Marigliano). She made her debut as Lola in

Cavalleria rusticana in Rome (1920), then appeared at La Scala from 1924 to 1930 and in other European cities. She sang with Nellie Melba on an Australian tour in 1928, and toured South America, but did not visit America. Singing in an age of dramatic sopranos, she retained an affinity for the bel canto style. Her major roles were the Verdi and Puccini heroines, but she excelled also in *Gioconda* and *Norma*. Retiring from the stage in 1938, she devoted herself to teaching, with posts in Milan and Ankara. Her death came in Milan.

Most of her records were made for Columbia in Milan, from 1927 to 1933. “Tacea la notte” from *Trovatore* is perhaps her finest disc (Columbia 18028; 1932), but “Vissi d’arte” (10508; 1932) is outstanding as well. She participated in the complete La Scala recordings of *Aida*, *Cavalleria rusticana*, *Gioconda*, and *Mefistofele*. A CD reissue of her principal Columbia arias appeared in 1990 (Harmonia Mundi 89013); another in 1991 (Preiser 89013).

ARCAM

A British electronics firm established in 1972 by John Dawson, who was then still an engineering student at Cambridge University. First known as A&R Cambridge, the firm began as a custom-builder of audio equipment. Within four years, it began making its first mass-produced product, the A60 integrated amplifier. Its simple design and durability won it a large following, with eventually over 30,000 units sold. The company followed with the equally successful T21 tuner, leading it to move to a larger site in 1979 (Waterbeach, north of Cambridge), where it began to produce loudspeakers of international quality (Arcam One, Two, Three). In 1985 A&R began to manufacture CD and DAT products. The company has continued to innovate during the 1990s in the areas of digital radio and TV. Its high quality line of CD players have been voted best in class by several leading British electronics journals during the later ‘90s. [Humphreys 1990; Website: www.arcam.co.uk.]

ARCHIBALD, VERNON
(30 JUNE 1886–24 MAY 1964)

American concert baritone and pianist, born in Morocco, Indiana. He began recording in 1910 for Columbia, moved to Edison in 1913 and apparently worked for no other label, except to make one Victor and one Operaphone. His first Columbia was “Juanita”/“The Two Roses” (October 1910), made with his own Archibald Quartet. With Edison he became one of the most popular recording artists, on

ARCHIV/ARCHIVE (LABEL)

both cylinder and Diamond Disc. "Somewhere a Voice is Calling" — a duet with Elizabeth Spencer — was a great success (Diamond Disc 80125; 1914). Many of his later recordings were as the baritone of the American Singers, which recorded until 1930. He died in Los Angeles. [Walsh 1972/4-5.]

ARCHIV/ARCHIVE (LABEL)

An imprint issued by Deutsche Grammophon, using the Archiv spelling in Germany and (from November 1954) the Archive spelling for Britain and America. It is now a CD series.

See also **Deutsche Grammophon; Gesellschaft (DGG)**

ARCHIVE OF FOLK CULTURE

SEE AMERICAN FOLKLIFE CENTER

ARCHIVE OF FOLK SONG

SEE AMERICAN FOLKLIFE CENTER

ARCHIVE OF RECORDED POETRY AND LITERATURE, LIBRARY OF CONGRESS

The Archive of Recorded Poetry and Literature began in 1943 when Allen Tate was consultant in poetry to the Library of Congress. It contains recordings of over 2,000 poets reading their own work; recordings of poetry readings and other literary events held at the Library; tapes of poets reading their poems in the library's recording laboratory or elsewhere for the archive; and recordings received through occasional gifts, exchanges, or purchases. — Manning [Published guide: *Literary Recordings: A Checklist of the Archive of Recorded Poetry and Literature in the Library of Congress* (1981) is cataloged: PS 306.5.Z9U53 1979. It supersedes the earlier 1966 edition and *Archive of Recorded Poetry and Literature: A Checklist* (1961). Website: <http://lcweb.loc.gov/poetry/archive.html>.]

ARCHIVES OF TRADITIONAL MUSIC

A unit of the college of arts and sciences at Indiana University, Bloomington, Indiana, established in 1949. It was formerly known as the Archives of Folk and Primitive Music. The collection, consisting of some

350,000 musical and textual items, covers folk music and folklore of all regions. There are two audio laboratories and a video laboratory for dubbing archival materials. A quarterly periodical, *Resound*, is published, and also catalogs of the sound recordings. [Website: www.indiana.edu/~libarchm/.]

ARETINO CO., INC.

A Chicago firm established on 3 June 1907, marketing a disc player made by Hawthorne & Sheble. The machine had a three-inch spindle, requiring a disc with a center hole of comparable diameter: this was provided by the company under the Aretino label. Most of the discs were 10-inch single or double, (with a few 12-inch, single faced), relabelled from Columbia or Leeds & Catlin matrices. It may be that the label name was drawn from that of the founder, Arthur O'Neill, in some anagrammatic fashion, but Fabrizio suggests the name of the renaissance satirist Pietro Aretino as the source. After injunction difficulties with Victor in 1909, Aretino had to switch from Hawthorne & Sheble machines to one made by Columbia. The firm did not recover from the financial loss involved, though it continued to sell machines (later with adapters to accommodate normal discs) and records into 1913. In 1910 it was merged with the O'Neill-James Co., which was succeeded in 1918 by the Consolidated Talking Machine Co. [Fabrizio 1973; Fabrizio 1977; Fabrizio 1980; Rust 1978.]

FRANK ANDREWS

ARGO (LABEL) (I)

A specialist company, registered in U.K. in 1952, with the intention of issuing performances by Britons. In 1954 there was a notable success with the BBC production of *Under Milk Wood*. Decca acquired the firm in 1957 but retained use of the label name. An acclaimed set of 137 LP records, covering the complete works of Shakespeare, was completed in 1964. It is believed to be the longest set of records ever issued. In 1991 the label was revived for Decca compact discs. [Usill 1980.]

ARGO (LABEL) (II)

An important pop label of the 1950s and 1960s, specializing in rhythm and blues and jazz. It was issued by the Argo Record Co., Chicago, a subsidiary of Chess Records, from 1956. Its roster of artists included New Orleans vocalist Clarence "Frogman" Henry and a moderately successful doo-wop group, the Pastels.

ARHOOLIE RECORDS

Founded in 1960 by Chris Strachwitz, a German immigrant who was raised in California, the label has specialized in blues, Tex-Mex, and Cajun/Zydeco music. The label was named after the traditional African-American field holler, known as an "Arwhoolie" or simply "Hoolie." Strachwitz is a jazz and blues enthusiast who began his career collecting 78s in the 1950s. He made his first field trip to Texas in 1960, where he recorded Mance Lipscomb, a blues guitarist. Soon after, Strachwitz also recorded Lightnin' Hopkins, another Texas-area blues performer.

Hopkins introduced Strachwitz to Clifton Chenier in 1964, a Black accordion player who was among the pioneers of the Zydeco style. Interest in Zydeco led naturally to Cajun music, which Strachwitz issued in both reissues of 78s from the 1920s and in new recordings. Through Alan Lomax, he located the Mississippi-based guitarist Fred MacDowell, who he recorded over a series of albums from the late 1960s through the 1970s. From the mid-1970s, Strachwitz became interested in Tex-Mex music, again recording new artists (notably Flaco Jimenez) and also reissuing 78s of past performances.

In the mid-1970s, he purchased the Folk Lyric label from folklorist Harry Oster; although the label had been inactive for many years, Strachwitz reissued many of its albums recorded originally in the early-to-mid 1960s. In addition to running the Arhoolie label, Strachwitz formed his own distribution company (Bay Side Distribution) and also a mail order and record store (Down Home Music); eventually, both the distribution company and the mail order businesses were sold. In 1995 he formed the Arhoolie Foundation as a means of supporting traditional music. Strachwitz also coproduced a series of films on traditional music made by Les Blank. [Website: www.arhoolie.com.]

CARL BENSON

ARIAL (LABEL)

A British record of the 1920s, pressed from Duophone masters.

ARIEL (LABEL)

A group of British labels (Ariel Celebrity Records, Ariel Concert Records, and Ariel Grand Records) issued from about 1910 to 1938 by J.G. Graves, Ltd., of Sheffield. Material was from masters of Beka Grand, Beka Meister, Favorite, Grammavox, Jumbo, Odeon, Parlophone, Polyphon, Popular, Winner, and Zonophone. Graves sold records and gramophones by mail order, primarily to rural areas of England. He had

4,000 selections available in 1912, and was selling some 600,000 discs per year. Among the artists to appear on Ariel were Billy Williams, Peter Dawson, and John McCormack. There were also several major jazz stars, including the Dorsey brothers and Louis Armstrong. But much of the repertoire was made up of band music, comedy turns, and sentimental songs. There were a number of series and number blocks, which are detailed by Badrock. [Badrock 1988; Rust 1978.]

ARIOLA (LABEL)

Ariola was most active in the late 1970s and early 1980s, releasing primarily disco material as well as R&B and soul.

ARISTA (LABEL)

A company founded in New York by Clive Davis, following his removal from Columbia in 1973. Davis took over the old Bell label, which was owned by Columbia Pictures Industries (not to be confused with CBS/Columbia), although he quickly changed its name and direction. Among his first big signings was Barry Manilow, whose "Mandy," released in 1974, was both the new label's first single and its first number one. Arista acquired Savoy in 1975. As one of the principal American independents, Arista divided a 30 percent share of the independent market with Ariola in the early 1980s; both labels would merge with RCA in 1983 (eventually becoming part of the Bertelsmann Music Group [BMG]). As he had at Columbia, Davis was actively involved in developing Arista's roster of artists; he helped revive the careers of earlier hitmakers like Aretha Franklin. His most successful new discovery was Whitney Houston, a major seller during the late 1980s and 1990s. Davis continued to run the label until he was forcibly retired at the end of 2000. He was replaced by Antonio "L.A." Reid, previously co-owner of LaFace Records with Kenny "Babyface" Edmonds. [Website: www.arista.com.]

ARISTON ACOUSTICS LTD.

A Scottish equipment firm located in Prestwick. It had specialized in turntables, but has diversified into amplifiers and most recently into complete systems for both vinyl discs and CDs, priced in midrange.

ARKANSAS TRIO

An Edison recording ensemble of 1924, consisting of Vernon Dalhart, Ed Smalle, and banjoist John Cali. Their "Boll Weevil Blues" (Diamond Disc #51373; 1924) was in the catalog for three years.

ARMATURE

The movable part in an electronic device; the vibrating element in a magnetic cartridge.

**ARMSTRONG, EDWIN HOWARD
(18 DEC 1890–1 FEB 1954)**

One of the pioneers of wireless transmissions, Armstrong started his career by building an amateur radio station when only 15 years old. Later, while at Columbia University, he studied under physicist Michael Pupin, and he was eventually appointed to the same teaching and research position that had been occupied by the great physicist. During his career he earned three different doctor of science degrees, and received more than a dozen awards for outstanding achievement. During his career, Armstrong developed the superheterodyne circuit that is the basis of almost all modern radio receiving and radar equipment, and went on to formulate the principles of radio frequency modulation in the 1930s. This contribution resulted in the development of FM radio.

FRANK HOFFMANN

**ARMSTRONG, LOUIS
(4 AUG 1901–6 JUNE 1971)**

American jazz trumpeter, singer, and bandleader (nicknamed “Satchmo”), born in a New Orleans slum, brought up fatherless in abject poverty. In a juvenile detention home he learned the cornet and played in the band. From there he went on to perform in local bars and brothels, eventually gaining the sponsorship of cornetist King Oliver who invited him to Chicago in 1922 to play in his Creole Jazz Band at Lincoln Gardens. Oliver’s group was focused on the blues, for which there was a national craze in progress. In 1923 the band made its first records on the Gennett label (6 Apr 1923 and 5 Oct 1923; issued in the album *King Oliver’s Creole Jazz Band*, Rhapsody 6032). Shortly thereafter the group recorded for Okeh (22–23 June 1923 — issued in the album *King Oliver’s Jazz Band* (Parlophone 7032) — Columbia (15–16 Oct 1923) and Paramount (probably 24 Dec 1923; later appearing in the album *Louis Armstrong and King Oliver*, along with all but one of the Gennetts, Milestone 47017). Armstrong’s cornet is a keynote on all of these discs.

His first recorded solo was “Chimes Blues”; his first significant jazz solo was “Froggie Moore.” Personnel on Okeh 4918, “Dippermouth Blues,” included Johnny Dodds, clarinet, and Armstrong’s wife Lil Hardin at the piano. He left Oliver in 1924 to join Fletcher Henderson’s band in New York (a selection of his work with Henderson was issued as *Fletcher Henderson’s*



Louis Armstrong reissue album from the early '60s. Courtesy Frank Hoffmann

Orchestra, Biograph BLP-C12; and in *Louis Armstrong 1924–25 with Fletcher Henderson’s Orchestra*, Archive of Jazz BYG 529086). From 1924 to 1929 Armstrong recorded as accompanist for great jazz and blues singers like Bessie Smith (“St. Louis Blues,” 1925; available in *The Bessie Smith Story*, Columbia 855, Vol. I) and Ma Rainey (available in the album *Ma Rainey*, Milestone 47021).

In late 1925 he established his Hot Five group, and made records of more than 60 innovative performances with them. The members were Kid Ory, trombone; Johnny Dodds, clarinet; Lil (Hardin) Armstrong, piano; Johnny St. Cyr, banjo; and Armstrong, cornet and vocals. He then changed from cornet to trumpet, and also began to sing in the scat style. The Hot Five made 26 recordings in 1925–1926 that display a New Orleans style. In May 1927 the group, with drums and tuba added, became the Hot Seven, made another set of records in which Armstrong moved away from New Orleans to his own rich style of improvisation. Then in fall of 1927, the original Hot Five made five records of great brilliance, notably “Hotter than That” (Okeh 8535). Joined by pianist Earl Hines, the group went on to record in 1928, displaying Armstrong in ever more expressive and creative performances. He developed a unique swinging style that was much admired and imitated, and created improvisations that were structured as well as imaginative. Volumes 1–5 of the French Columbia album *Louis Armstrong V.S.O.P.*, 88001-4, has all the Hot Five recordings.

During the 1930s and 1940s he performed and recorded with numerous star orchestras and singers

(e.g., Decca 15027: "Pennies from Heaven" with Jimmy Dorsey, trumpet and vocal by Armstrong) and he appeared in motion pictures (e.g., *High Society*, 1956, with Bing Crosby and Frank Sinatra). He was the first Black artist to have his own radio show and to appear regularly in feature films. His scat style of singing and his ability to blend smoothly with another artist are both exhibited to perfection in his album with Ella Fitzgerald, *Ella and Louis* (MGM 2-V6S-8811).

Armstrong recorded for Decca from 1935, and in 1957 the label issued an LP album, "*Satchmo*" — *A Musical Autobiography of Louis Armstrong* (DXM 155), featuring new recordings of Armstrong's classics of the 1920s. All the Armstrong Deccas were issued in the album *Louis Armstrong and His Orchestra* (Swaggie 701-07). A retrospective set of four LPs, *The Louis Armstrong Legend* (World Records 404-07; 1982) presented many of the great performances. Curiously, Armstrong won only one Grammy, that for his singing of "Hello, Dolly!" (Kapp 573; 1964).

When Louis Armstrong died in New York in 1971, he was one of the best known and beloved entertainers in the world, credited with shaping the vocabulary of jazz. In 1991 the Louis Armstrong Archive, consisting of 20,000 recordings and memorabilia, was opened at Queens College, New York City. [Bergreen 1997; Giddins 2001; *Record Changer*, July 1950, is an issue devoted to Armstrong, with a discography by Albert McCarthy.]

ARNHEIM, GUS (11 SEP 1897–19 JAN 1955)

American popular pianist, composer, and bandleader, born in Philadelphia. He played with Abe Lyman's band in Los Angeles during 1921–1923, and composed the hit "I Cried for You" in 1923. Forming his own band, he toured the U.S. and Europe. He began to record in 1928 with "I Can't Do Without You" (Okeh 41057). In 1929–1931 he made records with Russ Columbo, then in 1930–1931 with Bing Crosby. He made a hit record of his composition "Sweet and Lovely" in 1931 (Victor #22770), made radio appearances, and gained national popularity. Among his star players were Woody Herman and Earl Hines. The final recording was made in 1937 for Brunswick, just as Stan Kenton joined the group as pianist and arranger. Arnheim retired in the mid-1940s, then returned to lead a small ensemble on television shows in 1954. He died in Los Angeles.

ARNOLD, EDDY (15 MAY 1918–)

American country singer and guitarist, born in Henderson, Tennessee. He started out as guitarist in a band in Jackson, Tennessee, then performed on various radio stations from 1936. As vocalist with Pee Wee

King's Golden West Cowboys he attracted much attention, and began to record for Victor in 1943. His first hit record was "That's How Much I Love You" (Victor 20-1948; 1946). His "Cattle Call" (Victor 20-2128; 1947) was used as the theme song on his daily radio show in 1947.

Soon he dominated the country music field, starring on Grand Ole Opry and making a long series of hit records; often he had two or three records on the charts at one time during the peak years 1948–1952. In 1952, as a summer replacement for Perry Como, he was the first country artist to host a television program. Arnold's singing style changed from plain rural to a more mainstream crooning sound; and in the 1960s he had become a nightclub and television performer quite removed from his origins. He continued to make the charts, e.g., with "Make the World Go Away" (Victor 8879; 1965), "What's He Doing in My World" (Victor 8516; 1965), and "I Want to Go with You" (Victor 8749; 1966). He was elected to the Country Music Hall of Fame in 1966.

ARRAL, BLANCHE

(10 OCT 1864–3 MAR 1945)

Belgian soprano, born Clara Lardinois, performer of both lyric and coloratura roles. She began singing at the Paris Opéra Comique at age 15, and became the protégée of Marie van Zandt, the original *Lakme*; Arral sang that role and much of the other French repertoire. She made 48 cylinders for Bettini in 1898–1899, and in 1908 she recorded nine cylinders for Edison, the first being the "Polonaise" from *Mignon* (Edison B166). Thomas Edison is said to have stated that hers was organically the most perfect voice he knew. She recorded for Victor in May 1909, singing eight numbers; perhaps the finest were "Polonaise" from *Lombardi* (Victor 74146; reissued IRCC 19A), and "The Jewel Song" from *Faust* (Victor 74147). Arral died in a sanatorium near Cliffside, New Jersey, on 3 Mar 1945.

ARRAU, CLAUDIO

(6 FEB 1903–9 JUNE 1991)

Chilean pianist, born in Chillán. A child prodigy, he studied in Germany and gave recitals there and in Scandinavia in 1914–1915. His teacher was Martin Krause, a student of Franz Liszt. In 1924 he was heard in the U.S., with the Boston and Chicago orchestras; he eventually settled in New York. Arrau played the complete keyboard works of J.S. Bach in 12 Berlin recitals, in 1935–1936; and the complete Mozart works in five recitals there in 1936. During 1938–1939 he did the complete Beethoven piano works in various cities. He remained active in concerts and recitals throughout his life. Arrau died in Mürzzuschlag, Austria.

ARROW (LABEL)

The pianist's virtuoso capabilities were demonstrated in 1927 with "Islamey" by Mili Balakirev (Polydor 95112) — at one time considered to be the most difficult concert piece to play — and in 1928 with the fifth "Elegie" by Ferruccio Busoni (Polydor 90025). In 1928 he also recorded the *Transcendental Études* of Franz Liszt. On LP he did the Beethoven concertos with the Concertgebouw Orchestra (Philips SC71 AX501; five discs) and the Beethoven sonatas (Philips 6747035; 13 discs).

ARROW (LABEL)

A short-lived lateral-cut record issued by the Liberty Phonograph Co. (as of March 1920 the Arrow Phonograph Co.), of Cleveland, Ohio. In 1919 the firm had issued discs under the Liberty label name. Eighteen releases are known, perhaps taken from masters by other companies. Material is primarily jazz and blues, although #512 is Wilfred Glenn's "Rocked in the Cradle of the Deep" (originally done for Victor). [Kendziora 1985.]

ART ENSEMBLE OF CHICAGO, THE

SEE AACM

ARTHUR FIELDS MELODY RECORD (LABEL)

A disc issued by the Arthur Fields Record Co., New York, in 1923. Baritone Arthur Fields was featured on the few items issued. The label was one of the Olympic group of records, sharing at least some of its material with the label named Melody. [Kendziora 1961/1.]

ARTIA (LABEL)

Discs made in the U.S. from Russian masters, released in Britain by Associated Recordings, in the 1960s. The material was exclusively devoted to the classical repertoire.

ARTO (LABEL)

A record issued by the Arto Co., Inc., a subsidiary of the Standard Music Roll Co. of Orange, New Jersey. Advertising began in April 1919, announcing that G. Howlett Davis was president (he was also president of Standard Music Roll Co.). The new records were to be made at recording laboratories in New York, using a new process that would allow them to be played laterally or vertically. In June 1920 the first selection of discs



Arto label. Courtesy Kurt Nauck/Nauck's Vintage Records

appeared, offering dance, blues, jazz, and popular vocal material. The price was \$1 for a 10-inch disc in January 1921; an \$.85 disc was marketed in February 1921. Arto also pressed records for the Globe and Bell labels, and some Cleartones, Hy Tones, Ansonias, and Nordskogs. When the company went bankrupt in January 1922, it continued to press Bell and Globe issues for a time but ceased production of Arto records. Plant fittings and masters were up for public sale on 3 May 1923.

FRANK ANDREWS

ARTOFOLA CO.

An American firm, located in Springfield, Illinois. It was the manufacturer of the Artofolia disc player, advertised in *TMW*, 1916. There were seven models. The company also made vertical-cut discs: a 10-inch sold for \$.75, and a 12-inch sold for \$1.00.

ARTOPHONE CORP.

A firm established in St. Louis 1915; maker of the Artophone disc players. Later the firm issued records under the Herwin label. In 1926 it was located in Kansas City, Missouri, distributing Paramount records, and selling both phonographs and radios. Edwin Schiele was president at that time.

ASCH (LABEL)

A record issued by Moses Asch (5 Dec 1905–19 Oct 1986) in New York from 1939 to 1945. Asch

began his career repairing radios and installing sound systems in New York theaters. He began making radio transcriptions for the progressive station WEVD in the late 1930s, leading him to begin recording material for the station's Yiddish-language programming. Asch's initial releases were of Yiddish performers and cantorial records, but he then expanded into recording folk and jazz material in his small studio. Asch partnered during the war with Stinson because of the shellac rationing then underway; the labels separated in late 1945 and Asch started anew under the DISC name through late 1947, when the firm went bankrupt. The Norman Granz series "Jazz at the Philharmonic" appeared on that label in 1946. Following the bankruptcy of DISC, Asch formed his longest-lasting label, Folkways Records and Service Corporation, which he operated through his death in 1986. [Olmsted 2003.]

ASH, SAM (28 AUG 1884–21 OCT 1951)

American vaudeville performer and singer of popular songs, born in Kentucky. He made numerous appearances in Broadway musicals from 1915–1931. His first recording was "I'm Not Ashamed of You, Molly," accompanied by Prince's Orchestra, made in December 1914 (Columbia A-1701). He began recording also for the Little Wonder label in 1914 with "Chinatown, My Chinatown" (Little Wonder #98). His next Columbia was "Goodbye, Virginia" (Columbia A1697; 1915), made with the Peerless Quartet. He remained with Columbia until 1916, while recording



Asch label, early '40s. Courtesy Kurt Nauck/Nauck's Vintage Records

also for Little Wonder, doing solos, duets, and numbers with quartets. From 1917 he worked also for Emerson, Gennett, Okeh, and others. "When I Found You, Poor Little Ritz Girl" was made for Edison Diamond Discs in 1921 (#50721). In the 1930s he gave up recording to go into motion pictures. Ash died in Hollywood. [Walsh 1971/3.]

ASHER, PETER (22 JUNE 1944–)

British popular music producer. Asher was born in London, and formed the folk-pop duo Peter & Gordon with Gordon Waller in the early 1960s. The duo had some international hits, most notably the number one "A World without Love" (Capitol 5175), written by the duo's friends John Lennon and Paul McCartney (McCartney dated Asher's sister through much of the 1960s); they continued to record through 1967. In 1968, Asher was invited to join the Beatles's fledgling Apple label, serving as an A&R man. He signed singer/songwriter James Taylor, and produced Taylor's first album. When Apple fell apart, Taylor went to Warner Bros., and Asher followed him there. He also produced Linda Ronstadt's 1970s-era recordings, and several albums by the folk-rock group 10,000 Maniacs. Asher has been less successful as a producer since the early 1990s. In 1997, he took a position with Sony Music as a senior vice president to produce acts and work with the various Sony labels.

CARL BENSON

ASHKENAZY, VLADIMIR (6 JULY 1937–)

Pianist and conductor. The chasm between instrumental expertise and mastery of orchestral conducting is rarely bridged as successfully as in the case of Russian virtuoso Vladimir Ashkenazy, whose piano career was launched by a string of international competition victories. After taking second prize in the Chopin Competition (1955), and first prizes in the Queen Elizabeth Competition (1956), and Tchaikovsky Competition (1962), the pianist toured for three decades and recorded many seminal discs. Ashkenazy's 1960 recording of Chopin's *Etudes* set his reputation as the virtuoso of his generation. Defecting from the Soviet Union in 1963, and settling first London, then in Iceland (1969), the pianist began his catalog of conducted recordings in 1974 with Prokofiev's *Classical Symphony*. He has recorded all the Prokofiev symphonies, the entire orchestral output of Sibelius, the three Rachmaninoff symphonies, and large portions of the Beethoven repertoire. Ashkenazy returned to Russia in 1989.

BRAD HILL

ASHLAND MANUFACTURING CO.

ASHLAND MANUFACTURING CO.

A Chicago firm that made the Ashland disc player, advertised in *TMW* in 1916.

ASPIR (LABEL)

The name used in the British market in 1909 for Disque Aspir, made by the Compagnie Général d'Electricité. A label of the same name marketed in Britain in 1910 was attributed (in a *TMW* advertisement in March) to Établissements Phonographiques d'Ivry. The records were double sided, vertical cut, 11 1/2-inch and 12 1/3-inch; the repertoire was predominantly French, inclusive of opera, orchestral works, and songs. Epiphone talking machines were sold by the same London firm.

ASSOCIATED AUDIO ARCHIVES

SEE ASSOCIATION FOR RECORDED SOUND COLLECTIONS INC. (ARSC)

ASSOCIATION FOR RECORDED SOUND COLLECTIONS INC. (ARSC)

An organization made up of record collectors, librarian/curators, and researchers, established in 1966 in Silver Spring, Maryland. About 90 percent of the 1,000 members (including institutions and individuals) are American. Aims of the association include enhancement of communication among sound archivists and the encouragement of research. The *ARSC Journal* (two per year) was issued first in 1968; it presents research articles and continuing lists of discographies and writings about recordings. A quarterly *Newsletter* is also published, in addition to occasional monographs. One of the association's most significant projects is the Rigler-Deutsch Index, a microfilmed collection of 78-rpm record labels, carried out by the Associated Audio Archives (established 1974; an ad hoc subcommittee of the ARSC Bibliographic Access Committee since 1976).

Grants are awarded annually by ARSC to individuals pursuing research in any field of recording. Annual awards for excellence are given for the best publications on recording artists or recording history. [Website: www.arsc-audio.org; Brooks 1983; McKee 1989/1.]

ASV GROUP

A small British conglomerate, Academy Sound and Vision was founded by Harley Usill and Jack Boyce in 1981 and is based in London. The initial ASV launch

release consisted of 30 titles, many of them drawn from the Enigma catalog purchased from WEA. It currently controls these labels: ASV, COE, Living Era, Quicksilver, Gaudeamus, and RPO, with distribution in the USA handled by Koch. For a while, before Warner bought out the company, they also controlled Teldec. Artists and ensembles who have produced material on these labels include the Lindsays (regarded as one of the world's finest string quartets), the London Mozart Players, the Clerks' Group, Emma Johnson, the London Festival Orchestra, the Scottish Chamber Orchestra, the Mexican maestro Enrique Bátiz, Andre Previn, and Vlademir Ashkenazy, among many others. ASV remains a small company, now a team of people working in recently acquired offices in Hammersmith, England.

HOWARD FERSTLER

ASYLUM RECORDS

David Geffen founded Asylum Records in 1972 as a haven for his management clients, its initial releases including the debuts of Jackson Browne and the Eagles. Asylum was successful immediately, and Geffen quickly sold it to Warner Bros. Records, which merged it with Elektra Records and put him in charge of the combined division. But he stepped away from the music industry in 1976 due to illness, and Asylum subsided into being one subsidiary among many at Warner.

WILLIAM RUHLMANN

ATOMIC POP (LABEL)

SEE TELLER, AL[BERT]

ATCO RECORDS

The Atlantic Records subsidiary Atco Records was set up in 1955 as the niche of Atlantic cofounder Herb Abramson, who had returned from military service that year. ATCO opened the white pop market for Atlantic through the success of Bobby Darin (1958–1962) and Sonny and Cher (1965–1968). In the late 1960s, Atlantic placed a number of American rock groups, notably Buffalo Springfield, on the label, as well as British bands such as the Bee Gees and Cream.

WILLIAM RUHLMANN

ATKINS, CHET

(20 JUNE 1924–10 JUNE 2001)

American guitarist, country singer, composer, and record industry executive, born Chester Burton Atkins in

Luttrell, Tennessee. As a child he taught himself to play the guitar, and was playing on local radio in his teens. From there he went on to radio shows in Cincinnati, Raleigh (North Carolina), Richmond (Virginia), and Denver. He began to record for Victor, singing and playing guitar, achieving success in 1949 with "Gallop'n Guitar," "Main St. Breakdown," and "Country Gentleman." In 1946 he appeared for the first time at the Grand Ole Opry. Atkins toured Europe, Asia, and Africa, achieving international status. From 1957 he worked for RCA in Nashville, as production manager and A&R director; he helped to develop the "Nashville Sound" and to make that city the center of country music.

Some of his hits in this period were "Boo Boo Stick Beat" (Victor 7589; 1959; #49) and "Teensville" (Victor 7684; 1960; #73). He was invited to play for President John F. Kennedy in 1961, and performed as a soloist with several symphony orchestras. In 1973 he was elected to the Country Music Hall of Fame. Recordings by Atkins have won nine Grammy awards in the country instrumental category: *Chet Atkins Picks the Best* (RCA; 1967), *Me and Jerry* (RCA 4396; 1970), *Snowbird* (RCA; 1971), *Atkins-Travis Traveling Show* (with Merle Travis; RCA 0479; 1974); *The Entertainer* (RCA; 1975), *Chester and Lester* (with Les Paul; RCA 1167; 1976; #172), *Country — After All These Years* (1981), and *Neck and Neck* (with Mark Knopfler; Columbia 45307; 1990; #127; featuring the song "So Soft, Your Goodbye").

ATKINSON, JOHN (12 JUNE 1948—)

Born in Hitchin, Herts, England, Atkinson was educated in the sciences (B.S Hons, London, 1972) and trained as a teacher. He worked for a while as a research scientist and as a professional musician (bass guitar), before joining *Hi-Fi News & Record Review* magazine (U.K.) in 1976 as news editor. He became the editor of *Hi-Fi News* in October 1982 before emigrating to the U.S. in May 1986 to become editor of *Stereophile*, a position he still occupies. In addition to editing the magazine and writing reviews and articles, he has produced, engineered, and played instruments on more than 40 commercial recordings. Atkinson is a member of the Audio Engineering Society, National Academy of the Recording Arts and Sciences, and Associate Member of the Institute of Electrical and Electronics Engineers.

HOWARD FERSTLER

ATLANTIC (LABEL)

A New York label, Atlantic was one of the principal independent labels of the post-World War II era, with

first issues in summer of 1947. Founders of Atlantic Records were Ahmet Ertegun and Herb Abramson. Abramson was drafted into the army, and in 1953 Jerry Wexler was brought in to assist with producing pop acts, and Neshui Ertegun, Ahmet's brother, took over managing the jazz list. In 1955, when Abramson returned to the label, he was put in charge of the fledgling Atco subsidiary. The company leaped forward after signing Ray Charles in 1952; it also scored big in the mid-1950s with R&B vocal groups like the Clovers and the Drifters. Meanwhile, it built a distinguished jazz line, with artists like the Modern Jazz Quartet. Abramson sold out his share of the company to the other three in the later 1950s, and Wexler became more prominent in producing soul and pop acts.

During the early 1960s, Wexler made a deal with the Memphis-based Stax label to distribute their product, and he often used Stax's studios to record his acts. The deal ended acrimoniously in 1968, and Wexler moved to the Muscle Shoals-based Fame studios, where he produced hits for Aretha Franklin and Percy Sledge, among others. Meanwhile, Atco became the home for white pop and rock acts, beginning in the late 1950s with Bobby Darin, and then continuing through the 1960s with acts as diverse as Sonny and Cher and Buffalo Springfield. Atco also became the U.S. home for British groups like Cream.

In 1967, Atlantic was purchased by Warner Brothers Records; two years later, Warners's then parent, the Kinney Corporation, combined Atlantic, Warner Bros., and Elektra Records into the new WEA group. Ertegun remained active with Atlantic, however. In 1969, he signed a distribution deal with Rolling Stones Records; other big-name acts during this period were Crosby, Stills, Nash and Young, heavy metal acts Iron Butterfly and Led Zeppelin, and art-rockers Yes. Prominent R&B signings of the 1970s included Roberta Flack and the Detroit Spinners. Atlantic ceased to be active in new jazz signings after the 1960s, but their back catalog remained available.

Although still active over the last two decades, Atlantic has had less of a distinct personality as a label than it did previously. Atlantic has continued to release pop, country, R&B, and rock recordings as might be heard on any other mainstream label. [Ruppli 1979.]

See also Abramson, Herb; Ertegun, Ahmet M.

CARL BENSON

ATLEE, JOHN YORKE (28 JAN 1842—1 APR 1910)

American whistler, born in Detroit, who made very popular cylinders for Columbia from 1889 to 1897

ATMOSPHERE MICROPHONE

(there were 21 numbers by him in the November 1890 Columbia catalog). He also made some discs for Berliner and a few cylinders for Edison. The material included "Mocking Bird," "Anvil Chorus," "Annie Laurie," and "Marching through Georgia." "His whistling was loud, clear and piercing" (Brooks) as required by the early recording equipment, but he lacked the talent to survive in an a time of improved taste and technology. The January 1899 *Phonoscope* reported that he was managing the phonograph department of the Duston-Smith Piano Co., in Charleston, South Carolina. He did make a few more records, and was mentioned in the June 1900 *Phonoscope* as a supervisor of language instruction records. Atlee died in Washington, D.C. The spelling of his name is variously offered in the literature: Fred Gaisberg (who was his accompanist on some of the records) spells it "Atlee," and so does an 1893 issue of *Phonogram*; his death certificate, however, has "At Lee." [Brooks; Brooks 1978.]

ATMOSPHERE MICROPHONE

A microphone placed at some distance from the performers in order to include environmental ambience in the recording.

ATTENUATION

A reduction of voltage, intensity, amplitude, or loudness; the opposite of amplification.

ATTENUATION DISTORTION

SEE *DISTORTION*

ATWOOD, HARRIET (23 MAR 1865–CA. 1970)

American pianist, born Harriet Haddon (or Hadden). She was probably the first pianist to record, having been called on by Thomas Edison to play for his experimental tinfoil phonograph on 6 Dec 1887 while he recited "Mary Has A Little Lamb." Her husband, George Atwood (1864–1933), was an engineer for Edison: when a piano player was needed in the laboratory, Atwood sent for his wife. [Walsh 1970/4–5.]

AUDAK CO.

A firm based in New York City. It advertised in *TMW* 1924 as a maker of listening stations for record shops, intended to replace enclosed booths. Earphones were used.

AUDIBLE FREQUENCY RANGE

SEE *AUDIO FREQUENCY*

AUDIO (I)

A general term pertaining to hearing or sound, from the Latin *audire*, to hear; often used as a modifier to identify a system designed to record and/or reproduce sound, or an element of such a system.

AUDIO (II)

The sound portion of a film or television program.

AUDIBLE FREQUENCY RANGE

SEE *AUDIO FREQUENCY*

AUDIO BANDWIDTH

Typically stated as being from 20 Hz to 20 kHz, these are the acoustic signals that normal humans supposedly can be said to "hear" reasonably well. In older individuals, the low end may still be 20 Hz, or even a bit lower, but the high end often drops to 15 kHz, 10 kHz, or even lower, depending on both heredity and lifetime environmental factors. The musical significance of signals above about 15 kHz or even sometimes above 12 kHz is debatable.

HOWARD FERSTLER

AUDIO CABLES, WIRES, AND HARDWARE

CONNECTORS. These are what allow cables to be connected to inputs and outputs. In consumer audio, they vary from balanced and more common RCA types, which are used on line-level inputs, to banana, spade, and pin connectors, which are used on typical speaker-level inputs.

FIBER OPTIC. Cables that are used for digital connections between players and digital processors. They have the advantage of being immune to RF or electrical interference.

AUDIO INTERCONNECT. The shielded cables that are used to connect disc players and recording devices to preamplifiers or receivers and preamplifiers to power amps. Premium versions (some of which are very expensive) are often more durable than cheaper designs, but rarely sound better than anything but defective items.

MICROPHONE. The shielded cables that connect microphones to mixers or measuring equipment.

SPEAKER. The typical unshielded leads that are used between power amplifiers and loudspeaker systems. Even lamp cord is sometimes adequate for this use, provided the run is not extremely long. Some speaker wires are outrageously expensive, but those esoteric designs have no proven advantage over more mundane versions, provided the latter are large enough to keep signal losses to a minimum.

HOWARD FERSTLER

AUDIO CARTRIDGE

SEE CARTRIDGE

AUDIO CASSETTE

SEE CASSETTE

AUDIO CONCEPTS

SEE LOUDSPEAKER

AUDIOCONTROL

Founded in 1977, and headquartered in Mountlake Terrace, Washington, with some production facilities also in Spokane, AudioControl is a privately held company that currently designs and manufactures signal processors, amplifiers, and real-time spectrum analyzers for the automotive sound, home theater, professional audio, and recording industry markets. The company has more than 600 retail outlets, as well as distribution through over 300 residential contractors who sell, install and calibrate products in high-end home theater and audio systems applications. Products are also sold through distributors in approximately 35 countries. During its history, the company has received over 50 industry awards for its home audio, car audio, and pro audio creations. [Website: www.audiocontrol.com.]

HOWARD FERSTLER

AUDIODISC

SEE DISC

AUDIO ENGINEERING SOCIETY

Begun in 1948 in New York, it is the only professional society devoted exclusively to audio technology. Among its 10,000-plus members are specialists in most branches of recorded sound: designers of equipment,

installers and operators, journalists, teachers, salespersons, and technicians. In recent years, its membership of leading engineers, scientists and other authorities has increased dramatically throughout the world, greatly boosting the society's stature and that of its members in a truly symbiotic relationship. The technical council and its technical committees respond to the interests of the membership by providing technical information at an appropriate level via conferences, conventions, workshops, and publications. They work on developing tutorial information of practical use to the members and concentrate on tracking and reporting the very latest advances in technology and applications. This activity is under the direction of the AES technical council and its committees.

AES sections serve members in 47 concentrated geographic areas throughout the world. Sections in Australia, Canada, Europe, Japan, Mexico, South America, and the United States hold local meetings regularly for the dissemination of the most current audio information. The organization publishes the *Journal of the Audio Engineering Society*, which is the only peer-reviewed journal devoted exclusively to audio technology. The society also publishes a variety of anthologies, conference proceedings, standards, drafts, convention preprints, and other information documents.

HOWARD FERSTLER

AUDIO FIDELITY (LABEL)

An American record, issued by Audio Fidelity Records, New York, from May 1955. Classical, jazz, and gospel material was offered. The label was a pioneer in stereo, with first releases in November 1957. "The masters were cut with an automatic Scully Record Lathe mounting a Westrex 45-45 stereo cutter head system with special feedback electronic circuitry driven by custom 200 watt amplifiers. The frequency range...exceeded the range of previous high fidelity records..." [Case, source of the quote.]

AUDIO FREQUENCY

One of the frequencies within the range of sound frequencies audible to humans, from ca. 15 to 20,000 cycles per second (or Hz). Acoustic recording achieved coverage of about 1,000 to 2,000 or 3,000 Hz. With the emergence of electrical recording in 1925, manufacturers could claim coverage of 100 to 8,000 Hz. The frequency range of notes playable on certain instruments is encompassed by the capabilities of early electrical recording; e.g., all the high brasses and winds, the violin, and the viola. Female voices and higher male voices could also be reproduced with all fundamental

AUDIOGRAPHIC ROLLS

frequencies. One reason that realistic reproduction did not occur was that a sounding note produces not only a fundamental frequency but also an entire series of overtones, or harmonics, and it is these elements that give color and distinctiveness to the sound of an instrument or a voice. Some instruments, especially the percussions, also produce "transient tones," heard on initial-ization of a tone and then subject to quick fading. The audio experience of record listeners in the 1920s is often suggested today when loudspeakers of limited range are heard — for example, in elevators or in small portable radios. The effect is one of blurred identity for instruments and voices. Outside the audio frequency range humans perceive vibrations as feelings, not sounds: "There is thus a 'threshold of feeling,' and between these two lies the audibility area. At very high and very low frequencies these thresholds intersect: the sensations of hearing and feeling become merged, and it is difficult to distinguish between them" [Wilson 1957, source of the quotation.]

See also **Hearing**

AUDIOGRAPHIC ROLLS

Player piano rolls marketed by the Aeolian Co. in 1927, with a special feature: the printed music was inscribed on the roll, visible to the operator. However, the rolls moved vertically, and it would not have been possible to read the music as it went by or to sing along with the piano sound or to try duplicating the performance on the roll with one's own fingers on the keyboard. The concept seems to have originated in 1912 with Audiscript rolls.

AUDION

The three-element vacuum tube invented by Lee De Forest.

See also **Amplifier**

AUDIOPHILE

An individual who is extremely interested in high-fidelity sound reproduction, particularly as it relates to equipment designed for home-listening situations.

HOWARD FERSTLER

AUDIOPHILE RECORDING

A concept begun in 1960s to produce recordings of exceptional quality, using very careful techniques and equipment. Production techniques included half-speed mastering, improved vinyl, and even direct-to-disc methods, whereby the LP record was cut directly during

the musical session, rather than by a tape feed later on. (Sheffield Records was one of the pioneers in direct-disc LP recording.) The idea was to achieve better instrumental definition, better soundstaging, improved channel separation, and greater frequency range.

The technique originated with smaller, idealistic record companies, who were attempting to correct production-and engineering-related deficiencies found in mass-produced LPs. On a more practical level, those smaller companies needed a way to set themselves apart from bigger companies that could afford top musical talent. Later on, when it was discovered that audio buffs were a significant market segment, the concept was adopted by several of the major labels.

In the digital era, both small and large companies have endeavored to capitalize on the love some audiophiles have for ultra-high-quality recordings, and assorted systems have been devised to enhance the performance of the compact disc. The most recent audiophile recordings have made use of SACD and DVD-A technologies, with many of those involving more than the usual two channels.

HOWARD FERSTLER

AUDIO SPECTRUM

SEE AUDIO FREQUENCY

AUDIO TAPE

SEE TAPE

AUDIO TECHNICA

A major producer of professional-use microphones, mixers, and related products, as well as phonograph cartridges, Audio-Technica has been dedicated to advancing the art and technology of electro-acoustic design and manufacturing since 1962. From a beginning in phono cartridges, the company has expanded into high-performance headphones, microphones, mixers, and electronic products for home and professional use. The results of these engineering and production efforts can be seen in the effective use of the company's products in a broad spectrum of applications.

HOWARD FERSTLER

AUDISCRIP T ROLLS

Player piano rolls patented by Carrol Brent Chilton, of Washington, D.C., in 1912. They had two innovative aspects: they moved right to left, instead of vertically;

and they contained the printed score, visible to the performer. They did not find a market, nor did the later audiographic rolls of 1927.

AUGER, ROBERT (1928–12 DEC 1998)

An important recording engineer, Auger proved that an independent artist could succeed in major recording projects, and that leading performers would prefer to work with him, because of his skills. Working with Robert Fine, Auger's first recording at Mercury Records was Barbirolli conducting Vaughan Williams *Symphony Number 8*, in 1956. He worked for Pye Records when they were exploring stereo, and in 1959 he made historic recordings of Handel's *Fireworks* and later Janáček's *Sinfonietta*, both with Charles Mackerras. In 1969 he set up Granada Recordings and in 1974 he became a freelance engineer. In later years, he made historic CBS and RCA recordings with artists such as Bernstein, Maazel, Stokowski, Leinsdorf, and Boulez. Clients included Unicorn and later CRD.

HOWARD FERSTLER

AUGSPURGER, GEORGE (9 JULY 1929–)

George Augspurger is currently best known in the audio industry as an expert in studio design through his consulting firm, Perception Inc. Many of North America's most prestigious studios proudly boast of having "Augspurger designed" rooms and monitors. Before striking out as an independent consultant, Augspurger spent over a decade with JBL starting in 1958. He began as JBL's technical service manager and was later responsible for establishing and managing the professional products division. In 1968 he became technical director for JBL, a position he held for two years before deciding to move on to independent consulting.

HOWARD FERSTLER

AURAL EXCITER

A device used by radio stations to improve the broadcast signal, and in record production for the enhancement of clarity and presence.

AURORA (LABEL)

A Canadian record issued from 1926 to 1932. Material came from Brunswick, Melotone, and Victor masters. Content was popular songs and dance numbers. Artists included Gene Autry (under pseudonyms), Henry Burr, and the Peerless Quartet. [Robertson 1986 lists the known items.]

AUSTIN, GENE

(24 JUNE 1900–24 JAN 1972)

American singer and composer, born in Gainesville, Texas. After serving with U.S. forces in France during World War I as a bugler, he formed a dance band (playing piano), worked in vaudeville, and then became a successful crooner and radio personality. He began recording for Vocalion in 1924, but his first great success did not come until 1927, when he wrote and recorded "My Blue Heaven" (Victor 20964); a copy of which was placed in the Smithsonian Institution as an exemplar of the fine music of the day. A second hit came in the following year, "Voice of the Southland" (Victor 21714). Another best seller was "Ramona," a vocal solo with pipe organ and instrumental backup (Victor 21334; 1928). Austin also composed (with Roy Bergere) the successful songs "How Come You Do Me Like You Do?" and "When My Sugar Walks Down the Street." In 1948 Universal Records acquired the rights to the Austin masters and reissued many of the favorites. "Too Late" (Victor 6880; 1957) was his final chart appearance. He died in Palm Springs, California. [Magnusson 1983 is a complete discography; Walsh 1957/2-3.]

AUSTRAL, FLORENCE

(26 APR 1892–15 MAY 1968)

Australian soprano, born Florence Wilson in Richmond. After study in Melbourne, she went to England for a debut at Covent Garden as Brünnhilde — a role she sang without peers — on 16 May 1922; her later roles there were Isolde and Aida. Her Victor records include "Yo-ho-he!" from *Fliegende Holländer* (#7117), an aria from the Brahms *Requiem* (#9395) and the part of Brünnhilde in the *Gotterdammerung* set (#M-60). For the Gramophone Co. she recorded the church scene from *Faust* with Feodor Chaliapin (#DB899), and "O terra addio" with Miguel Fleta (#DB580). Austral made a total of 102 recordings, encompassing lieder, oratorio, Wagnerian roles, and both dramatic and lyric roles from the Italian/French repertoire. Fred Gaisberg of the Gramophone Co. said that "in the early twenties, Florence Austral was the most important recording soprano we had." [White 1962.]

AUSTRALASIAN PERFORMING RIGHT ASSOCIATION LTD.

An organization established in 1926 to monitor the performing rights of its members, who are from Australia and New Zealand.

AUSTRALIA

During the 19th and early 20th centuries mechanical music played a significant part in Australian musical life. Such music had many forms: the music box, the barrel organ, the symphonion, the orchestrion, the band organ, etc. Most of these were devices that replicated the sound of instruments by responding to encoded instructions in a perforated paper or cardboard roll. Player pianos and piano rolls were imported from the U.S. prior to 1919. The QRS Co. set up an Australian branch office; it was purchased by G.H. Horton of Sydney, who made rolls under the trade name Mastertouch. Horton's firm continued through the Depression and in the face of competing media, albeit at a lower production level. In 1959 the company was acquired by its present owner, Barclay Wright. It is now the only active piano roll manufacturer in the Southern Hemisphere. Nellie Melba offered a "Complete Singing Course" on a Mastertouch piano roll.

The earliest reference to a phonograph in Australia appeared in the *Sydney Morning Herald* dated 7 June 1879: announcing an entertainment that would feature "Edison's World-Renowned Phonograph or Talking Machine." In 1890–1892 an English educator and showman, Douglas Archibald, exhibited the Edison Improved Phonograph in Australia, New Zealand, India, and Ceylon. He also made recordings of such individuals as the governor-general of Australia, the earl of Hopetoun; and actress Nellie Stewart.

By the late 1890s the cylinder phonograph was commercially established in the country, the market being dominated by the Edison, Columbia, and Pathé interests. One notable use of the phonograph was made by anthropologist Charles Baldwin Spencer, who set out for central Australia on camels in 1901 to record Aboriginal music and dialect.

Disc players, with their single-sided seven-inch flat "plates," appeared at the turn of the century, but they did not have great impact at first; indeed, the Australia Phono Record Co. was established in 1907 in Sydney, to produce cylinder records, and a similar venture existed in Melbourne. However the Gramophone Co. and Columbia set up offices in Sydney in 1904 for the distribution of disc records, primarily imports from U.K. and the U.S. Between 1924 and 1926 four manufacturing plants were built — three in Sydney and one in Melbourne — for local disc production. The first, in Darlinghurst, was operated by music publisher D. Davis and Co.; in 1925 it was pressing Brunswick records from American metal masters. In the same year the Gramophone Co. built a stamping plant at Erskineville, using English and American masters, for release on the HMV and Zonophone labels. Columbia built a factory at Homebush; and the World Record Co. opened one in Melbourne, also setting up a facility at

North Brighton, Victoria, for making local recordings (1924). World's pioneer effort at issuing Australian artists was, however, short-lived.

Brunswick was forced to close during the Depression, but Columbia's Homebush plant became the headquarters of the new EMI conglomerate and it was there that the recording of local performers finally began on a steady footing. Commencing in June 1936, discs were made by Jack Lumsdaine, Gladys Moncrieff, Tex Morton, Smoky Dawson, Dick Bentley, Rex Shaw's orchestra, and others — among them Jacko, the broadcasting kookaburra (a laughing jackass). Radio drama, musicals, and variety shows were also recorded, including 16-inch transcriptions of programs that were part of the way of life, such as *Dad and Dave of Snake Gully*.

In about 1936 the Australian Record Co. commenced operations, later becoming a subsidiary of the American CBS. An insurance company, Mainguard, started up a record company in the early 1950s, issuing the Manhattan label. In 1952 it became Festival Records, and then finally a subsidiary of News Limited, Australia.

Other major companies opened Australian branches: Philips in 1954; RCA in 1956; and Phonogram in 1968. There are also a number of smaller independent companies active in recording national artists, but only a few have their own studios and all have their records pressed by other firms. Locally pressed Australian labels established from ca. 1928 included Angelus, Broadcast, Kismet, Lyric, Melotone, Polydor, Summit, and Vocalion; none were still active after the Depression. Swaggie was a later label, successful in the jazz field.

Among the best-known Australian performers to record were Ada Crossley, Peter Dawson, Florrie Forde, Percy Grainger, Nellie Melba, Albert Whelan, and Billy Williams. Others who were internationally active included Dan Agar, Irene Ainsley, Harry Atkinson, Catherine Aulsebrook, Humphrey Bishop, Eileen Boyd, Doris Carter, Ella Caspers, Amy Castles, Hope Charteris, Violet Elliot, A.?. Gee, Elsie Hall, Hamilton Hill, Alice Hollander, Carrie Lancelley, Marsh Little, Lalla Miranda, Marie Narelle, Lempriere Pringle, Harry Reynolds, Frances Saville, and Harry Taylor. Rock era pop artists to gain international recognition include the British-born Bee Gees, the Easybeats, AC/DC, the Little River Band, INXS, Midnight Oil, the Church, and Kylie Minogue.

Of the earliest Australian-made gramophones, the Salonola of Home Recreations, Ltd., Sydney, appears to have been the most successful. Others were the Homophone, the Concordia Gramophone, and the Concertrola — the motor of which was made by the Russell Gear and Machine Co., Ltd., of Toronto, Canada.

A special part in the history of sound recording in Australia has been played by the Australian Broadcasting Commission (ABC), which came into being in 1932, though regular broadcasts had been transmitted well before this time. Under terms of the Broadcasting Act, all stations are required to devote 2 1/2 percent of musical programming to Australian works, though in actual fact ABC's percentage far exceeds this minimum. Recording and transcription services have always been prominent among the ABC's activities. Until the introduction of tape recording, acetate discs were used. From its comprehensive collection of native compositions, the ABC has issued a series of 10 discs entitled *Australian Composers*. Percy Grainger's works have had special attention. Another great native was honored in 1981–1982 with the issue of *Melba — the American Recordings, 1907–1916*. The first digitally mastered symphonic recording, by the ABC Permanent Recordings Unit was Eugene Goossens's monumental choral work *The Apocalypse*, made in 1982. ABC has an Enterprises Unit for the production of commercial recordings by Australian composers. It also produces a series of jazz compact discs and LPs, digitally remastered. The ABC sound libraries hold enormous collections of Australian discs, all registered in an online database. The Canberra School of Music produced a 15-CD set called *Anthology of Australian Music on Disc* in 1989.

The music board of the Australia Music Council released an important report in 1987 entitled "The Australian Music Industry; An Economic Evaluation." It covered funding, numbers of musicians and other workers, ethnic musicians, studios, radio broadcasting, and television. According to the Australian Record Industry Association, a trade association for Australia's record labels, the total sales of audio material (excluding music videos and DVDs) in Australia at the end of 2002 was \$579 million, a 8.9 percent drop from the previous year, reflecting global trends in record sales. Local performers accounted for 15.6 percent of these sales, although many performed in an International pop style, such as Kylie Minogue. New rap albums by U.S. based artists like Eminem were the strongest sellers, reflecting the worldwide popularity of this musical style. Total CD sales topped 46 million units, and CD singles accounted for 11 million units.

Local manufacture of CDs began in 1987 when the U.K.-based firm Disctronics opened an Australian plant in Melbourne, expecting to produce 25 million discs a year. However, financial problems plagued the company from the outset, and it changed hands several times through the 1990s, eventually becoming part of a major Australian printing company/magazine distribution firm.

The National Library of Australia has accepted the role of establishing a national sound archive covering the full spectrum of sound history. The Library has gathered more than 300,000 discs and tapes, including many rare and historical items. The Australian Music Center, founded in 1974, is an agency in Sydney that promotes Australian music. Its journal, *Sounds Australian*, publishes varied material on the recording industry [Australian 1987; Directory 1985; Mulholland 1980; Music Recording 1978.]

GERALD R. SEAMAN

AUTO PNEUMATIC ACTION CO.

A New York City firm, Auto Pneumatic made the Auto Deluxe Reproducing Action (as a Welte-Mignon licensee), used in 64 makes of reproducing piano.

AUTOGRAPH (LABEL) (I)

A British record of the period before World War I, pressed for issue of material by comedian Billy Whitlock.

AUTOGRAPH (LABEL) (II)

Records issued by the Marsh Laboratories of Chicago, ca. 1923–1925. Orlando Marsh, a sound engineer and owner of Autograph, is credited with the earliest commercial electrical recordings, in 1924; survivors are so scarce that Autograph has been called "second if not on a par with Black Patti as the rarest of recording labels" (Henriksen). The repertoire included jazz and dance music. Jelly Roll Morton and Jesse Crawford were among the artists — they were the first persons to make commercial electric records.

The earliest known matrix numbers of the label are #30 and #35, a pair of test pressings (apparently not released) from ca. 1922; they feature Bennie Moten's Kansas City Orchestra playing "Muscle Shoal Blues" and "Oh Baby Dear." It seems that the first item issued was a piano solo by Clarence M. Jones, "Modulation" (matrix #202). Organ music was a specialty; Crawford performed acoustically and electrically on the Chicago Theatre organ, beginning with "Until Tomorrow" (#4004; matrix #581), and Milton Charles recorded electrically on the organ of the Tivoli Theatre (also in Chicago). Morton's jazz material is also of great interest, and rarity. He recorded with various jazz ensembles, beginning with "Fish Tail Blues" (#606; matrix #635) in September 1924. He and King Oliver performed jazz duets in December 1924: "King Porter Stomp" and "Tom Cat Blues" (#617; matrices #685 and 687).



Autograph label, c. 1923-25. Courtesy Kurt Nauck/Nauck's Vintage Records

In a departure from the typical repertoire of the label, classical pianist Moissaye Boguslawski played “Dizzy Fingers” and “Prelude in C-Sharp Minor” (presumably Rachmaninoff’s) on #500 (matrices #981 and #980). [Bryan 1990; Henriksen 1978 has a label list; Rust 1978; Rust 1980; *TMR* #52–53, p. 1376.]

AUTO-LOCATE

The feature in a tape recorder or tape deck that allows rapid location of a chosen point on the tape.

See also Automatic Search

AUTOMATIC DIALOG REPLACEMENT (ADR)

A motion-picture film postproduction term used to indicate the process whereby dialogue that is not taped during production or that needs to be redone is recorded and synchronized to the picture. It is commonly used with music videos, as well as in film.

HOWARD FERSTLER

AUTOMATIC DOUBLE TRACKING (ADT)

SEE DOUBLE TRACKING

AUTOMATIC ENTERTAINER

SEE JOHN GABEL'S AUTOMATIC ENTERTAINER

AUTOMATIC LEVEL CONTROL (ALC)

A circuit used to maintain a recording level despite changes in the amplitude of the signal. In playback, extremes of volume are evened out to a middle ground (e.g., presenting ffff as ff).

AUTOMATIC MACHINE AND TOOL CO.

A Chicago firm, established in 1898 by John Gabel. The company was maker of the popular John Gabel’s Automatic Entertainer in 1906, an early jukebox. In 1916 the firm was making a home version under the name of Gabelola (or Gabel-ola); it handled 24 discs in sequence or could play any one (one side only) selected. David C. Rockola acquired the company in 1949.

See also John Gabel's Automatic Entertainer

AUTOMATIC MICROPHONE MIXER

First patented by Dan Dugan, this is a specialized, multifeed mixer that is optimized for solving the problems of multiple inputs operating together as a system. Voice activated, the device controls the live-feed microphones by temporarily turning the proper unit up when someone is talking, and turning down any that are not used. At the same time, the arrangement must adapt to changing background noise conditions. A good automatic mixer must be able to make rapid and dramatic changes in the levels of the various inputs while giving the impression that nothing unusual is happening at all. This is especially important when such systems are used in recording and broadcasting.

HOWARD FERSTLER

AUTOMATIC MUSICAL CO.

A firm located in Binghamton, New York, making coin-ops, including a self-playing xylophone. Bankrupt in 1912, it was revived as the Link Piano Co.

AUTOMATIC MUSICAL INSTRUMENT CO.

A firm located in Grand Rapids, Michigan, established in 1909 as the National Piano Manufacturing Co. It made a player that allowed automatic selection of player piano rolls from a magazine. A division of the firm, National Automatic Music Co., was independent for some time, but rejoined the parent company in 1925; in 1927 it was making a jukebox that could play either side of 10 discs. Operation of that jukebox was fully electrical, employing the first electrostatic speaker. About 12,000 of those machines were on location

by 1930. The company became incorporated in 1946, as AMI, Inc.; president was John W. Haddock. A 1951 model jukebox for 45 rpm discs could handle up to 120 selections, and a 1955 model 200 selections. The firm also made phonographs for home use.

AUTOMATIC MUSICAL INSTRUMENT COLLECTORS ASSOCIATION (AMICA)

Founded in San Francisco in 1963, this organization is Non-profit organization is dedicated to "player pianos, reproducing pianos, music boxes, nickelodeons, circus organs and many other types of organs, orchestrions and more." It has local chapters throughout the United States and Canada. It holds an annual convention and publishes a newsletter. [www.amica.org.]

AUTOMATIC PHONOGRAPH EXHIBITION CO.

A New York firm established by Felix Gottschalk in February 1890. It made, operated, and leased coin-op cylinder players. The machines, in glass-topped cabinets and run by storage batteries, were exhibited at the first convention of the National Phonograph Association in May 1890. Records were changed daily. Selections were comic songs, monologs, whistling, bands, and hymns. In 1891, 16 of the North American Phonograph Co. affiliated firms were leasing coin-ops from the Automatic Phonograph Exhibition Co. Contract disputes resulted in abandonment of the lease plan.

AUTOMATIC RECORD CHANGER

SEE RECORD CHANGER

AUTOMATIC REGINAPHONE

SEE REGINA MUSIC BOX Co.

AUTOMATIC REPLAY

A system that allows repeated playbacks of a recorded program without user intervention. It operates on a signal within the recording, or can be activated by a preset mechanical device.

See also Automatic Reverse; Talking Doll

AUTOMATIC REVERSE

In a magnetic tape recorder, a system that begins playback of the second tape track upon completion of the first track. The reversal is achieved by a foil sensing tape

at the proper point on the magnetic tape, or by means of a signal on the tape. In earlier cassette devices there was a mechanism to turn the cassette over for playback of the second track. The foil sensing or signal systems require two playback heads, one for each direction.

See also Automatic Replay

AUTOMATIC SEARCH

A system in a tape recorder for rapid movement of the tape to a desired point, for playback of selected material.

AUTOMATIC SEQUENCE

SEE MANUAL SEQUENCE

AUTOMATIC SHUTOFF

A device that turns off the motor of all or part of an audio system when playback of a recording has concluded.

AUTOMATIC STOP

Beginning around 1911 or earlier many inventions were introduced for the purpose of bringing a turntable to a stop at the end of a disc; the reason was to avoid the noise made by the needle as it reached the tail groove. Earliest advertisers in TMW were Sonora and Condon-Autostop Co. The latter's autostop device required adjustment for each disc, but in 1912 Condon offered the Altobrake, which was self-adjusting. Simplex was the name of a 1912 device by Standard Gramophone Appliance Co.; it could stop the turntable and restart it for a repeat of the record. Edison's Diamond Disc Phonograph had a Duncan Automatic Stop in models offered from April 1917 to mid-1918 (described and illustrated in Paul 1988). Several similar devices appeared in the next few years, and the Columbia Grafonola player of 1920 had one built in. [Paul 1988.]

AUTOMATIC TURNTABLE

SEE TURNTABLE

AUTOMOBILE SOUND SYSTEMS

The first generally marketed cars to be radio equipped appeared in the U.S. in 1930. Equipment was rudimentary and results were poor. No serious attention to the problem of overcoming the auto's hostile environment was given until the hi-fi revolution of the 1950s. Then audio manufacturers began to deal with the need

AUTOPHONE

for miniaturization (to fit into the relatively small space available), for amplification to counter road and engine noise, and for physical toughness of components to withstand vibration and extremes of temperature. Those problems notwithstanding, there are favorable factors present in the automobile that are not usually found in a home audio environment. The listeners are located in fixed positions; reverberation time is short; and there is greater discrimination against ambient sounds because the loudspeaker(s) and the listeners are so close to each other.

FM radio was the first major breakthrough; it became available in American cars in the 1950s. The four-track and eight-track tape cartridge appeared in the mid-1960s, gradually giving way to the cassette in the late 1970s. Noise reduction systems were added, and electronic tuning, followed by computerized controls in certain "high-end" installations like the Blaupunkt TQR-07 Berlin, or the Polk 12-speaker, 160 watt, H700 system; these were selling for around \$1,500 in 1990. While these complexities have tended to take more and more of the space in the driver area — at a time when other gadgetry was also crowding into the dashboard — some success has been achieved in space saving. Cassette/receivers with built-in multi-channel amplifiers can power all the speakers; and CD changers can be mounted in the trunk.

Compact disc changers for automobiles became available in the U.S. in 1988, made by Alpine, Pioneer, Sony, and Technics. Ten- and 12-disc models by Clarion, Concord, and Kenwood, were brought out in 1989. DAT players for automobiles were marketed in 1988, by Alpine, Clarion, JVC, and Kenwood. Lincoln Continental and Cadillac Fleetwood offered DAT as a factory-installed option. Single-band parametric equalizers came into use in these players to improve fidelity of the bass frequencies in both front and rear speakers. Optical fiber technology is applied to the elimination of interference by removing the analog signals from long cables. In fall 2001, Mazda introduced a limited-edition MP-3 Protégé that featured a built-in MP3 player in the dash. GM has announced plans for satellite radio technology to be installed in select models as part of their OnStar communication system.

AUTOPHONE

A cylinder player made by the American Phonograph Co., New York, from about 1913 to 1919. It was also marketed, and perhaps assembled, in Canada by the Dominion Autophone Co., Vancouver. The machine could play 12 cylinders in succession without stopping and without the need to rewind its three-spring motor. Julius Roever filed for the patent in 1907, and received

U.S. patent #883,971 on 7 Apr 1908. (Koenigsberg notes also the patent granted to Allison A. Pratt on 27 Aug 1907, #864,686, for a 30-cylinder coin-op.) Operation was based on a Ferris wheel housing of the cylinders, each of which had its own adjustable mandrel. Adjustment was needed to set the first groove of each cylinder in line with the diamond point reproducer. By rotation of the wheel, any cylinder could be brought to the first playing position. A coin-op version was also patented and manufactured. Advertisements and photos appear in *TMR* #14. [Koenigsberg 1990; Stephenson 1983.]

AUTOPIANO CO.

Maker of a quality player piano that was purchased by European royal families and by the Vatican. Its president in 1926 was Corley Gibson. The deluxe Autopiano player action was used in more than 100 Welte-Mignon licensee brands of piano, appearing in grands, uprights, and reproducing pianos. The Pianista Player-Piano was another brand name for the product.

AUTOSTOP

SEE *AUTOMATIC STOP*; *CONDON-AUTOSTOP Co.*

AUTRY, GENE (29 SEP 1907–2 OCT 1998)

American country singer and guitarist, actor, songwriter, and business executive; born Orvon Autry in Tioga, Texas. His style of cowboy song became the mode of a more sophisticated country music, superseding the simpler hillbilly style. He taught himself guitar while working as a telegraph operator in Oklahoma, and was lucky enough to be heard by a customer named Will Rogers. Rogers told him to go into radio, and Autry found a job with an Oklahoma station. By 1929 he was well known in the region. He was the first person to record cowboy songs, one of the first being his own composition "That Silver Haired Daddy of Mine," which was a great best seller in the early 1930s. He wrote more than 250 songs. The singer was highly popular on the Chicago radio show *National Barn Dance*, and in 1934 he had a small singing role in a western film, *In Old Santa Fe*; eventually he made more than 100 feature pictures. He had a radio show, too, *Melody Ranch*, from 1939 to 1956.

Autry served as a flight officer in World War II, then returned to make dozens of all-time hit records. He left Okeh, which had recorded such chart songs as "Back in the Saddle Again" (his own composition; #05080) and

"When the Swallows Come Back to Capistrano" (#05780), for Columbia and had great success with such numbers as "Rudolph the Red-Nosed Reindeer" (Columbia 38610; 1949). His last single to appear on the charts was "Peter Cottontail" (Columbia 38750; 1950). There were various LP reissues, including his *Greatest Hits* (Columbia, 1961).

While continuing to perform in film and on television during the 1950s, Autry went into the business world, establishing his own record label, Challenge, and acquiring two others, Champion and Republic. He also bought several radio stations, and became part owner of the California Angels major league baseball club. In 1969 he was elected to the Country Music Hall of Fame. He died in Los Angeles.

AUXETOPHONE

A disc player with a compressed air device used to amplify the output. The inventor is usually thought to have been Charles A. Parsons of London (inventor of the steam turbine), who received for it British patents #10,468 and #10,469 in 1903, plus #20,892 in 1904; and he did exhibit a working model of the Auxetophone to the Royal Society in 1904. However, Horace Short, who had been associated with Thomas Edison in Menlo Park, held an earlier British patent: #22,768, of 1898. Horace's device was named the Gouraudophone, after its financial backer George Gouraud. Following some controversy, Short assigned his patent to Parsons in 1904. Later the patent was acquired by G & T for use in Britain; in the U.S. the license was held by Victor. Various demonstrations in London during 1905–1912 proved that great amplification could be achieved. In a concert arranged by the Gramophone Co. in Finsbury Park, London, it was reported (by *TMN*, September 1912) that 3,000 persons were present, and that the music "was distinctly heard at a distance of a quarter of a mile."

The principle was that of a soundbox with a modified diaphragm incorporating an air valve mechanism. As compressed air, supplied by a small electrically driven unit, passes the valve and is suddenly expanded — due to the effect of sound waves from the recording or other source — this expansion carries the sound with it. One application of the concept was in the megaphonic Aerophone and the later Stentorphone, both used to amplify outdoor voices. Despite the utility of the Auxetophone for various purposes, just a few were sold; one estimate says only about 500 were manufactured. Cost (ca. \$500) was one problem for the salesman, but more serious was the nuisance of the hissing sound created by the air movement. [*TMR* #12 and #19 have photos; Carter 1977 has details of operation and a drawing.]

AUXILIARY INPUT

An audio device, usually found on a tuner or amplifier, that allows receipt of a signal from an outside source. For example, a turntable or a radio tuner may be attached, via a cable, plug, and jack, to an amplifier. Connecting components should be matched in impedance and voltage level, for optimum performance.

AVAKIAN, GEORGE (1919)

Legendary jazz record producer Avakian was born in Armavir, Russia; his parents were Armenian. Avakian was raised in the U.S., and attended Yale University, where, in 1937, he met a fellow jazz enthusiast and future jazz scholar, Marshall Stearns. In 1939, while still attending Yale, he produced sessions for Decca Records featuring Pee Wee Russell and Eddie Condon for what is generally credited as the first jazz album, *Chicago Jazz* (Decca 121). In 1940, he was hired by Columbia to research their back catalog of jazz recordings to reissue as 78-rpm albums in a series that was called "Hot Jazz Classics." In 1951, many of these reissues were themselves reissued on early LPs, including the famous *Louis Armstrong Story* series of albums, which remained in print through the CD era. Avakian joined Columbia's production staff in 1946, and remained there for 11 years, overseeing many of the firm's classic jazz recordings of the 1950s, and signed new artists including Dave Brubeck and Miles Davis. He also pioneered live recordings of jazz performances, including Duke Ellington's famous 1956 appearance at the Newport Jazz Festival. In 1957, Avakian moved to Pacific Jazz Records (later renamed World Pacific), and then moved to the new Warner Bros. label in 1959, where he signed comedian Bob Newhart. Three years later, he moved to RCA, where he signed Sonny Rollins. However, he decided in 1963 to strike out on his own, continuing to produce independently, as well as manage a few jazz artists. When Sony developed the Legacy label to reissue earlier Columbia recordings, it hired Avakian to oversee reissues of many of the albums that he produced during the 1950s.

CARL BENSON

AVALON, FRANKIE (18 SEP 1939–)

A child prodigy of the trumpet, Frankie Avalon starred on Paul Whiteman's radio and TV programs, both of which were based in the Philadelphia area in the early 1950s. By 1957, he signed with Chancellor Records as a vocalist. The label's owners, Bob Marcucci and Peter de Angelis, also took on the management of his career.

AVIATION RECORDINGS

Avalon scored his first national hit in early 1958 with a Marcucci-de Angelis composition, "Dede Dinah" (Chancellor 1011). A prime exponent of the teen idol school, he enjoyed five Top 10 hits the following year, including three million sellers — "Venus" (Chancellor 1031), "Just Ask Your Heart" (Chancellor 1040), and "Why" (Chancellor 1045).

Although his recordings were less successful in the early 1960s, Avalon became a major Hollywood film star. His acting credits included *Guns of the Timberland* (1960), *The Carpetbaggers* (1962), and a string of beach party movies produced by American International Pictures. From the 1960s to the 1990s, he divided his time between television and film acting — most notably, *Grease* (1978) and *Back to the Beach* (1987), club appearances, and occasional recording sessions. A disco version of his number one hit, "Venus" (De-Lite 1578), was his last charting single. By the late 1970s, he became increasingly active performing on the rock and roll revival circuit. [Stambler, 1989.]

FRANK HOFFMANN

AVIATION RECORDINGS

The actual sounds of aircraft have been recorded for diverse reasons, from technical interest (e.g., "Aeroplane: Starting; Steady Flight; Stopping," Columbia #YB-5) to a desire for historical documentation (air battles, the Hindenburg Zeppelin disaster [Romeo 70876; 1937], etc.).

Songs about airships were popular in early days of recording. The first was "My Sweetheart's the Man in the Moon" (Edison cylinder 484; 1892), which tells of a spaceship voyage. The earliest record about an airplane — made just after the Wright Brothers experiments at Kitty Hawk — was "Come Take a Trip in My Airship" (Victor 2986; October 1904), sung by Billy Murray, "Come Josephine in My Flying Machine," sung by Blanche Ring, was the greatest aviation hit (Victor 60032; 1911). Victor made another version of it later in the year, by Ada Jones and the American Quartet, with Billy Murray (#16844). Charles Lindbergh's solo crossing of the Atlantic in 1927 produced a number of songs; one hit record was Vernon Dalhart's rendition of "Lucky Lindy" and "Lindbergh, Eagle of the U.S.A." (Columbia 1000-D). During World War II there were songs about the U.S. Air Force and its pilots, of which the best was probably "He Wears a Pair of Silver Wings" (by the Gordon Jenkins band, Capitol 106; 1942). Later airplane songs have been few. "Leaving on a Jet Plane" was a hit record by Peter, Paul & Mary in 1969 (Warner 7340). "Jet" by Wings (Paul and Linda McCartney) was on the charts in 1974 (Apple 1871). [Mason 1984; Walsh 1974/1.]

AVON COMEDY FOUR

An American vaudeville singing comedy team, greatly popular from 1916 to 1924. The original members were Irving Kaufman, Harry Goodwin, Charles Dale, and Joe Smith. Eddie Miller replaced Kaufmann and Frank Corbett replaced Goodwin in 1919; Arthur Fields was a member for a brief period. Their first recording was "Yaaka Hula Hickey Dula (Hawaiian Love Song)" (Victor #18081; 1916). In the 1917 Victor catalog they were represented by 13 discs. The last Avon record was "Clancy's Minstrels"/"The New School Teacher" (Victor 35750; 1924). [Walsh 1962/10.]

AYLER, ALBERT

(13 JULY 1936–5 NOV(?) 1970)

Ayler, born in Cleveland, Ohio, became one of the most radical practitioners of the free jazz movement of the 1960s. His father, a tenor saxophonist, began giving him lessons on the alto sax when he was seven. He played the alto in R&B groups while in his teens and switched to tenor during his service with an army band from 1958 to 1961. Ayler spent his most productive years from 1962 to 1968 travelling back and forth from Europe to New York.

Ayler's playing was unorthodox and incendiary, and it challenged the very definition of jazz itself. The recordings, *Witches and Devils* (Freedom/Arista AL 1018; 1964), and *Spiritual Unity* (ESP CD 1002; 1964), both find him at the peak of his improvisatory powers. Ayler's experimentation with marching-band techniques is well-represented on *At Slug's Saloon, Volume 1* (Base 3031; 1966) with the compositions, "Truth is Marching In" and "Bells." *Live At Lorrach: Paris* (Hat Art 2009; 1966) finds him continuing to merge free jazz and pre-jazz marching band techniques into a compelling mix. Ayler's final recordings, *Foundation Maeght Nights, Volume 1* (Jazz View 004; 1970), and *Volume 2*, (Jazz View 005; 1970) feature him in a duo setting with piano accompaniment. Ayler's body was found in New York's East River in early November 1970; how he came to die is unknown.

GARTH ALPERS

AYLSWORTH, JONAS WALTER

(CA. 1868–1916)

A chemist with Thomas Edison from ca. 1890; after his retirement in 1903 he remained as a consultant in the West Orange laboratories. His inventions included the commercial nickel-iron alkaline storage battery and various cylinder molding processes. He was known particularly for the Edison gold molded cylinder. He also improved the cast solid-wax cylinder that

could be shaved and re-used. The brittleness of the 1908 black-wax Amberol led him into research on materials for disc records. Aylsworth held, alone or jointly, 38 patents for audio-related inventions, the last of which was filed in June 1911.

See also Edison Diamond Disc

AZIMUTH

In a tape recorder, the angle between the gap in the tape head and the longitudinal axis of the tape. It should be 90 degrees.

See also Gap Alignment

AZOFF, IRVING

One of the prime movers within the entertainment industry, Irving Azoff started out running a music booking agency in Champaign, Illinois. After helping both REO Speedwagon and Dan Fogelberg secure recording contracts with Columbia, Azoff formed his own production company, Full Moon. The firm quickly evolved into a subsidiary label within the Columbia family.

He established Front Line Management in the mid-1970s, whose client roster went on to include Jackson

Browne, the Eagles, Heart, Stevie Nicks, Boz Skaggs, and Steely Dan. He also branched out into film production; his hit projects included *Fast Times at Ridgemont High* and *Urban Cowboy*.

Azoff became chairman of the then-floundering MCA Music Entertainment Group in 1983. He helped the company return to profitable status via a distribution deal with Motown and the signing of artists such as teen star Tiffany.

Azoff left MCA in 1989 to establish Giant Records, which experienced success with the *New Jack City* soundtrack and the pop act, Color Me Bad. The following year he joined forces with Time Warner to form the Azoff Entertainment Company, which included joint ownership of the Giant and Revolution labels. In April 2001 the Warner Music Group purchased the remaining 50 percent stake in Azoff's Giant label for an estimated \$15 to \$25 million, with the latter's artists — most notably, Steely Dan and Disturbed — shifting to the Reprise imprint.

Azoff also organized the lucrative "Hell Freezes Over" Tour in 1993, which featured the Eagles's late period line-up. Both a best-selling compact disc and video documenting these concerts appeared the following year.

FRANK HOFFMANN



B

B&H FIBRE MANUFACTURING CO.

A Chicago firm established in 1907. The initials stood for Barry and Hall. B&H made bamboo needles under a U.S. patent (#870,723) issued to Frederick Durive Hall on 12 Nov 1907. Reduced hiss was the selling point of bamboo, quick deterioration its problem. The claim, in *TMW* (September 1916), of “perfect tonal reproduction, reliability, and durability,” was typical of the sales presentations for the product. Sometime before 1923 the company — under the leadership of president Lester C. Wiswell — took the name of Hall Manufacturing Co., having become associated with the inventor.

B&W [BOWERS & WILKINS] LOUDSPEAKERS

Founded in 1966 in Britain by John Bowers and Peter Hayward, the company specializes in the production of both mainstream and upscale loudspeaker systems. The first models produced were called the P1 and P2, and somewhat later the company came out with the DM70, which had a large, curved bass chamber, above which was mounted an 11-module, curved electrostatic treble radiator. These innovations resulted in some very favorable magazine product reviews, leading to an upsurge in exports. In 1972, riding on the wave of success, the company opened a refurbished factory that included several anechoic chambers, a vast array of B&K measurement equipment, and excellent facilities for an expanded research team. Among the team members were

Dennis Ward, a former technical manager of EMI, Ray Greenwood, formerly with Rank, and Kenneth Grange, an industrial designer who offered advice on cabinet finishes and styles.

By 1973, exports were 60 percent of sales, and by 1978, they were 90 percent, making the company a major exporter of British goods. Throughout his career, Bowers enjoyed a close relationship with recording engineers who provided vital feedback on how loudspeakers could be improved. As a result, in 1979, B&W released the now legendary 801 model, which has become a mainstay monitoring system in many recording studios around the world. In 1982 Bowers created a dedicated research and development facility for his team of engineers at Steyning in West Sussex, some 10 miles from the production facilities at Worthing. The facility included the latest in high-tech hardware, including laser interferometry for determining phase linearity. These days, the facility houses some 20 graduate engineers and support staff with expertise in a wide range of disciplines. [Website: www.bwspeakers.com.]

See also Loudspeaker

HOWARD FERSTLER

B SIDE

The reverse side of a double-sided disc, the side with the less featured material. It is also known as the The flip side.

See also A Side

BABBITT, MILTON (10 MAY 1916–)

Influential American composer of classical music, born in Philadelphia. He first studied mathematics at the University of Pennsylvania (1931) and then earned degrees in music at New York University (music, B.A. 1932–1935) and Princeton University (music, M.F.A., 1942). He was on the music faculty at Princeton University from 1938 to 1942, and was later named Conant professor of music there in 1960. He is currently professor emeritus at Princeton and also on the composition faculty of the Juilliard School of Music. Among his many achievements and honors, he was awarded a Pulitzer Prize special citation for lifetime achievement in 1982.

Babbitt is best known as a 12-tone or serialist composer. Beginning in 1955, he joined music professors Vladimir Ussachevsky and Otto Luening to become a driving force behind the operation of the Columbia-Princeton Electronic Music Center, home of the analog RCA Music Synthesizer. Babbitt extended the principles of 12-tone composition to electronic music, composing several influential works in this field including *Ensembles for Synthesizer* (1961–1963), and *Philomel* (for soprano, recorded soprano, and synthesized accompaniment, 1963–1964). His electronic works sometimes combined live musicians accompanied by electronically generated sounds on tape. The original RCA Music Synthesizer (1955) did not have a tape recorder attached to it. Music was recorded using a cumbersome disc lathe. Milton Babbitt worked closely with RCA to attach a tape-recording system to the synthesizer by 1959 and became one of the first to apply multitracking recording techniques to synthesizer music. The Library of Congress held a symposium in honor of Milton Babbitt on 2 May 1998 to commemorate his work as a leading composer and music theorist.

THOM HOLMES

BABY

A one-minute disc made in Germany, sold in 1905 as Baby-Platten for 1 mark (two sides) and 0.75 mark (single side). It was distributed under the Baby name by the Compagnie Française du Gramophone in Paris, selling for 1 franc. The first repertoire consisted of marches, while later issues included waltzes and other instrumental modes. Baby discs, with a diameter 12.5 cm, could be played on any gramophone without the need for extra gadgetry.

**BABYFACE (EDMONDS, KENNY)
(10 APR 1959–)**

American recording artist, songwriter, producer, record company executive, born in Indianapolis. After

stints in the bands Manchild and the Deele, Babyface teamed with L.A. Reid (Mark Rooney) to found a production company and LaFace Records in 1989. Babyface also launched a solo recording career with the Top 10 hit "It's No Crime" in 1989, initially on Solar Records, later on Epic. After Reid became president of Arista Records in 2000, Babyface moved to that company, running his own label, NuAmerica. However, by 2002, he had signed a new deal for the label with the Universal Music Group.

WILLIAM RUHLMANN

BABY GRAND GRAPHOPHONE

One of the first spring motor cylinder players, marketed in early 1895 by Columbia. It weighed 15 pounds and cost \$75, or \$100 with all accessories. [Chew 1981 (illus.).]

See also Graphophone

BABY ODEON (LABEL)

A small disc (six inches in diameter) sold by Carl Lindström in London, in August 1914. It featured patriotic titles played by the Band of the Grenadier Guards.

BABY TOURNAPHONE

A German disc player introduced in England in 1906. [Chew 1981 (illus.).]

**BACCALONI, SALVATORE
(4 APR 1900– 31 DEC 1969)**

Italian basso, born in Rome. As a child he sang with the Sistine Chapel choir. In 1922 he made his operatic debut in Rome; he was at La Scala in 1926, and with the Chicago Civic Opera from 1930 to 1931. From 7 Dec 1940 (as Bartolo in *Nozze di Figaro*) to 14 Feb 1962 he sang with the Metropolitan Opera. His repertoire covered 150 roles, most of them basso buffo parts, but including Wotan in *Siegfried*. Among Baccaloni's greatest recordings were those made for Columbia from 1926 to 1932. These included two fine solos and a duet from *Elisir d'amore* (#CQ75; #CQX16451, later #71383D), and the role of Bartolo in the complete recording of *Barbiere di Siviglia* (#D14564–79). In 1936 he was Leporello in the outstanding recording of *Don Giovanni* made at the Glyndebourne Festival (Victor VM 423–425). Baccaloni was heard as Alcindoro in complete recordings of *Bohème* made at La Scala (Columbia D14515–14527) and at the Metropolitan (Columbia OP27). He died in New York.

BACHARACH, BURT (12 MAY 1929–)

One of popular music's most enduring melodists, Bacharach wrote an amazing 52 Top 40 hits in the 1960s and 1970s. Probably because his songs became extraordinarily familiar, Bacharach's songs often draw a knee-jerk reaction of "elevator music," but this ignores the sophistication of his tunes, with their striking chord changes, and elements of jazz, bossa nova, pop, and rock. Bacharach was influenced by bebop as a youth, and became vocalist Vic Damone's piano accompanist after being discharged from the army in the early 1950s. In 1957, he collaborated for the first time with lyricist Hal David, whom he met while working in New York's legendary Brill Building. Early Bacharach-David hits were "The Man Who Shot Liberty Valance" (1962), by Gene Pitney, and "Make It Easy on Yourself" (also 1960), by Jerry Butler. The third corner of a powerful hit-making triumvirate fell into place when Bacharach met singer Dionne Warwick. Bacharach and David worked closely with Warwick on her recordings, and the result was some of the best pop on record of the era. The trio had 20 Top 40 and seven Top 10 hits, including "Do You Know the Way to San Jose" (1968). Later, Bacharach released several albums of his hits, accompanying himself on piano, although his singing abilities were somewhat limited. An unlikely collaboration with vocalist Elvis Costello brought Bacharach back into the limelight in 1995; the duo collaborated on the well-received 1998 album, *Painted from Memory* (Mercury 538002).

BOB SILLERY

BACK COATING

The addition of a conductive material to the back of a magnetic tape to eliminate static buildup and improve winding characteristics.

BACK CUEING

A means of starting a disc so that the music begins exactly on cue. The stylus is placed at the point of the first recorded sound, then the disc is backed up slightly with the stylus left in the groove. The idea is for the first note to encounter the stylus as the turntable reaches proper speed. This technique is commonly used by disc jockeys. Experts are divided on the question of damage to cartridge or disc that may result from frequent back cueing, such as would take place at a radio station.

BACK SPINNING

A technique used by hip-hop deejays. By rapidly and rhythmically reversing directions of the turntable

while a record is being played, a skilled deejay can create a stuttering sound, or rapidly repeat a key vocal, melodic, or rhythmic phrase so as to emphasize it.

BACK TRACKING

The technique of composite recording in which a new live sound is combined with a previously recorded track (the backing track). In this process the performer listens through headphones to the backing track and adds a new solo part to it. The resulting composite track may be used as the backing track for other new parts.

**BACKHAUS, WILHELM
(26 MAR 1884–5 JULY 1969)**

German pianist, born in Leipzig. He made his debut at the age of eight, and concertized for 70 years. As a recording artist, he spanned the formats from cylinder to stereo disc. His specialties were the works of Beethoven and Brahms (he had met Brahms and played for him in 1894; and he had heard him conduct the two concertos). He was the earliest famous pianist to make records, for G&T in 1908. Backhaus was the first pianist to record a composition by J.S. Bach, the "Prelude in C-Sharp Major" from *Wohltemperierte Klavier*; it was on an HMV issue of 1909. In January 1910 Backhaus, at age 26, made the earliest concerto recording; it was a part of the Grieg work, an abbreviated version of the first movement, filling two single-faced HMV discs. The orchestra was the New Symphony Orchestra, formed three years earlier by Thomas Beecham. It was conducted — in its recording debut — by Landon Ronald. Later Backhaus and the same orchestra recorded the entire concerto, under John Barbirolli, on HMV DB2074–06. Fred Gaisberg invited Backhaus to record many of the Brahms piano works during the mid-1930s for HMV; a CD reissue of that series appeared in 1990 (Pearl GEMM CD 9385). Backhaus died in Villach, Austria.

BACKING

SEE BASE

BACKMASKING

Also called backward masking, the term is used to describe reversal of recorded sound or speech. Such sounds were used in musique concrète compositions of the 1950s; later the Beatles, beginning with the single "Rain" (April 1966), used backmasking as an expressive tool (see, for example, the guitar in the Beatles' "I'm Only Sleeping," 1966). As a result of the

BACKSTREET BOYS

"Paul is dead" rumors of 1969–1970, however, some fans believed that the Beatles deliberately concealed secret backward messages in their songs (e.g., the repeated "number nine" from "Revolution 9" [1968] became "Turn me on, dead man" when reversed).

In the 1970s and 1980s, religious fundamentalists claimed that backward messages (usually of an occult nature) were encoded in rock lyrics, either by simple tape reversal or by carefully constructed lyrics that would yield different statements when played in reverse (see Aranza 1984). Led Zeppelin's "Stairway to Heaven" (1971), for example, was widely alleged to contain Satanic references, speculation fueled largely by guitarist Jimmy Page's interest in the occult. According to Evan Olcott (see references), such coincidental (and anecdotal) instances are examples of "phonetic reversal." Outcomes of reversible messages are hard to predict, and there is little evidence that they are understood when played forward.

Nevertheless, in response to this controversy, some musicians have "planted" backward messages in some of their songs. For example, the Electric Light Orchestra's "Fire on High" (1976) contained a reversed spoken message: "The music is reversible, but time is not. Turn back! Turn back!" Pink Floyd added a barely audible reversed message to the beginning of "Empty Spaces" (1979) that begins, "Congratulations! You've just discovered the secret message." Prince's salacious "Darling Nikki" (1984) concludes with a backmasked Christian message. Olcott has labeled such deliberate instances "engineered reversal." [Poundstone 1983.]

KEVIN HOLM-HUDSON

BACKSTREET BOYS

Popular boy-pop band of the late 1990s, who took R&B/hip-hop styled music into the (white, popular) mainstream. The group was formed around two cousins from Lexington, Kentucky, Kevin Richardson and Brian Littrell, and three commercial/professional singers, Howie Doran, A.J. Doran, and Nick Carter. The band was "assembled" by entrepreneur Lou Pearlman, who had previously worked in the commercial aviation business. After leasing a plane to the group New Kids on the Block, Pearlman decided to form his own boy band. Through his efforts, the group was signed to Jive Records in 1995, releasing their first album only in Europe. They had hits in Europe and Canada through 1996, but failed to make much impression in the U.S. until the album was finally released there in 1997. They finally broke through in America with the platinum-selling "Quit Playing Games (With My Heart)" (Jive 42453). Management problems and lawsuits ensued after this success, plus

Littrell was sidelined by health problems, which delayed their next album, *Millenium* (Jive 41672), until 1999. Working with teen-pop Svengali-producer Max Martin, the album hit number one on its week of release, and eventually sold over 12 million copies. It spawned several major hits even though no songs were officially released as singles. Most notable was the pop-ballad "I Want It That Way" (Jive 0550502). However, in the fickle world of teen pop, success can change overnight into obscurity, and the Boys's next album, *Black & Blue* (Jive 41743), marked the beginning of the end for them. By 2002, the group was suing Jive, claiming the label was promoting singer Nick Carter (who released a solo album that year) at their expense.

CARL BENSON

BADISCHE ANILIN UND SODA FABRIK

SEE BASF AG.

BAEZ, JOAN (9 JAN 1941–)

American popular and folksinger, Baez was born in Staten Island, New York. The family relocated to the Boston area when she was young, and it is there that she made her first appearances in local folk clubs at the age of 17. She attracted attention at the Newport Folk Festival of 1959 and was signed to make records for Vanguard. Her first LP, *Joan Baez* (Vanguard 2077; 1962; #15) remained on the charts 140 weeks, and her third, *Joan Baez in Concert* (Vanguard VRS 2122; 1962; #10) became her all-time best seller. A year later *Joan Baez in Concert, Part 2* (Vanguard 2123; 1963; #7) became her highest charting album. Baez was an early supporter of Bob Dylan, inviting him to perform at her concerts and recording his songs.

She appeared in Boston coffeehouses, then at the Gate of Horn in Chicago, singing protest songs against the Vietnam War. Baez remained popular through the 1970s; an album of original material called *Diamonds and Rust* (A&M 4527; 1975; #11) became her biggest hit during that decade. She has made "comebacks" from time to time since, and continues to record and perform. 1992's *Play Me Backwards*, featuring Mary Chapin-Carpenter's song "Stones in the Road," was a minor hit for Baez, primarily in Europe.

BAFFLE

A loudspeaker enclosure, or a rigid surface encircling the loudspeaker rim, or a board on which a speaker is mounted, intended to prevent interference between the

sound waves created simultaneously on both sides of the speaker's diaphragm.

See also Infinite Baffle

BAGSHAW (W.H.) CO.

A Massachusetts firm, established in Lowell in 1870; it became the earliest manufacturer of needles for disc talking machines. The firm may have made the needles used by Emile Berliner. In 1911 it claimed to be producing 6 million needles a day. One of the brand names was Petmecky. They also produced the Brilliantone Steel Needle, advertised in 1918.

BAILEY, A.R.

SEE LOUDSPEAKER

BAILEY, MILDRED

(9 FEB 1907–12 FEB 1951)

American vocalist, born in Tekoa, Washington. At an early age she played piano in movie theaters, then performed on the radio in Los Angeles. Through her brother, Al Rinker (Bing Crosby's first partner), she auditioned for Paul Whiteman and sang with his orchestra from 1929 to 1933. Her popular record of "Rockin' Chair" (Victor 24117; 1932) earned her the nickname of "Rockin' Chair Lady." Then she teamed with Red Norvo (she also was married to him from 1933 to 1945), and did some of her best work with his swing band in 1936–1939. A good example of her style at that time is "I've Got My Love to Keep Me Warm" (Brunswick 7813; 1937). During 1939–1940 she sang with Benny Goodman; one of her best records with his band was "Darn That Dream" (Columbia 3533; 1940). Serious illness in the 1940s kept her mostly inactive until her death in 1951 in Poughkeepsie, New York. Columbia issued a three-disc LP album, *Her Greatest Performances* (#C3L22). *Rockin' Chair*, a VJC label CD, includes material made with Goodman, Teddy Wilson, and Roy Eldridge.

BAKER, ANITA (1958–)

An exponent of traditional rhythm and blues vocalizing, Baker's restrained intensity and subtle coloring attracted widespread media attention and pop mainstream success in the mid-1980s. Born in Toledo and raised in Detroit, she began her professional career as lead singer for the R&B group, Chapter 8, from 1976 to 1984. Her moderately successful debut album, *The Songstress* (Beverly Glen 10002; 1983), was followed by the

commercial breakthrough release, *Rapture* (Elektra 60444; 1986), which included the Top 10 single, "Sweet Love" (Elektra 7-69557; 1986), reputed to have sold more than 4 million copies. Her subsequent albums, most notably the chart-topping *Give You the Best That I've Got* (Elektra 60827; 1988), and *Compositions* (Elektra 60922; 1990), have all been bestsellers. [Romanowski and George-Warren 1995.]

FRANK HOFFMANN

BAKER, CHET

(23 DEC 1929–13 MAY 1988)

Charismatic trumpeter whose drug addiction and erratic lifestyle undermined a style that featured an inventive, moody tone. He also played the flugelhorn and sang, though his voice was limited and is considered an acquired taste. Born Chesney Henry Baker in Yale, Oklahoma, Baker was the son of a semiprofessional guitarist. Sometime after Baker's 10th birthday, the family relocated to Glendale, California, and Baker's father bought him his first instrument, a trombone. He soon switched to trumpet. He dropped out of high school to join the army in 1946; he remained in the service for two years, briefly attended junior college, and then returned to the army, completing his service in 1952. On his discharge, Baker started out on top, gigging with Charlie Parker in 1952 and then joining the Gerry Mulligan Quintet, recording for Pacific Jazz Records. With Mulligan, Baker helped make "My Funny Valentine" a 1952 hit. A year later, Baker went solo, continuing to record for Pacific Jazz. In 1954, he released the album *Chet Baker Sings* (PJP 11; CD reissue Pacific Jazz 1222), which introduced his idiosyncratic vocal style.

By 1959, Baker was hooked on heroin and had been arrested several times on a European tour. His play was often uninspiring during the 1960s, and he reached his nadir in 1966 when he was severely beaten in San Francisco in a drug-related fight. But in 1974, on methadone, he started a comeback that featured more authoritative and passionate playing. The comeback led to an engagement at a prominent New York club in November 1973 and a reunion concert with Mulligan at Carnegie Hall in November 1974. On 13 May 1988, after taking heroin and cocaine, Baker fell or was pushed out of a hotel window in Amsterdam to his death. The following September, Bruce Weber's documentary film, *Let's Get Lost*, on Baker's life introduced his playing — and legend — to a new generation. All of Baker's recorded legacy is available on CD in various formats, from original album reissues, compilations, and previously unissued sessions.

BOB SILLERY

BAKER, ELSIE

(27 SEP 1886–28 APR 1958)

American contralto, born in Philadelphia. She was “probably the most popular contralto who ever recorded for the Victor black and blue labels” (Walsh). Her “Silent Night” (Victor 19823; 1925) remained in the catalog into the 1940s. She also appeared on Red Seal, one popular number being “He Shall Feed His Flock” from *Messiah* (Victor 4026); and made Edison cylinders in 1913–1914. On U-S Everlasting cylinders she was identified as Elsie West Baker. She was Edna Brown on one Edison Blue Amberol and on one Indestructible cylinder. She died in New York. [Walsh 1950/10.]

BAKER, GEORGE

(10 FEB 1885–8 JAN 1976)

British baritone, born in Birkenhead; also known as Arthur George. He began recording for Pathé in London in 1909, and made records for one company or another for over 50 years, primarily in the light concert and operetta repertoire, including HMV recordings of Gilbert and Sullivan. He appeared as Ko-Ko on the first complete recording of their *Mikado* in 1916, and recorded the entire cycle of their works over his long career twice, with his final record appearance coming in 1962 as Robin Oakapple in *Ruddigore*. Although he was famous for these Gilbert and Sullivan recordings, he never appeared in any of their works on stage. He also recorded hundreds of art and popular songs, and even early children’s recordings, issued under the nom-de-disc of “Uncle George.” Many of his other records were issued under a variety of pseudonyms, including Arthur George, Walter Jefferies, George Portland, Victor Conway, Victor Norbury, Leslie Milton, George Barnes, and Walter Duncan.

BAKER, LAVERN

(11 NOV 1929–10 MAR 1997)

One of the finest female rhythm and blues singers of the post-World War II era, LaVern Baker’s greatest commercial success came from teen novelty recordings, most notably “Tweedlee Dee” (Atlantic 1047; 1955; #14, #4 R&B) and “Jim Dandy”/“Tra La La” (Atlantic 1116; 1956; #17, #1 R&B). Unable to make the transition to the adult market with any degree of lasting impact, she finally achieved widespread public acclaim in the 1990s following a 20-year hiatus in the Philippines for health reasons.

Born Delores Williams, Baker first sang professionally in the nightclubs of her native Chicago billed as “Little Miss Sharecropper.” Her early recordings for National, RCA, Columbia/Okeh, and King attracted

little attention; she became an R&B chart fixture after signing with Atlantic in 1953. Her hits included “Bop-Ting-A-Ling” (Atlantic 1057; 1955; #3), “Play It Fair” (Atlantic 1075; 1955; #2 R&B), the soulful ballad “I Cried a Tear” (Atlantic 2007; 1958; #6, #2 R&B), the gospel rave-up “Saved” (Atlantic 2099; #34, #17 R&B), and a searing update of the Chuck Willis ballad, “See See Rider” (Atlantic 2167; 1962; #34, #9 R&B). Well aware of Baker’s protean talent, the label backed the ambitious project, *LaVern Baker Sings Bessie Smith* (Atlantic 1281; 1958). Although her gospel-inflected treatment of classic blues material was every bit as effective artistically as Ella Fitzgerald’s songbook series devoted to notable Tin Pan Alley composers, the album sold poorly. Once the hits stopped coming in the early 1960s, she faded into obscurity.

Baker’s revival was spurred by her selection in 1990 to replace Ruth Brown in the acclaimed Broadway revue, *Black & Blue*. Later that year she was voted into the Rock ‘n’ Roll Hall of Fame and received a career achievement award from the Rhythm & Blues Foundation. A flurry of recordings for Sire, DRG, and Rhino followed, complemented by numerous reissues of her classic R&B tracks.

FRANK HOFFMANN

BALANCE

The characteristic of a stereo sound system that describes the relative volume of playback signal emanating from the several loudspeakers.

BALANCE CONTROL

A device in a stereo sound system that adjusts the relative loudness of the channels to obtain an accurate reproduction of the input sound.

BALDWIN (LABEL) (I)

A record issued by the Bridgeport Die and Machine Co., Bridgeport, Connecticut, ca. 1922, apparently sold in chain stores and/or by mail order; Paramount masters were used. [Rust 1978.]

BALDWIN (LABEL) (II)

A label available before 1942 in the U.S., named for the New York recording engineer who manufactured it. One known area of interest was Haitian music. There was a likely connection with the Varsity label. [Blacker 1981/7.]

BALDWIN PIANO CO.

A firm established in Cincinnati as D.H. Baldwin & Co. in 1873 by Dwight Hamilton Baldwin (1821–1899) and his partner Lucien Wulsin (1845–1912). It became one of the great international piano makers, winner of numerous prizes at expositions. During the player-piano era, Baldwin was active and successful in the manufacture of players and reproducing pianos. Among the brands and models listed in a 1926 directory were the Manualo (winner of the grand prize at the London Exposition of 1914 as “the player-piano with the human touch”), which appeared as the Baldwin Manualo, Ellington Manualo, Hamilton Manualo, and Howard Manualo; the Monarch, the St. Regis, and the Modello.

Wulsin and George W. Armstrong, Jr. (1857–1932), bought the company in 1903, and Wulsin was president until his death in 1912. Armstrong was president from 1912 to 1926, succeeded by Lucien Wulsin, Jr., who held office until 1964. His son Lucien (b.1916), grandson of the cofounder, was chief executive after him. General offices were in Cincinnati, with other offices in Chicago, New York, St. Louis, Louisville (Kentucky), Indianapolis, Dallas, Denver, and San Francisco. In its various divisions Baldwin was producing 20,000 pianos and 15,000 player pianos annually in the mid-1920s. In 1946, the firm introduced its electronic organ. Piano manufacture continued along with various electronic keyboards during the post-World War II period through the end of the century. The company was purchased in 2001 by the Gibson Guitar Company. [Website: www.baldwinpiano.com.]

**BALLARD, GEORGE WILTON
(24 NOV 1877–6 APR 1950)**

American concert tenor, born in Syracuse, New York. He was also known as George Winton, on Indestructible records. He had a sweet, clear voice, well suited to his frequent church work. His first recordings were on U-S Everlasting cylinders between 1910 and 1913, beginning with “A Dream” (#1043). He started his 15-year association with Edison singing “Carissima” (two-minute cylinder #213). His most popular offering was “When the Twilight Comes to Kiss the Rose Goodnight” (Edison Blue Amberol 2150). In December 1914 he went to Victor; his most notable recording for the label was “You’re More than the World to Me” (#17654). Ballard’s voice seemed to record best on vertical-cut discs, so it was on Edison Diamond Discs that he achieved his greatest successes, during 1915–1922. In addition to his solo work, he was a member of the Moonlight Trio on Edison records. When he quit performing and recording he returned to earlier work as a salesman in a jewelry store. Ballard died in Syracuse, New York. [Walsh 1960/4.]

BALLEW, SMITH**(31 JAN 1902–2 MAY 1984)**

American popular vocalist, born in Palestine, Texas. From 1929 to 1936, he made records with numerous jazz and dance bands, primarily in New York. He also had his own band in the early 1930s, with many distinguished artists among the personnel at one time or another, including Glenn Miller, Bunny Berrigan, and Ray McKinley. In 1935, he sang on Glenn Miller’s first recording as a bandleader, “A Blues Serenade”/“Moonlight on the Ganges.” Ballew had a radio show in the mid-1930s, and appeared in motion pictures through the 1940s, primarily in B-grade cowboy pictures. By the 1950s, he had returned to Fort Worth, Texas, after retiring from show business. He died there in 1984.

BAND (ALSO KNOWN AS A CUT)

The portion of the recorded surface of a disc that is separated from adjacent bands by a marker space or scroll. It usually contains one song, or one movement of a larger work.

BAND, THE

The Band was a key force behind the back-to-the-roots trend in late 1960s rock music. Their sound represented a populist amalgam of country, folk, and rhythm and blues; its most notable feature, however, consisted of compassionate, blue-collar poetry — often evoking historical themes from the standpoint of the common man — communicated by a loose vocal interplay that often had one singer begin a line of a verse and another chiming in to finish it.

The Band — consisting of Arkansas native Levon Helm on drums, and four Canadians: lead guitarist Robbie Robertson, pianist Richard Manuel, keyboardist Garth Hudson, and bassist Rick Danko — came together in the early 1960s as Ronnie Hawkins’s rockabilly-oriented backing group, the Hawks. They eventually drifted to the eastern seaboard, attracting attention as Bob Dylan’s support band in 1965. Their work with Dylan — most notably the 1966 Royal Albert Hall concert and the legendary Basement Tapes recorded in Woodstock, New York, while the folk-rock pioneer recuperated from a motorcycle accident — is available on countless bootlegs and official Dylan retrospectives released by Sony/Columbia.

The unadorned evocations of rural Americana in the Band’s debut LP, *Music from Big Pink* (Capitol 2955; 1968; #30), recorded in 1967–1968 during the Woodstock period, drew rave reviews. Although the album was recorded in studios New York and Los Angeles, an attempt was made to duplicate the

BAND MUSIC

“homemade” feeling of the earlier Basement Tapes. Robertson was particularly interested in creating a funky sound for these sessions, damping Helm’s drums with rags and other materials to give them an earthy “thud.” They repeated this successful formula in the highly influential *The Band* (Capitol 132; 1969; #9), in which band members moved en masse to Los Angeles, living together to create and rehearse the songs, in an attempt to revive the group comradery developed in the Woodstock years. The reflective *Stage Fright* (Capitol 425; 1970; #5), and uneven *Cahoots* (Capitol 651; 1971; #21) followed.

From late 1971 until their official breakup at a gala San Francisco concert, Thanksgiving Day, 1976, the Band recorded only two more albums of original compositions, the uneven *Northern Lights/Southern Cross* (Capitol 11440; 1975; #26), and *Islands* (Capitol 11602; 1977; #64). A reunion with Dylan also led to a lackluster studio album, *Planet Waves* (Asylum 1003; 1974; #1), and a competent live outing, *Before the Flood* (Asylum 201; 1974; #3), both of which sold largely on the basis of reputation. While Capitol continued to repackage older material by the group, the individual members pursued a wide range of artistic activities (including film acting and writing). They began performing again as a unit (without Robertson) in 1983, eventually releasing three LPs of new material — *Jericho* (Pyramid; 1993), *High on the Hog* (Pyramid; 1996), and *Jubilation* (River North; 1998) — which lacked the innovative spark of their early work.

FRANK HOFFMANN

BAND MUSIC

SEE *BIG BAND*; *MILITARY BAND RECORDINGS*

BAND OF THE COLDSTREAM GUARDS

One of the early recording military bands, with a series of excellent recordings for HMV from 1904 to 1935, including military music and arrangements like the “Mikado Selections” (#2602). An LP reissue was marketed in 1986 by the International Military Band Society of Wellingborough, England (#IMMS 104).

BANDA ROSSA

One of the earliest military bands to record, for Berliner. Among their 1895 offerings was “William Tell Overture” (#7y).

BANDWIDTH

The characteristic of an amplifier or receiver that expresses its frequency range; e.g., 20 Hz–20,000 Hz.

It is stated for given output levels and distortion percentages.

BANDY, MOE (12 FEB 1944–)

Born in Meridian, Mississippi, Marion Bandy grew up in San Antonio dividing his time between bronco-busting and playing guitar in his father’s band, the Mission City Playboys. A string of injuries convinced him to switch from a rodeo career to performing. He signed his first recording contract with a San Antonio-based label, Satin, as leader of the group Moe Bandy and the Mavericks. A shift to the Shannon label brought him into contact with record producer Ray Baker (who would become a longtime associate), but resulted in no hits.

Signing with GRC brought a change in Bandy’s fortunes; he enjoyed five Top 25 country hits in 1974–1975. When GRC folded, Bandy joined the Columbia roster. Assisted by Columbia’s marketing muscle, he enjoyed a long run of honky-tonk flavored hits, most notably the Top 5 singles, “Hank Williams, You Wrote My Life” (Columbia 10265; 1975–1976), “It’s a Cheating Situation” (Columbia 10889; 1979), “I Cheated Me Righted Out of You” (Columbia 11090; 1979), and “She’s Not Really Cheatin’ (She’s Just Gettin’ Even)” (Columbia 02966; 1982). He was found recording success as part of the duo, Moe and Joe (Stampley), including the number one hit, “Just Good Ol’ Boys” (Columbia 11027; 1979), “Holding the Bag” (Columbia 11147; 1979–1980), and the Boy George parody, “Where’s the Dress” (Columbia 04477; 1984). Although less active as a recording artist since the mid-1980s, Bandy remains popular, performing at his own theater in Branson, Missouri.

FRANK HOFFMANN

BANG RECORDS

Bankrolled in part by Atlantic Records head Ahmet Ertegun, the New York-based Bang label was run by Bert Berns, whose songwriting credits included “Twist and Shout,” “Piece of My Heart,” and “I Want Candy.” Established in 1964, Bang’s success owed much to Berns’s ability to attract Richard Gottlehrer, Jeff Berry, Ellie Greenwich, Neil Diamond, and other talented young producers/songwriters and producers formerly affiliated with Brill Building music publishers such as Don Kirshner’s Aldon Music.

Concentrating on mainstream Top 40 fare, the label’s hits included Derek’s “Cinnamon” (Bang 558; 1968; #11); the Strangeloves’ “I Want Candy” (Bang 501; 1965; #11), “Cara-Lin” (Bang 508; 1965; #39), and “Night Time” (Bang 514; 1966; #30); the McCoy’s “Hang On Sloopy” (Bang 506; 1965; #1), and “Fever” (Bang 511; 1965; #7); Van Morrison’s

“Brown Eyed Girl” (Bang 545; 1967; #10); and Diamond’s “Cherry Cherry” (Bang 528; 1966; #6), “Girl, You’ll Be A Woman Soon” (Bang 542; 1967; #10), and “I Thank the World For the Night Time” (Bang 547; 1967; #13). Other artists enjoying marginal success on Bang and its subsidiary, Shout, included Erma Franklin, Jackie Moore, Freddie Scott, and Donald Height.

Bang’s bubblegum sensibilities during the heightened social consciousness of the late 1960s would help bring on its demise. Furthermore, the loss of Morrison and Diamond to major labels left the company without any name artists capable of making the transition to the newly emerging album market.

FRANK HOFFMANN

THE BANGLES

The Bangles emerged in the early 1980s as part of Los Angeles’s “paisley underground,” a brand of soft psychedelia also performed by the Rain Parade and Dream Syndicate. Following a self-released single (as the “Bangs,” a name owned by another group), and an EP with I.R.S., the Bangles signed with Columbia in 1983. When the original bass player left and was replaced by former Runaway Michael Steele, the band’s lineup was set, including Susanna Hoffs and Debbi Peterson, both on guitar and vocals, along with drummer/vocalist Vicki Peterson.

David Kahne, a producer specializing in power pop, was recruited to assist in recording Bangles’s debut album, *All Over the Place* (Columbia 39220; 1984). The critically acclaimed LP attracted the attention of funk star Prince, who gave the band the song, “Manic Monday” (Columbia 38-05765; 1986). Thanks in large part to MTV, which placed the promotional video of the highly photogenic girls into heavy rotation, the single reached number two on the pop charts, paving the way for the breakthrough album, *Different Light* (Columbia 40039; 1986). A string of hit recordings followed, most notably the number one singles “Walk Like An Egyptian” (Columbia 38-06257; 1986), “Hazy Shade of Winter” (Def Jam/Columbia 38-07630; 1987), and “Eternal Flame” (Columbia 38-68533; 1989). The media’s increasing fascination with Hoffs fomented dissension within the group, leading to a breakup in late 1989. Hoffs has enjoyed the greatest success among the former band members; however, poor sales for her solo album and a number of undistinguished film appearances in the early 1990s led to a disappearance from public view. The group reunited to record a song for the second Austin Powers film in 1999, and subsequently toured and recorded a new album. Like many other once-popular bands, they were also

featured as part of the VH-1 *Behind the Music* series. [Romanowski and George-Warren 1995.]

FRANK HOFFMANN

BANJO RECORDINGS

The five-string “American” banjo was the most popular instrument on early records; its acoustic qualities were well suited to the possibilities of recording equipment, and there were a number of outstanding artists available. The first banjo music to be heard was on Edison North American cylinders in 1889, performed by Will Lyle; “Banjo Jingles” was the earliest noted in the Edison “Musical Cylinder Accounts” — the date was 30 Sep 1889. Lyle performed in a total of nine sessions that year. W.S. Grinstead made Edison cylinders on 22 Oct 1891.

Columbia cylinders initiated their banjo catalog ca. 1893, with the “Banjo King” Vess Ossman and two lesser known players named Cullen and Collins. Steph Clement made a seven-inch Berliner disc, “Mittoam Gallop,” on 18 Oct 1896. Ossman made 11 records for Bettini in 1898. Ruby Brooks made Edison cylinders from before 1900 (e.g., “Belle of Columbia,” #2636) until he died in 1906. Fred Van Eps was the star performer later on; he began with Edison in 1901 and recorded until 1922. Van Eps, Ossman, and F.J. Bacon were the artists listed in the Victor 1917 catalog, which carried 40 banjo titles. Popular performers on the four-string or tenor banjo during the 1920s were “Blackface” Eddie Ross and fleet-fingered guitarist Roy Smeck. British banjoists included Alfred Cammeyer, Emile Grimshaw, Joe Morley, Olly Oakley, John Pidoux, and Charlie Rogers.

The first women to make banjo records were also British: Bessie and Rose Skinner, in 1903 for Zonophone in London. Helen Sealy was the first woman on HMV (“Kettledrums,” #B648). Shirley Spaulding was the first American woman to make a banjo record: it was “Royal Tourist — March Novelette” (Edison Diamond Disc #80625; 1921).

The five-string banjo declined in popularity during the 1930s and 1940s. Jazz and ragtime groups preferred the four-string tenor banjo, and only a few artists remained with the five-string instrument, notably Uncle Dave Macon and Grandpa Jones, and Bill Monroe’s Bluegrass Boys. Pete Seeger — who played a major role in popularizing the instrument as part of the post-World War II folk revival — also used the banjo in much of his recorded work.

Bluegrass music also enjoyed a boom in the 1950s and 1960s, led by Earl Scruggs (one of the Bluegrass Boys), and Lester Flatt. A popular American television show, *Beverly Hillbillies*, premiered in 1962 with a bluegrass themesong played by Scruggs. On the

BANNER (LABEL)

four-string or tenor banjo, Eddie Peabody made several hit LP albums on the Dot label in 1958. The Banjo Kings, John Cali (who had recorded for Grey Gull in the 1920s), Joe Maphis, and Jad Paul were among the other successful tenor banjo artists of the 1950s. Five-string banjo music received a boost with the filming of *Bonnie and Clyde* (1966); it had a Grammy-winning bluegrass score by Charles Strouse. *Dueling Banjos*, from the soundtrack of *Deliverance*, was a popular album in 1973 (Warner #7659).

Since the 1970s, the five-string banjo has continued to appear on country music recordings, with a resurgence of bluegrass styles since the 1980s “new country” movement began. Bela Fleck has been the most popular solo artist on the instrument, expanding its use into jazz, funk, and electronica styles. With the new country revival movement of the mid-1980s, the banjo returned to a prominent place on many country recordings. The tenor banjo has been most prominent in the hands of traditional Irish music revivalists, such as Mick Moloney.

BANNER (LABEL)

A record issued by the Plaza Music Co. beginning in 1922 with Paramount and Emerson reissues. Plaza produced its own masters by the end of 1922, and the label survived into the LP era under various corporate arrangements. Dance music and popular vocals were featured in the 1920s. Under parent company American Record Corp., beginning in 1938, famous bands joined the roster (e.g., Vincent Lopez, Duke Ellington), and some notable artists from Brunswick



Banner label. Courtesy David A. Jasen

(also taken over by American Record Corp.), appeared on Banner: Bing Crosby, the Mills Brothers, Guy Lombardo, and the Boswell Sisters. [A full matrix list appeared in *RR*, beginning in July 1961; Rust 1978.]

BANTA, FRANK E. (1897–1969)

American pianist, son of Frank P. Banta, born in New York. He was studio pianist for Victor, participating in all sorts of recordings as soloist, accompanist, and ensemble player. He was one of the Eight Famous Victor Artists and he played with the Van Eps Trio. Rust has noted two jazz solos by Banta: “Wild Cherry Rag” (Gennett #4735; 1921), and “Sweet Man” (Victor 19839; 1925). [Rust 1969.]

BANTA, FRANK P. (1870–1903)

American pianist, father of Frank E. Banta. He was accompanist for many record companies, assisting singers and other instrumentalists. His “Violets” seems to have been his first piano solo record on Edison wax cylinders (#8394; May 1903). A photo of Banta making a record in 1900, with violinist Charles D’Almaine, appears in *Moogk* 1975, p. 35, and in *Hoover* 1971, p. 75.

BAR AUTOMATICO

The name given to phonograph parlors in Italy, around the turn of the century. Customers could listen to cylinder recordings of opera or popular music for 10 centesimi (1/10th of a lire).

BARBIROLI, JOHN, SIR (2 DEC 1899–29 JULY 1970)

English conductor and cellist, born Giovanni Battista Barbirolli (of French-Italian parents) in London. He made his debut at age 12, playing the cello in Queen’s Hall. After army service he toured with a quartet, then conducted the British National Opera (1926–1929), and Covent Garden Opera (1929–1933). In 1933 he became conductor of the Scottish Orchestra (Glasgow), and the Leeds Symphony. From 1937 to 1943 he was conductor of the New York Philharmonic, from 1943 to 1961 of the Hallé Orchestra, and from 1961 to 1968 of the Houston Symphony. He was knighted in 1949. His death came in London in 1970.

Barbirolli’s first records (for Edison Bell) were as a child cellist, accompanied by his sister, and as a string quartet player. His recording career as a conductor, spanning 1911–1970, featured distinguished performances of Brahms, Bruckner, Mahler, Sibelius, and the

British composers of his time. He also made a notable early record of the Grieg Piano Concerto with Wilhelm Backhaus and the New Symphony Orchestra (HMV DB2074/76).

BARDINI

A console record player made by Sonora Phonograph Co., selling for \$5,000 in 1921.

BARENBOIM, DANIEL (15 NOV 1942–)

Pianist and conductor, born in Buenos Aires. His first public appearance was at age seven. His family moved to Israel in 1952. Barenboim studied at the Academy of Santa Cecilia in Rome, gaining a diploma in 1956. He gave recitals in Paris and London, then made his Carnegie Hall debut in 1957. He conducted many orchestras before being appointed director of the Orchestre de Paris in 1975. In 1989 he was selected to succeed George Solti as conductor of the Chicago Symphony Orchestra. He published his autobiography, *A Life in Music*, in 1991, and then was named the musical director of the Berlin State Opera in 1993.

Barenboim's recording career began at age 13 with Philips. Between 1967 and 1970 he recorded the complete Beethoven piano sonatas for EMI, released on 14 Angel LPs (#S3755), and then all the Mozart piano concertos while conducting the English Chamber Orchestra from the keyboard. An Angel album set (#3752) offered all the Beethoven concertos on four LPs with the New Philharmonia Orchestra. The recording of Brahms's three violin sonatas, with Itzhak Perlman, won a Grammy (Sony SK-45819; 1990). And Barenboim's 1990 recording of the First Symphony by John Corigliano, with the Chicago Symphony (Erato 2292-45601-2), won a Grammy as best classical disc. During the 1990s, he recorded both popular material — the successful albums, *Tangos Among Friends* (1996; Teldec 13474), and 1999's *Tribute To Ellington* (Elektra/Asylum 25252) — and contemporary classical and repertoire material.

BARKING PUMPKIN RECORDS

Following earlier labels such as Bizarre/Straight and DiscReet, Frank Zappa formed Barking Pumpkin Records as an outlet for his prolific recordings, initiating the label with the simultaneous release of four albums on 11 May 1981. Three were solo guitar LPs available by mail order — now released as *Shut Up 'N Play Yer Guitar* (Rykodisc 1028/29; 1986), *Joe's Garage* (Rykodisc 1060/61; 1987), and *Guitar* (Rykodisc 1079/80; 1988) — while the double-LP

Tinsel Town Rebellion (#37336) went to retail. Zappa continued to release his music on Barking Pumpkin — most notably reissues of his out-of-print albums in a series of box sets — until his death in 1993, after which his catalog was sold to Rykodisc.

WILLIAM RUHLMANN

BARNET, CHARLIE

(26 OCT 1913–4 SEP 1991)

American tenor saxophone player and big band leader, born in New York. After working with various bands across the U.S. he formed his own group in 1933, performing mostly in New York hotels. A second band, organized in 1936, featured the Modernaires, a vocal swing group. Another band, formed in 1938, was his best ensemble. It had fine arrangements by Billy May, one being Barnet's great hit, "Cherokee" (Bluebird 10373). Lena Horne and Kay Starr were among his vocalists in the 1940s, when the band was at its peak, appearing in several motion pictures. With the decline of the big band era, Barnet became much less active, although he continued to record sporadically for Verve, Capitol, and other labels, making his last recording in 1966. He died in San Diego, California. In the mid-1970s, RCA reissued Barnet's complete Bluebird recordings on six two-LP sets. In 1996, the French label EPM Musique began a similar reissue series on CD in its Jazz Archives series.

BARNETT, SAMUEL

SEE SAMUEL (BARNETT) AND SONS LTD.

BARRAUD, FRANCIS (1856–29 AUG 1924)

English painter of French descent, famous in recording history for his rendition of Nipper, the Victor and Gramophone Co. trademark dog. He went into the Maiden Lane office of the Gramophone Co. in September 1899 to borrow a horn for use as a model, and there met William Barry Owen, managing director of the new firm. Owen asked him to paint a dog listening to a gramophone, similar to Barraud's earlier dog listening to an Edison cylinder phonograph. A month later Barraud returned with a palimpsest: he had erased the cylinder phonograph from his first painting and substituted the Improved Gramophone. Owen gave him £100 for it. (In the original work, which now hangs in the EMI boardroom, a ghostly image of the Edison machine can still be seen.) Berliner began to use the painting, and its name, "His Master's Voice," in advertising in 1900, despite the fact that Nipper could not be

BARRAUD, WILLIAM ANDREW

hearing what he might have heard in the first version of the painting; home recording was possible on cylinders from the beginning, but not on discs until 1905. (Allen Koenigsberg has also noted that the machine's brake is in position, so its turntable could not be moving.) In 1924 Barraud painted a miniature of his masterwork for the queen's dollhouse. It is curious that no record was made of Barraud's voice.

BARRAUD, WILLIAM ANDREW (1851–1937)

Recording industry executive, brother of Francis Barraud; the trademark dog Nipper was also one of the family. He worked in South Africa as an explorer and miner, then returned to London in 1900. In 1908 he was active in the talking machine business in India and Britain as an agent of Aldridge, Salmon & Co. Barraud was London representative for the German Dacapo record in 1910–1912. When Dacapo reorganized in 1912, he became an agent for another German label, Invicta, issued by the Berolina Schallplatten GmbH, trading under the name W.A. Barraud, Ltd. When disputes with Berolina resulted in the liquidation of his company, Barraud established (1913) the Invicta Record Co., Ltd. He went into semiretirement ca. 1915, but Invicta remained in business until the late 1920s. [Andrews 1990/8.]

BARRETTO, RAY (29 APR 1929–)

Bandleader and percussionist Ray Barretto has been one of the most influential recording artists in Latin jazz history, having collaborated with the likes of saxophonists Gene Ammons, Lou Donaldson, Sonny Stitt, and Stanley Turrentine, trumpeters Dizzy Gillespie, Wes Garland, and Clark Terry, guitarists Kenny Burrell and Wes Montgomery, and vibraphonist Cal Tjader. The first American musician to integrate the African-based conga drum into jazz, he played a key role in the fusion movement, combining his Latin heritage with orthodox bebop techniques.

Born in Brooklyn of Puerto Rican ancestry, Barretto developed his reputation performing in Tito Puente's orchestra beginning in 1957 in addition to working as a studio musician. In 1962 he formed his own ensemble, Charanga La Moderna, best known for the pachanga-styled novelty single, "El Watusi" (Tico 419; 1963; 317). Utilizing both his own compositions and covers, he issued a series of Latin fusion LPs for Riverside, Tico, and United Artists throughout the 1960s. In mid-1960s, he also began working closely with Fania, the New York-based record company specializing in Latin music. Both *Acid* (Fania 346; 1967), and *Hard Hands* (Fania 362; 1968) — featuring punchy Stax-like horns, sinuously hypnotic bass lines,

and fiery percussive displays — are considered classic albums that anticipated the Afro-Latin funk revolution of the 1970s. He would become the music director of the label's house band, the Fania All-Stars, which included vocalists Ruben Blades and Hector Lavoe, trombonist Willie Colon, and pianist Larry Harlow.

In addition to his work as a featured performer, Barretto did session work for a wide range of artists, including the Average White Band (*Cut the Cake*; Atlantic 18140; 1975), the Bee Gees (*Main Course*; RSO 4807; 1975), Sabu Martinez (*Safari with Sabu*; RCA 1122; 1957); and Babatunde Olatunji (*High Life*; Columbia 8796; 1963). Tiring of the stylistic limitations of salsa, he formed New World Spirit in 1992, which focused on the bebop style. He was inducted into the International Latin Music Hall of Fame in 1999.

FRANK HOFFMANN

BARRIENTOS, MARIA (10 MAR 1884–8 AUG 1946)

Spanish coloratura soprano, born in Barcelona. She made her debut at age 15 in Barcelona, and then toured Europe. On 31 Jan 1916 she sang at the Metropolitan Opera, as Lucia, and remained with the company until 1920. Then she returned to Europe, where she made her last stage appearance in 1922. Barrientos was one of the first artists to record for Fonotipia, beginning with "Son vergine vezzosa" from *Puritani* (#39010; 1903), a flawless "'Ah non giunge" from *Sonnambula* (#39011; 1903), and 21 other numbers through 1906. In the 1906 Fonotipia catalog she had two outstanding renditions from *Fra diavolo*: "Or son sola" (#39538), and "Giö per la danza" (#39539), both of which were later issued by IRCC. For Columbia she made 34 discs, the first being the *Lucia* mad scene (#48627; 1916), and the last Handel's "Sweet Bird" (#49805; 1920). In 1927–1928 she made eight discs for French Columbia, all of them Spanish songs. She died in Ciboure, France.

BARRON, MICHAEL (6 SEP 1945–)

Born in England and a noted researcher in large-room acoustics, Barron attended the University of Cambridge from 1964 through 1967, taking a B.A. at the end of his studies. He went on to receive a Ph.D. from the University of Southampton, in 1974. Since 1987 he has been a partner in Fleming & Barron (acoustic consultants) and has since 1989 been senior lecturer (now part-time) at the University of Bath department of architecture and civil engineering. In 1988, he was awarded the Tyndall Medal by the British Institute of Acoustics. Dr. Barron has published papers in the *Journal of the Acoustical Society of America*, *Acustica/Acta Acustica*, *Journal of Sound and Vibration*, and *Applied Acoustics*, and in 1993 he

published *Auditorium Acoustics and Architectural Design* (Routledge and Spon Press).

HOWARD FERSTLER

BARTHLOMEW, DAVE (24 DEC 1920–)

Born in Edgard, Louisiana, Barthlomew is best-known for producing and performing on Fats Domino's seminal 1950s-era sessions. His father was a barber and amateur musician, and Barthlomew studied trumpet as a youngster. He played in various New Orleans bands through his teen years and then in 1941 was drafted into the air force. When he returned from the war, he began leading his own jazz band, and in 1949 had a minor hit with the song "Country Boy" issued on DeLuxe. This brought him to the attention of Imperial Records's owner Lew Chudd, who signed him to his new label. Chudd also signed at about the same time a local singer named Fats Domino, and asked Barthlomew to accompany him on his first (December 1949) session, which produced the hit "The Fat Man." This led to a string of hits through the

1950s for Domino, including "I'm Walkin'," and the much-covered "Blueberry Hill," always accompanied by Barthlomew, who cowrote, produced, and arranged most of these sessions. He also worked with other Imperial signings, including Smiley Lewis, James Booker, Lloyd Price ("Lawdy Miss Clawdy" from 1949), and Roy Brown. However, Barthlomew's career pretty much ended when Domino's popularity waned in the face of the British Invasion and teen pop of the early 1960s. In 1991, he was inducted as a nonperformer into the Rock and Roll Hall of Fame, and seven years later, he was inducted into the Songwriters Hall of Fame for his classic compositions.

CARL BENSON

BARTÓK, BÉLA

(25 MAR 1881–26 SEP 1945)

Hungarian composer and scholar of folk song, born in Nagyszentmiklós. He began writing down peasant songs in 1904, and two years later issued *Magyar*



Béla Bartók recording folksingers in Transylvania on a cylinder recorder. © Archivo Iconografico, S. A./Corbis

BASE

nÇpdalok, a collection of songs arranged for voice and piano in collaboration with Zoltán Kodály. His work is of interest in the history of sound recording because his later field studies (from 1906) involved an Edison phonograph, which he took to various regions in present-day Hungary, Czechoslovakia, and Romania. This was the earliest use of the phonograph for field recordings on the continent, contemporary with Percy Grainger's work in Britain. Bartók donated about 1,000 cylinders to the Ethnographic Museum in Budapest. As a pianist, Bartók recorded a number of his own works, and also made a notable disc of the Beethoven "Kreutzer" sonata and the Debussy Violin Sonata with Joseph Szigeti (Vanguard 304-05E, 2 LPs). He wrote *Contrasts* on commission from Benny Goodman, and recorded it with Goodman and Szigeti (1939). Bartók died in New York City, where he had settled in 1940.

See also **Field Recordings**

BASE (ALSO KNOWN AS BACKING)

The material of which a magnetic tape is made; that is, the carrier of the magnetizable coating that holds the pattern representing the signal. Acetate (lacquer) and polyester bases have predominated, with a thickness of 1/2 mil, 1 mil, or 1-1/2 mil. Tapes of greater thickness are less liable to print-through.

BASEBALL RECORDINGS

The rise of the phonograph coincided with the emergence of professional baseball as the American "national pastime." Many recordings about the game, in song and story, appeared on early Edison, Columbia, and Victor labels. The earliest known is "Slide, Kelly, Slide" by George J. Gaskin, on a North American brown wax cylinder (#146; 1893). Cal Stewart did some Uncle Josh episodes involving baseball on Edison from 1897, and later many more for Columbia cylinders and Victor discs. Other noted artists were also heard on the two-minute wax Edison cylinders up to 1909 (among them Edward M. Favor; Arthur Collins; and accordionist John J. Kimmel, playing "The Fans' March," #10172).

The perennial hit, "Take Me Out to the Ball Game" was recorded first by the Hayden Quartet (Victor 5510; 1908), and Edward Meeker (Edison #9926; 1908). "Casey at the Bat" first appeared in 1906 (Victor 31559), read by William De Wolf Hopper — it remained in the catalog until the late 1920s. "Cubs on Parade" seems to have been the first song with the name of a specific team (Zonophone #1099; 1908). Babe Ruth was the first player to be honored by a phonograph

record, and to speak on it: "Babe Ruth's Home Run Story" (Perfect 022443; 1920). But the most catchy of the player tunes was "Joltin' Joe DiMaggio" (recorded by Les Brown on Okeh 6377; 1941).

The Baseball Hall of Fame in Cooperstown, New York, has thousands of taped interviews with baseball players, and many novelty items, including songs by a quartet of professional baseball players. In 1982 a series of records named "Talkin' Baseball" was released on the Lifesong label; it included separate discs about each major league club except two. [Walsh 1971/12; 1972/7.]

BASF AG.

A German firm, presently located in Ludwigshafen. It is one of the world's largest chemical manufacturers, with over 90,000 employees worldwide and sales (in 2001) of 32.5 billion Euros (approx. \$29 billion). Among its many products are audio and videotapes.

The firm was founded in 1865 as the Badische Anilin und Soda Fabrik by Friedrich Engelhorn. It was successful in producing synthetic dyes, and diversified into various petrochemical products. Experiments with magnetic tape in the 1930s led to the cellulose acetate tape, coated with ferric oxide, used in the Magnetophon. Easy breakage and brittleness with age were its defects. In 1976 the firm introduced the Uniset cassette, with tape 1/4 inch wide; it was similar to the Elcaset. [Website: www.basf.de/basf/html/rampe/home_e.htm.]

BASIC AMPLIFIER

SEE *POWER AMPLIFIER*

BASIE, COUNT

(21 AUG 1904-26 APR 1984)

American jazz pianist and big band leader, born William Basie in Red Bank, New Jersey. His early experience included vaudeville and performing on a theater organ in Kansas City. He played with Bennie Moten's band from 1932, and made his first records when Moten died in 1935 and Basie took over direction of the group. He came to prominence in Kansas City after forming a band of his own in 1935; it included drummer Joe Jones and tenor saxophonist Lester Young. Basie signed a Decca contract, moving in 1939 to Vocalion and other companies. His international hit records included "One O'Clock Jump" (Decca 1363; 1937), "Jumpin' at the Woodside" (Decca 2212; 1938), and "Taxi War Dance" (Vocalion 4748; 1939). His uncluttered, energetic improvisations influenced the cool jazz pianists of the 1950s.

Basie's popularity spanned a half-century. He won three Grammy awards for LP albums, including 1958 and 1960 Roulette releases as well as *Sinatra-Basie* (Reprise 1008; 1963; #5). He was also recognized in 1976, 1977, 1980, and 1982 with Grammys for solo and band releases on the Pablo label. He and Ella Fitzgerald won a Grammy in 1980 for their Pablo album, *A Perfect Match*. A posthumous Grammy was awarded in 1984, the year of his death. In 1960 and 1961 his band was ranked number one on the *Down Beat* poll.

Basie's recordings have been reissued on LP and CD in various forms, on both the "original" labels and on various American and European jazz reissue labels. All of his original Decca Recordings are available on *The Complete Count Basie* (GRP 36112; 1996). Columbia reissued some of his classic 1939–1942 recordings for the label, originally on three LPs and later on CD, as *The Definitive... 1, 2, 3* (40608; 40835; 44150), and has also issued other compilations in various forms. French RCA reissued his complete Bluebird recordings from 1947 to 1950, while the U.S. branch issued only a one-CD sampler drawn from the 1947 sessions (Bluebird 2292). Mosaic has reissued the complete 1957–1962 Roulette live and studio recordings in two boxed sets (Mosaic 8–135 and 10–149, respectively). There are many, many other compilations and reissues that document Basie's entire career.

BASS

The lower range of the audible musical spectrum, usually considered to be from 18–20 Hz on up to about 300–400 Hz. The driver element in a loudspeaker system that is designed to reproduce bass sounds is called a woofer.

See also **Subwoofer**

HOWARD FERSTLER

BASS REFLEX SYSTEM

A speaker-box design that makes use of a port or drone (unpowered) cone, in addition to a powered woofer driver, that, according to parameters outlined by Neville Thiele and Richard Small more than 20 years ago, allows the rear radiation of a woofer cone to reinforce the output of the front, extending and smoothing low-range response. At frequencies below the reinforcement range, there will be a sharp attenuation of the system output, as the port signal goes back out of phase with the radiation from the front of the cone.

See also **Acoustic Suspension; Loudspeaker**

HOWARD FERSTLER

BASS TRAP

An acoustical device used in multitrack recording to minimize the reflection of sound from one instrument to the microphone of an adjacent instrument. It is built into the floor beneath each performer, and by means of its absorbent surface it draws much of the sound down into its interior, which is filled with spaced fiberglass panels. The same principle can be applied to walls and ceilings to avoid reflected signals.

BASS, RALPH (1 MAY 1911–5 MAR 1997)

Half-Jewish, half-Italian, Ralph Basso was born in the Bronx where he developed a childhood love for jazz. He settled in Los Angeles in 1944, which had a vibrant bebop scene, and oversaw sessions by Charlie Parker and Dizzy Gillespie, among others, for various small labels. By 1946, he turned to local R&B performers, producing T-Bone Walker's classic "Call It Stormy Monday" (his first top pop and R&B hit), and the novelty hit "Open the Door, Richard" by the Jack McVea Band from 1947. In 1948 Bass joined Savoy Records, where he worked with legendary bandleader Johnny Otis. In 1951 Syd Nathan of King Records hired Bass to run his new Federal label, where he produced Little Esther and the doo-wop groups Billy Ward and the Dominoes ("Sixty Minute Man"), and Hank Ballard and the Midnighters' notorious "Work with Me, Annie" and its many spinoffs. In the mid-1950s, Bass oversaw James Brown's big hits recordings, beginning with "Please, Please, Please." In 1960 he was hired by Chess, where he remained through 1976, where he worked with their stable of artists, including Etta James, Muddy Waters, and Howlin' Wolf. In 1977, he oversaw sessions for the T.K. label which were eventually issued by Delmark in the early 1990s. He was inducted into the Rock and Roll Hall of Fame in 1991. He died of a heart attack in 1997.

CARL BENSON

BASTIANINI, ETTORE

(24 SEP 1922–25 JAN 1967)

Italian baritone, born in Siena. His debut was as a bass, in Ravenna, in 1945. He was with the Metropolitan Opera from 15 Dec 1953 (debut as Germont), to 1965. Verdi roles were special strengths: he was heard in the complete recordings of *Ballo in maschera* (DGG 38680–82), *Forza del destino* (Decca LXT 5131–34), *Rigoletto* (Mercury 436–38), and *Traviata* (DGG 138832–34). He was also a distinguished Figaro in *Barbiere di Siviglia* (Decca LXT 5283–85). Bastianini died in Sirmione, Italy.

BATCHELOR, CHARLES
(21 DEC 1845–1 JAN 1910)

British/American inventor, born in Dalston, near London. He went to the U.S. around 1870 as a representative of J.P. Coates, the Manchester thread manufacturer. He decided to remain in America, working for Thomas Edison from 1871 as a machinist and laboratory associate. He and Edison worked closely in telegraphy experiments during 1874–1875, then in developing the “electric pen” (mimeograph machine). The Edison establishment at Menlo Park, New Jersey, was planned by Batchelor and Edison, and he became the “keeper of notes and designer of prototypes” there. In 1877 the first project was the telephone, which was greatly improved beyond the stage reached by Alexander Graham Bell — the Menlo Park work made the modern Bell System possible, and created the mode for long distance calling.

Batchelor’s connection with the phonograph began with the first working model; he and John Kruesi made it together on Edison’s plan in November 1877. Probably Batchelor was responsible for “constructing the phonets [reproducer] and provided the mechanisms for the fine adjustments necessary for successful operation.”

Later he and Edison made thousands of experiments with filaments and carbonization methods to perfect the incandescent lamp — succeeding finally in October 1879. Batchelor extended the electrical work to the design of dynamos for the Pearl Street station in New York, where operations began in May 1882. At the same time he planned the Edison exhibit for the Paris Electrical Exposition of 1881, displaying a complete lighting system that won the highest awards. Remaining most of four years in Europe, he organized electrical installations in France and elsewhere.

The great Edison establishment in Schenectady, New York, was built by Kruesi and Batchelor. In 1889, when the Edison interests were sold and a new firm, Edison General Electric Co., was formed, Batchelor was named to the board of directors. He was able to work on a small scale as well, inventing the talking doll in 1888; this was based on a tiny phonograph with an automatic return motion (U.S. patent #400,629; filed 30 Oct 1888, granted 2 Apr 1889). The Edison Toy Phonograph Co. was formed, and by February 1889, 425 dolls had been shipped to New York City for sale.

Batchelor produced artificial sapphire for use in recording styli, and filed a patent application for it in May 1890. It was this sapphire that was used by Eldridge Johnson in making disc masters and which remained in use through the LP era for cutting lacquer masters. After 1890 he spent little time on the phonograph or other key inventions, having been detoured by Edison into iron ore research, one of the master’s less inspired projects. He did develop a “belt-type ore

concentrator” in late 1889, but this area of experiment proved unsatisfying and exhausting. The ore business failed, and the effort was converted in time to the production of Portland cement. Batchelor left regular employment with Edison in 1893, and after 1899 he devoted himself to travel with his family. He died in New York. He is regarded as “next to Edison...the second man in the phonograph development.” [Welch 1972, from which the above quotes are taken.]

BATTELLE MEMORIAL INSTITUTE

A research and development firm located in Columbus, Ohio, said to be the world’s largest non-profit scientific institute. It was founded in 1929 by George Battelle, whose family made its fortune in the steel business. Xerography was developed there, and titanium for aerospace applications. In audio history Battelle is noted for participation in wire recorder development during World War II. The institute also did key early research in digital sound recording during the 1970s that lead to the development of the compact disc, or CD. The organization has research establishments in the state of Washington, Geneva, Switzerland, and Frankfurt, Germany, and also operates several other scientific research centers, including the Brook Haven and Oak Ridge National Laboratories. [Website: www.battelle.org.]

BATTEN, JOE (1885–1956)

British pianist and record producer, with 50 years of service in at least 30 companies. His first work in recording was as a piano accompanist for Musiphone, a cylinder maker. He was a producer with Edison Bell from 1920 to 1927, then with Columbia Graphophone. As a ragtime pianist he recorded under the name Joe Bolton as early as 1912. His autobiography, *Joe Batten’s Book*, carries interesting anecdotes about the pioneer days of the industry in Britain.

BATTISTINI, MATTIA
(27 FEB 1856–7 NOV 1928)

“The most wonderful baritone of our Golden Age” (Hurst 1963, p. 115), born in Rome. His debut was at the Teatro Argentino in Rome on 11 Dec 1878 in *Favorita*. In 1883 he was at Covent Garden, and from 1888 at La Scala; he then sang throughout the world except for North America. In a Covent Garden *Traviata* of 1905, his Germont “was of overwhelming splendour, actually overshadowing Melba and Caruso” (Hurst). Praise for his singing was universal: Richard Wagner said he was the greatest Wolfram; Verdi named him perfect in *Ernani* and *Ballo in maschera*, and wrote the

role of Falstaff for him (though Battistini declined the honor, claiming he could not sing clownish parts). He gave up opera in 1924, but concertized to 1927. He died of emphysema a year later in Collebaccaro, Italy, just as he was preparing a return to opera.

Between December 1902 and February 1924, Battistini recorded for HMV, making 120 discs; he also made two for Fonografia Nazionale, Zurich. Of the 1902 recordings, made in Warsaw, the most notable is "O tu bel astro" ("Evening Star") from *Tannhäuser* (#52664). Most of these first recordings were below the artist's standard and made with technical carelessness. The 1906 group of discs — issued with an orange label at 15 shillings — are far superior. They were recorded in Milan with the La Scala Orchestra and Chorus. Among the best were "O dei verd'anni" from *Ernani* (HMV #052141), "Il mio Lionel" from *Martha* (#052143), "Perchä tremar" from *Zampa* (#052148), and "Eri tu" from *Ballo in maschera* (#052146). In June 1911, also in Milan, Battistini sang *Traviata* and *Tannhauser*, as well as the new verismo repertoire. In his later sessions signs of vocal deterioration were evident, but there were gems also, such as "Ai miei rivali cedere" from *Ruy blas* by Marchetti (Victor 88650; 1921). His last records were made in February 1924, when he was already suffering from emphysema. Seraphim issued a set of seven LPs in 1986, remastered at the original speeds. [Dennis 1953; Phillips 1947; Stroff 1987/1.]

BATTLE, KATHLEEN (13 AUG 1948–)

Battle is a celebrated American soprano, born in Portsmouth, Ohio. She studied at the Cincinnati College Conservatory of Music, and made her professional debut in 1972, followed three years later by her operatic debut in Detroit, Michigan. Her first appearance at New York's Metropolitan Opera came in late 1977; she quickly became an international star. A falling out with the Met's administration led her to be fired in 1994, but by then her career was secure both on the operatic and concert stage. Battle has appeared on many complete opera recordings, and has also recorded more popular-oriented material on theme albums; her 1986 album *Sings Mozart* (Capital 38297), won her first Grammy Awards (she has won a total of three to date), and she has also recorded holiday albums and other selections of popular material, including 1996's *So Many Stars* (Sony Classical 068473), featuring duets with pop singers like Grover Washington, Jr. She has recorded exclusively for Sony Classical since the early 1990s.

BAUER, BEN (26 JUNE 1913–31 MAR 1979)

An important figure in the history of audio and recording, Bauer did notable research in microphone and

other audio technologies, including quadrasonic technologies. One of his more notable achievements occurred in 1938, when, while working for Shure Brothers, he engineered a single microphone element to produce a cardioid pickup pattern. The resulting product was called the Unidyne Model 55, and the basic design later became the basis for the well-known SM57 and SM58 microphones that were used by performers to good effect for many years. Bauer later went to work for CBS, and in the late 1960s he was influenced by Peter Scheiber's four-channel research. He worked on his own variant of the matrix encode/decode (record/playback) technique, and the result was called "SQ" for Stereo-Quad. This matrix rejected the specific phase and amplitude parameters of the Scheiber proposal (which would only yield 3dB adjacent channel separation) and was claimed to be fully stereo and mono compatible. Bauer was president of the Audio Engineering Society in 1969, having received the society's John H. Potts award in 1963, and was made a life member in 1972. In 1978, he received the Acoustical Society of America's silver medal.

See also **Ambiance Extraction; Microphone; Tone Arm**

HOWARD FERSTLER

BAUR, FRANKLIN

(CA. 1904–24 FEB 1950)

Popular American tenor, born in Brooklyn; his first name is sometimes spelled "Franklyn." He was one of the most acclaimed recording artists of the 1920s, recording for Victor from March 1924 to March 1929, with an interval of freelancing. In addition to solo work, he sang many duets with Gladys Rice and was one of the Shannon Four (later the Revelers). Baur sang in the *Ziegfeld Follies* of 1927 and 1928, and was the original "Voice of Firestone" on the radio program of that name from 1929 to 1931. A typical disc was "When Day Is Done" (Victor 38795–3; 1927). Baur died in Brooklyn.

BAXANDALL, PETER J. (1921–1995)

Known primarily for his analog circuit designs, after attending King's College School, in England, Baxandall went on to study electrical engineering at Cardiff Technical College, receiving a degree in 1942. After helping with research in radar during the war, he joined Royal Signals and Radar Establishment, where he remained until his retirement in 1971. At that time, he became a freelance electroacoustical consultant. Baxandall had already published a description of his widely used tone-control circuit in 1952, but after 1971, he also researched and helped to further develop other

BAY (H.C.) CO.

technologies, including audio-frequency transformers, radio-frequency carrier microphones, powered loudspeakers, dipole and electrostatic loudspeakers, motion-al-feedback circuits for loudspeakers, bandbass loudspeakers, line-source loudspeakers, oscillators, high-speed tape-duplicating equipment, and microphone-calibration methods. He also published numerous papers on amplifier design and electrostatic loudspeaker systems, and was known for his guarded antipathy toward members of audio's lunatic fringe. In 1980, Baxandall became a fellow of the Audio Engineering Society, and in 1993 he won the society's silver medal.

HOWARD FERSTLER

BAY (H.C.) CO.

An American piano manufacturer established in 1909. Maker of the H.C. Bay reproducing grand piano action, and an upright action, used in many brands of inexpensive pianos. The apparatus would slide under the keyboard when not in use. Its offices were located in Chicago, with a factory in Bluffton, Indiana. The president was Harry C. Bay. The firm made as many as 4,000 reproducing pianos, 8,000 grands, and 18,000 upright and player pianos annually.

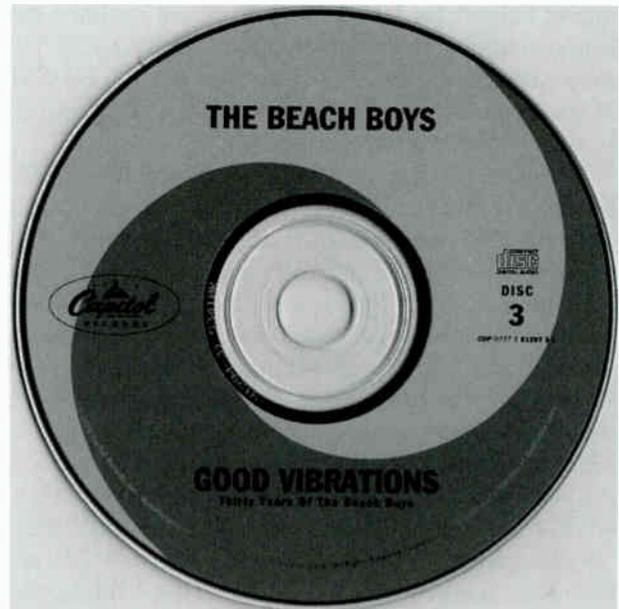
BBC

SEE *BRITISH BROADCASTING CORP. (BBC)*

BEACH BOYS

A rock group formed in California in 1961. The group was originally formed around the three Wilson brothers, Brian (songwriter, lead vocalist, pianist, and bass guitarist), Carl (vocals, guitarist), Dennis (vocals, drummer), their cousin Mike Love (lead vocals), and friend Al Jardine (vocals, guitarist). Signing with Capitol Records in 1962, the group scored top hits through the 1960s. Beginning with their second album, Brian Wilson took over the producer's role, and, influenced by wall-of-sound producer Phil Spector, began experimenting with elaborate instrumental productions, using top studio musicians, as backups for the group's vocals. Early hits included "Surfin'" (Capitol 331; 1962), "Surfer Girl" (Capitol 5009; 1963), "I Get Around" (Capitol #5174; 1964), "Help Me, Rhonda" (Capitol #395; 1965), and "California Girls" (Capitol #5465, 1965), with its unusual, brief orchestral introduction.

Brian's widely acknowledged masterpiece was the album *Pet Sounds* (Capitol T2458; 1966), created while the rest of the group was touring Japan (Brian had abandoned touring in the mid-1960s due to the



Beach Boys CD label, showing '60s-era Capitol "swirl label" design. Courtesy BenCar Archives

stress of creating the group's music). The record's breathtaking instrumental and vocal arrangements, created in mono (Brian was deaf in one ear and therefore did not work in stereo) was highly influential; Paul McCartney of the Beatles cited it as a direct influence on their studio work of the later 1960s, as did many others. He followed it with the complexly orchestrated "Good Vibrations" (Capitol 5676; 1966), a masterpiece of tape collage assembled through various recording sessions.

However, while working on a followup to *Pet Sounds* to be called *Smile*, Brian suffered a major breakdown. The unfinished album has appeared over the years in bootlegs and fragments issued officially on boxed sets, but remains one of the most famous albums that in fact can never be heard. After that, Brian withdrew from the group, and his brothers and Love attempted to make up for his loss, with mixed results. Also, the group's sunny harmonies and beach-oriented material went out of fashion, although beginning in the mid-1970s Capitol ceaselessly mined the group's back catalog to great success. Continuing to tour primarily as a nostalgia band, the group worked the road while occasionally issuing albums through the 1980s. After 12 years without a hit record, the Beach Boys scored a surprise hit with "Kokomo" (Elektra 69385), which reached the top of the charts in September 1988.

The group continued to tour through the death of Carl Wilson in the late 1990s (Dennis had previously died in 1983), finally splitting into two factions, with Al Jardine leading his own group of family and friends

while Mike Love and Bruce Johnston (Brian's road replacement from the mid-1960s who worked steadily with the group over the next decades) led their own "Beach Boys" band. Brian Wilson himself emerged from self-retirement on occasion, first with a self-titled solo album (Sire 25669; 1988; #54), and then for tours and further recordings in the late 1990s.

CARL BENSON

BEAR FAMILY RECORDS

Launched in Bremen, Germany, in 1975, Bear Family was the creation of Richard Weize, who had earlier started Folk Variety Records. Bear Family initially reflected Weize's taste, issuing folk and bluegrass, but in 1978, Weize licensed an LP of unissued Johnny Cash recordings, thus launching Bear Family into the reissue business. Drawing from both major and independent labels, Bear Family developed a vast LP and CD catalog, specializing in career-spanning boxed sets. The focus, initially on country music, was expanded to rock 'n' roll, then pop, R&B, jazz, and ethnic music (boxed sets of German Jewish recordings from the Nazi era and American left-wing music from the 1930s and 1940s are especially notable examples of the label's eclecticism). Bear Family also has a large catalog of German language recordings, including beat groups and schlager, and operates one of Europe's largest record mail order companies. [Website: www.bear-family.de]

COLIN ESCOTT

BEARVILLE (LABEL)

SEE GROSSMAN, AL[BERT B.]

BEASTIE BOYS

American hip-hop band active from 1981 until the present. Beastie Boys started as a New York hardcore band with founding members Adam Yauch, bass; John Berry, guitar; Kate Schellenbach, drums, and Michael Diamond, vocals. By 1984 the band had moved into the burgeoning hip-hop culture: Berry and Schellenbach departed and Adam Horowitz joined. The new lineup featured each member on vocals with Horowitz eventually taking up guitar and Diamond moving to the drums. They also adopted rap names: Adam "King Ad-Rock" Horowitz, Michael "Mike D" Diamond, and Adam "MCA" Yauch. The first popular white rap act, the Beasties created controversy and astounding sales with their first album, 1986's *Licensed to Ill* (Def Jam 4500621), a work packed

with brazen sampling from rock and funk groups. The song "Fight for Your Right (To Party)" became a popular music video on MTV.

Controversy followed early Beastie performances and their lyrics were attacked for celebrating violence and drug use. A lengthy legal battle with producer Rick Rubin delayed their second album, *Paul's Boutique* (Capitol 2102), until 1989. The Beasties had teamed up with the Dust Brothers on this dense album of sound collages and intricate soundscapes that initially failed commercially but has since been heralded as a masterpiece of pop experimentalism. In 1992, the Beasties returned to their instruments and hardcore background for *Check Your Head* (Capitol #EST2171); this work also proved to be their return as pop favorites.

1994 saw the release of *Ill Communication* (Grand Royal/Capitol 61468), featuring the popular "Sabotage" and the spiritual "Bodhisattva Vow." The latter song was indicative of a cultural shift in Beastie aesthetics: Yauch had become a Buddhist and the band became staunch supporters of Tibet; they organized a series of Tibetan Freedom Concerts that brought the plight of an occupied Tibet to the pop world. In 1996 the band released an instrumental EP entitled *The In Sound from Way Out* (Polygram 013), a Euro-Funk collection.

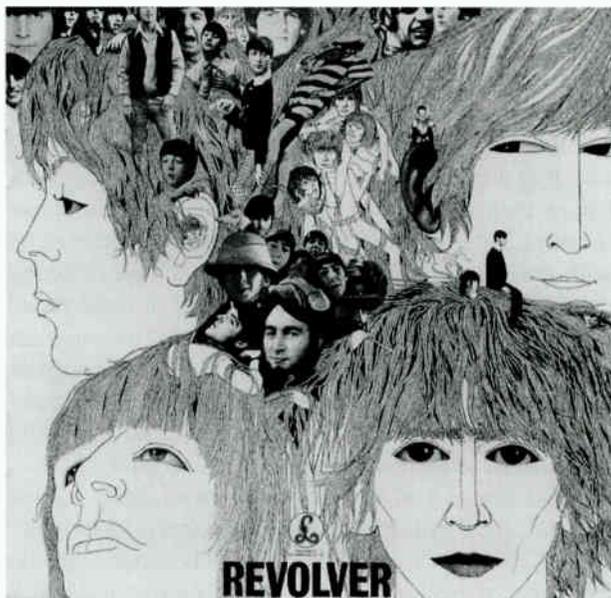
With the release of *Hello Nasty* (Grand Royal/Capitol 38377162) in 1998 the Beasties had solidified their importance as cultural arbiters and political activists. The band established their own record label, Grand Royal, a now-defunct magazine of the same name, and a clothing line. A collection of material spanning their entire career entitled *Beastie Boys Anthology: The Sounds of Science* (Grand Royal/Capitol 352294022) was released in 1999. The entire Beastie Boys catalog is available on CD.

JOHN ROCCO

BEATLES, THE

The story of the Beatles's career and their incredible impact on popular music in our time is well known. This entry will cover the Beatles's achievements as recording artists.

The Beatles were perhaps the first great recording group in 20th century popular music. Rather than viewing their records as an adjunct to their live performances — as most previous groups did — the Beatles developed studio techniques that allowed their recordings to stand alone as unique artistic statements. They were so successful that, at the height of their touring popularity in 1966, they could "retire" from performing and rely on records to represent them to their millions of fans. Certainly, the economics of the record industry contributed to their ability to cease performing live, as



Cover of the Beatles's 1966 album, *Revolver*. Courtesy BenCar Archives

the group could easily support itself through record sales; but the decision to retire from live performing was as much an aesthetic as a financial one. The second half of the Beatles's creative output exists only as records, and was not created for live performance. This remains a unique achievement for a popular act, and led the way for others to view their careers in terms of recorded output rather than live concerts.

The Beatles themselves were among the first generation of musicians to be influenced by recorded performances, rather than learning from other local musicians. Liverpool was a port-of-entry for imported American goods, and many American seaman passed through, bringing with them blues, country, and jazz records. None of the Beatles's major early influences — Buddy Holly, Elvis Presley, the Everly Brothers — had performed "live" there; it was their records that entranced the young musicians. Records also had the advantage of being fixed performances, that could be played again and again, until every nuance could be captured. When John Lennon first heard Paul McCartney play guitar, he was impressed by his ability to reproduce Gene Vincent's "20 Flight Rock" from the record; George Harrison lifted many of his early licks from Carl Perkins's Sun recordings.

The Beatles were outsiders to British pop music when they first were signed to EMI's small Parlophone division. George Martin, their producer, had a background in working with comedians and certainly was not known for being a pop music producer. Perhaps this helped both the group and their producer approach the recording process in a new way. At first, the group and

Martin struggled simply to capture their "live" sound-on-tape; their first album was recorded in a single, day-long session, with the last song, "Twist and Shout," held until the end so that John Lennon would only have to sing it once. The demands of shouting the lyrics were such that, plagued with a head cold, the singer could only risk one performance. Such live, direct-to-tape recording was common in the record business of the day, and certainly economical for an unproved group.

However, by the time the Beatles began work on their second album, they already began experimenting with studio techniques. Double-tracking the lead vocal was one of the first — and simplest — studio tricks employed by Martin. Such simple double tracking created a stronger lead line, and also a slightly out-of-phase edginess to the lead part, because a perfect double could never be created in this manual manner. Soon, performances were being created by splicing together the best parts of various takes, rather than relying on the vagaries of producing a perfect, complete performance. Guitar solos could also be added (or amended) at a later time.

The most advanced studio equipment of the day was the four-track stereo tape recorder. Once a backing track was created on all four tracks, it could be mixed down to a single track, to open up the other three tracks for vocals or instruments. Most "effects" were created by manipulating the tape itself. When John Lennon purchased his own tape machine — in order to listen to rough studio mixes — he discovered that he could vary the speed of the tape, as well as create new sounds by threading the tape backwards. Some of these techniques began to appear on singles like "Rain" and the eerie "Tomorrow Never Knows." Paul McCartney was also exposed to *musique concrète* through his connections in the London avant-garde in the mid-1960s; these composers created their compositions directly on tape, using splicing, overtracking, and tape-speed manipulation, among other techniques.

Most of the Beatles's recordings were made on four-track equipment to this point. In order to add additional parts beyond the four basic tracks, the recordings had to be "bounced"; four tracks were recorded, then mixed to one track via a second tape recorder. This opened three more tracks for additional parts, but it also meant that the four original parts could no longer be adjusted (without losing them all). Unintentional bits of conversation, mistakes in editing, and other small problems became integral parts of the finished product. Also, stereo and mono versions of a song were not always identical; sometimes a different take was used for each mix, although the variations in performance were usually minor.

The Beatles's greatest recorded achievements are generally considered to be the single "Strawberry Fields

Forever”/“Penny Lane,” followed by the *Sergeant Pepper's Lonely Heart's Club Band* album. “Strawberry Fields” is a tour de force of tape composition; it was created by overlaying two different versions, originally sung in two different keys. To make them match, Martin had to vary the tape speeds. Other effects, including the backwards cymbal part, exotic instrumentation (including the use of an early electronic keyboard, the Mellotron), and an extended instrumental coda featuring many overlaid parts, all contribute to the song's dream-like quality. The rather thin, compressed vocal — with its slightly out-of-phase quality — is perfectly suited to the lyric and accompaniment.

Sergeant Pepper's lays claim to being the first “concept” album. Rather than being an assembly of hit singles and B-sides, the album was created as a single package, and no material was released separately for single sales. Even the “spacing” between tracks was manipulated, to give the illusion of a continuous “concert” rather than a grouping of individual tracks. The album stands as a summation of the Beatles's recording interests to date, featuring many of the same effects that were experimented with on *Revolver* and the singles preceding it, but used to create a coherent whole. The various different styles of songs — from the nostalgic “When I'm Sixty-Four” through the trippy “Lucy in the Sky With Diamonds” to the cinematic “A Day in the Life” — were each given a unique audio style suited to their content. No attempt was made to create versions that could be replicated “on stage”; the soundstage of the album became the platform on which the listener experienced the music.

Sergeant Pepper's also represented a new level of sophistication in album packaging. The Beatles had long taken an aesthetic interest in how they presented themselves to their public; the famous half-shadowed portraits that graced their second U.K. album (and the first released on Capitol in the U.S.) was an early sign that they were self-aware to a degree that was not previously seen in popular music. As their albums became more sophisticated, so did their visual presentation, culminating in the justly famous elaborate cover for *Sergeant Pepper's*. Everything from the “group” shot on the cover with its many visual references to famous pop-culture icons, to the Sergeant Pepper uniforms, and the presentation of the lyrics on the back of the sleeve was carefully planned. Purchasing the album allowed the listener to participate in the mythmaking; the album became an icon for all advanced pop-music fans of the day.

Much of the Beatles's later career was spent trying to recapture the freshness of their live performing days, without losing the innovations they had made in recording technique. This was perhaps best achieved in the long song-medley that comprised most of the

second side of *Abbey Road*. Although each song was not elaborately produced, the piecing together of the material both thematically and in terms of contrasting audio experiences was handled in such a way to create a composition that is more sophisticated than its individual parts. The last bit, a snippet of a song called “Her Majesty,” performed by Paul McCartney to his own guitar accompaniment, was actually a fragment that was meant to be removed from the finished product (hence the several second delay before it is heard, as well as the clipped final note). When the master arrived including the track, McCartney was pleased with the serendipity, and kept it.

CARL BENSON

BEBOP (ALSO KNOWN AS BOP)

A form of “hot jazz” that was prevalent in the U.S. from the end of World War II to about 1958, as successor to swing. The name was derived from a two-note motive that was typically played to terminate a phrase: a “be-bop” figure. In contrast to the big bands that played swing music, bebop was usually played by small combos — though a few large groups like those of Dizzy Gillespie and Woody Herman did join in later — made up of soloists with rhythm sections. In the standard form, the combo played 12-measure blues or 32-measure popular songs, with the theme announced by the ensemble, followed by a solo, and the return of the group. Improvisations followed chord progressions but often they extended diatonic practice by means of chromatic alterations or substitutions. The rhythmic beat departed from the square swing accompaniment and added its own free patterns.

Among the artists associated with the origin of bebop are pianist Thelonious Monk, trumpeter Dizzy Gillespie, and alto saxophonist Charlie Parker. Because of the recording ban enacted by the American Federation of Musicians, effective 1 Aug 1942, much of the pioneering work in bebop went undocumented. However some private recordings were made at jam sessions, and a few have been issued commercially: Archive of Folk Music FS-219 includes Gillespie's “Stardust” and “Kerouac” of 1941; Xanadu 107 has Monk's solo in “Sweet Lorraine”; Onyx 221 and Spotlite 120 have Parker's 1942 version of “Cherokee.”

With the lifting of the ban on 11 Nov 1944 (Decca had come to terms with AFM in September 1943, and a number of independents were established during 1944, but Victor and Columbia had persisted another year), record companies were free to take on bebop, and eventually they did so. It was the small label Guild that signed Dizzy Gillespie to an exclusive contract. Blue Note and Dial were two other labels that made

BECHET, SIDNEY

commitments to bebop. During the 1950s bebop's moderate aspects assumed prominence over its "hot" manner, and it gave rise to cool jazz. The other trend of the period saw rhythm and blues turning into rock.

BECHET, SIDNEY

(14 MAY 1897–14 MAY 1959)

American jazz clarinetist and saxophonist, born in New Orleans. At age six he was playing in the honky-tonks of Storyville in New Orleans. He moved to Chicago in 1917, and to New York in 1919; he led his own band and performed also with Noble Sissle, Duke Ellington, and others. After 1919 he spent much of his time playing in Europe, finally settling in France in 1947. He died in Garches, France, on 14 May 1959.

Bechet's first published record dates from 1923, as he and the "King Bechet Trio" accompanied singer Rosetta Crawford on Okeh 8096. His first-ever records were made in London in early 1920 for Columbia, with Benny Peyton's Jazz Kings ("High Society" and "Tiger Rag"); they were never issued. Between 1923 and 1925 he made many discs with various groups. On 30 May 1924 he and an unidentified pianist accompanied singer Maureen Englin on "Foolin' Me" (Pathé Actuelle 032056). His first principal recordings were made 15 Sep 1932 for Victor in New York, with his New Orleans Feetwarmers; they included "Maple Leaf Rag" (#23360 and many reissues). Among later popular items were "One O'Clock Jump" (Victor 27204; 1940) and "Nobody Knows the Way I Feel Dis Mornin'" on which he plays both clarinet and soprano saxophone (Victor 26663; 1940); both had several reissues. A remarkable "Sheik of Araby" made on 18 Apr 1941 (Victor 27485, many reissues), had Bechet as a "one-man band"; he "overdubbed" himself playing clarinet, soprano sax, tenor sax, piano, bass, and drums — the first such effort on a jazz record, and long preceding the overdub technique employing multitrack tape. Another famous record is "Les oignons," done for the Vogue (French) label in 1949. He died in Paris on his birthdate in 1959. LP and CD reissues cover the 1924–1928 period (BBC LP/CD 700; 1989), and the 1932–1941 period (RCA LP 5516, and RCA CD 86590; 1976).

BECK (BECK HANSEN) (8 JULY 1970–)

Postmodern rock wonderkindeck Hansen's best years may still lie ahead, but he has already revealed a masterful grasp of songcraft and studio dynamics. His best work has fused together elements of folk-pop, roots blues, country, white noise, hip-hop, and psychedelia complemented by clever — at turns biting or surrealistic — lyrics.

Los Angeles native Beck emerged in the early 1990s with the local alternative radio hit, "Loser" (Bongload 5; 1993). The popularity of the slacker anthem led to his signing with Geffen, and a newly recorded version (DGC 270; 1994; #10) became a national hit, followed by an eclectic debut album, *Mellow Gold* (DGC 24634; 1994; #13).

Possessing an open-ended contract that permitted distribution arrangements with other labels, additional Beck material flooded the market in short order, most notably, *Stereopathic Soul Manure* (Flipside 60; 1994), a collection of home recordings from the 1988–1993 period, and the predominantly live acoustic set, *One Foot in the Grave* (K 28; 1994). The next Geffen release, *Odelay* (DGC 24823; 1996; #16), featured his tour de force production values, shifting effortlessly from hardcore dissonance to country blues while retaining a funky rhythmic flow throughout. By now an established star, Beck further consolidated his reputation with *Mutations* (DGC15309; 1998; #13), and the decidedly darker *Midnight Vultures* (DGC 490485; 1999; #34).

FRANK HOFFMANN

BECK, JEFF (24 JUNE 1944–)

More than any other guitarist, Jeff Beck was responsible for defining the progressive rock genre. Combining extraordinary technique with a predisposition to expand previously defined stylistic boundaries, he blazed a path in the latter half of the 1960s that would be traveled by peers such as Jimmy Page, Mick Ronson, and Paul Kossof. His innovations included the use of dissonant chords, controlled feedback, fuzztone, and sustained notes to create emotional intensity, combined with an overriding sense of compositional perspective, which precluded empty displays of virtuosity. Beck's later experiments with blues rock, heavy metal, jazz fusion, and new wave rockabilly offered further evidence of his facility in an encyclopedic range of styles.

When blues guitar interpreter Eric Clapton professed dissatisfaction with the pop direction of the Yardbirds's first hit single, "For Your Love" (Epic 9790; 1965; #6), many observers of the British rock scene assumed Clapton would be replaced by highly regarded session player Jimmy Page (later the founder of Led Zeppelin). Instead, the group recruited the relatively unknown Beck, who immediately positioned himself in the forefront of guitar innovators, emulating the Indian sitar by filtering his guitar through a fuzzbox in "Heart Full of Soul" (Epic 9823; 1965; #9). His restrained application of then-exotic sound effects — feedback in "Shapes of Things"

(Epic 10006; 1966; #11), and the dual lead interplay with Page on "Happenings Ten Years Time Ago" (Epic 10094; 1966; #30) — enabled the Yardbirds to remain commercially viable despite a pronounced experimental orientation.

Wishing to exert greater control over the creative process, he left the Yardbirds in 1967 to form the Jeff Beck Group, which featured vocalist Rod Stewart, bassist Ron Wood (later a member of the Rolling Stones), drummer Mickey Waller, and keyboardist Nicky Hopkins (Quicksilver Messenger Service). While the band's two albums — *Truth* (Epic 26413; 1968; #15), and *Beck-Ola* (Epic 26478; 1969; #15) — laid the groundwork for heavy metal, internal differences spurred Stewart and Wood to join the Faces. A new edition of the band released two well-executed, if predictable, LPs, *Rough and Ready* (Epic 30973; 1971; #46), and *The Jeff Beck Group* (Epic 31331; 1972; #19), before Beck joined forces with drummer Carmine Appice and bassist Tim Bogert (both formerly with Vanilla Fudge and Cactus) to form a short-lived power trio.

Beck returned to the public eye with a highly acclaimed fusion album, *Blow by Blow* (Epic 33409; 1975; #4). He continued in much the same vein with *Wired* (Epic 33849; 1976; #16), and *Jeff Beck with the Jan Hammer Group – Live* (Epic 34433; 1977; #23), both collaborations with Hammer, the former Mahavishnu Orchestra keyboardist.

For that point onward, Beck followed an erratic career path, retiring for lengthy periods of time before resurfacing with high-profile guest contributions (e.g., Mick Jagger's *Primitive Cool*, Roger Waters's *Amused to Death*), as well as uniformly well-received solo recordings. His LPs have included the jazz-inflected *There and Back* (Epic 35684; 1980; #21); his most polished, pop-oriented offering, *Flash* (Epic 39483; 1985; #39); the track "Escape," awarded the Grammy for best rock instrumental), featuring Nile Rodgers's production work and a bevy of vocalists; *Jeff Beck's Guitar Shop* (Epic 44313; 1989; #49), awarded the Grammy for best rock instrumental performance; *Crazy Legs* (Epic 473597; 1993), a retro tribute to Gene Vincent and his Blue Caps guitarist, Cliff Gallup; *Who Else!* (Epic 67987; 1999; #99), nominated for the Grammy for best rock instrumental performance; and *You Had It Coming* (Epic 61625; 2001).

FRANK HOFFMANN

BEECHAM, THOMAS, SIR (29 APR 1879–8 MAR 1961)

British conductor, born in St. Helens, into a wealthy family. At age 20 he conducted the Hallé Orchestra; in

1906 he established the New Symphony Orchestra and led it until 1908. From 1910 to 1913 he was impresario of Covent Garden; in 1916 he conducted concerts of the Royal Philharmonic Society. Beecham's American debut was with the New York Philharmonic in 1928. He organized another orchestra, the London Philharmonic, in 1932. During World War II he took the post of conductor of the Seattle Symphony Orchestra. He founded yet another orchestra, the Royal Philharmonic, in 1946. Among his many honors was a knighthood (1916), and the issue of a commemorative stamp for his (approximate) birth centennial on 1 Sep 1980. He died in London.

Beecham's conducting was most notable in works of Delius, Handel, Mozart, Schubert, Sibelius, and Richard Strauss; his best recordings are of those composers. He began to make discs for the Gramophone Co. in London in 1910, then for Odeon ca. 1912. Mozart overtures were among his 1915–1917 releases by Columbia, including *Die Zauberflöte* (#6559–60), and *Nozze di Figaro* (#6908). However, his acoustic records were in general inferior to the later electrics, made for Columbia in Britain, in 1926–1932. Several Delius works were recorded, beginning with *Brigg Fair* in 1928 (#4335–5). He directed the first complete *Messiah* recording from June to October 1927 (discs issued separately and in album DX 630/637). He conducted for the Delius Society during 1934–1938; made a popular record of his own arrangement from Handel, *The Faithful Shepherd: Suite* (Columbia LX 915/917; 1940), and other Handel numbers in the 1930s. His Mozart symphonies were issued from 1933 to 1940. The Sibelius Society set included Beecham with Jascha Heifetz in the Violin Concerto (Victor 14016/19, album M-309; 1935), still regarded as the definitive performance, as well as *Finlandia*, the fourth symphony, and *Kuolema*.

Beecham was one of the Britons who did not develop an early distaste for Nazism; in 1937 he was in Berlin to record the complete *Die Zauberflöte* for HMV (#DB3465/83 and #8475/93). With Tiana Lemnitz, Erna Berger, and Gerhard Hasch, it remains one of the outstanding versions of the opera on record. He continued to record, for Columbia and then EMI, after World War II, producing fine releases of his favorite composers, directing "his" London orchestras as well as leading orchestras in the U.S. His final issue was the Prelude to *Die Meistersinger*, made in a London concert on 4 Nov 1959 (HMV ALP-2003). CD reissues of Delius works appeared from the Beecham Memorial Trust in 1989; and EMI has transferred to CD most of the Beecham legacy from 78s and LPs. [A CD listing appeared in the July 1990 *Gramophone*, p. 195; earlier discographies were Beecham Society 1975; Gray 1979; Lewis 1980.]

BEE GEES, THE

Many pop music artists have parlayed an eclectic blend of musical styles to achieve commercial success, but the Bee Gees are one of the few to remain on top, at least for their first 15 years on the charts, despite a complete image makeover. Whatever genre assayed by the group, be it British Invasion pop, Baroque ballads, rhythm and blues, disco, or adult contemporary, their recorded output has been distinguished by immaculate three-part vocal harmonies, flawless arrangements and production work, and songwriting of the highest order.

Although the group (particularly in the late 1960s) has sometimes included added personnel, the primary members have always been the three Gibb brothers, Barry (born 1 Sep 1947), and the twins, Robin and Maurice (born 22 Dec 1949). They first performed in public at an amateur talent show in Manchester's Gaumont British Theater in 1955 as "The Blue Cats." After the family emigrated to Brisbane, Australia, in 1958, the trio began performing live as well as appearing on radio and television. Within two years, the brothers had been awarded a weekly TV series and secured an 18-month residency at the Beachcomber Nightclub in the resort, Surfers Paradise. Their popularity with Australian youth led to a contract with the Australian label Festival Records in late 1962. The group's first single, "Three Kisses of Love" (available on *Bee Gees: The Early Years, Vol. 2*; Excelsior 4402; 1980), was released in January 1963, making Australia's Top 20. A string of hits followed, climaxed by three number one hits in 1966: "Wine and Women," "I Was a Lover, a Leader of Men" (both on *Bee Gees: The Early Years, Vol. 1*; Excelsior 4401; 1980), and "Spicks and Specks" (available on *Rare Precious & Beautiful*; Atco 33-264; 1968).

With the group primed to achieve international popularity, the family relocated to England in February 1967. They immediately began recording *The Bee Gees' First* (Atco 223; 1967), which included three U.S. Top 20 singles: "New York Mining Disaster" (Atco 6487; 1967), "To Love Somebody" (Atco 6503; 1967), and "Holiday" (Atco 6521; 1967). The album also earned them the "Beatles imitators" label, because of the perceived similarities in their songs, vocal harmonies, and overall production sound to the popular British group. Their father, Hugh Gibb, refuted the charge, noting, "In actual fact we began recording before the Beatles...we came from Manchester, which is only 30 miles from Liverpool. It is rubbish to say we copied the Beatles' sound, it wasn't their sound, it was an English sound that began with Tommy Steele and skiffle" (liner notes to *Bee Gees: The Early Years, Vol. 2*).

Despite such criticisms, the group enjoyed a long run of hit singles — including "I Gotta Get a Message

to You" (Atco 6603; 1968), "I Started a Joke" (Atco 6639; 1968), "Lonely Days" (Atco 6795; 1970), and "How Can You Mend a Broken Heart" (Atco 6824; 1971) — and moderate-selling LPs — most notably, *Horizontal* (Atco 233; 1968), *Idea* (Atco 253; 1968), *Odessa* (Atco 702; 1969), *Best of Bee Gees* (Atco 292; 1969), *2 Years On* (Atco 353; 1971), *Trafalgar* (Atco 7003; 1971), and *To Whom It May Concern* (Atco 7012; 1972) — interrupted only by Robin's brief departure in 1969 to pursue a solo career.

By 1974, however, sales of their increasingly over-produced recordings had dropped off to the point where Atco demanded a stylistic change more in tune with the contemporary music scene. The resulting release, the R&B-disco flavored *Main Course* (RSO 4807; 1975), placed the Bee Gees squarely into the pop mainstream with the help of three Top 20 singles (including the chart-topper "Jive Talkin'," RSO 510). During the latter half of the 1970s, no act enjoyed greater chart success. Three of the group's contributions to the *Saturday Night Fever* soundtrack (RSO 4001; 1977) — "How Deep Is Your Love" (RSO 882; 1977), "Stayin' Alive" (RSO 885; 1977), and "Night Fever" (RSO 889; 1978) — spent a total of 15 weeks at the top of the *Billboard Hot 100*. At one point the Bee Gees had five of their compositions in the Top 10 (including songs recorded by Samantha Sang and brother Andy Gibb). The soundtrack remained number one on the album charts for 24 weeks; it was estimated at the time to be the best-selling LP in history. They also earned five Grammys for their work on the film soundtrack project in 1978.

Faced with the unenviable task of trying to top their hitherto unprecedented success, the Bee Gees moved away from disco with *Spirits Having Flown* (RSO 3041; 1979), which included three number one singles: "Too Much Heaven" (RSO 913; 1978), "Tragedy" (RSO 918; 1979), and "Love You Inside Out" (RSO 925; 1979). However, album releases comprised of new material from that point onward exhibited a marked decline in sales. While songs such as "The Woman in You" (RSO 813173; 1983), and "You Win Again" (Warner 28191; 1987) continued the group's tradition of beautiful melodies, lush harmonizing, and polished production work, they appeared predictable compared with earlier cutting-edge releases. Furthermore, Top 40 radio stations seemed less inclined to place new Bee Gees records in rotation. Their only major later career hit was 1989's "One" (Warner 22899), a number seven pop/number one adult contemporary hit in the U.S. On the other hand, they have remained a fixture within the adult contemporary format. The Bee Gees were inducted into the Rock and Roll Hall of Fame in 1997, which led to their first new album release in six years in 1998 and a subsequent tour. They released their 28th album

of original material in 2001. Following surgery, Maurice died on 12 Jan 2003, putting into question any future recordings or performances by the group.

FRANK HOFFMANN

BEGGARS BANQUET (LABEL)

Beggars Banquet began in 1974 as a record store founded by London disc jockeys Martin Mills and Nick Austin in the Earl's Court district, taking its name from the well-known Rolling Stones's album *Selling both new and used recordings*, the outlet's success led to the opening of branches in Fulham and Ealing. By 1976 the company had moved into tour promotion, handling the Commodores, the Crusaders, Southside Johnny, and other artists reflecting the stores's specialties.

The rise of punk in the second half of the 1970s led to a change of emphasis; the stores began stocking the vast array of seven-inch singles being released by domestic and foreign labels, and the promotions firm focused on booking bands such as the Damned, the Stranglers, and Graham Parker. The central facility even provided rehearsal space for emerging acts.

A request by the Lurkers, a London-based punk band strongly influenced by the Ramones, for management support, led to a record label search. Failing in this regard, Beggars Banquet decided to start its own recording company. Following the debut single release, the Lurkers's "Shadow" (Beggars Banquet BEG 1; 1977), the label developed a reputation as a shrewd judge of underground talent. As the punk movement moved closer to the pop mainstream, Beggars Banquet found commercial success. Ivor Biggun's "The Winker's Song (Misprint)" (Beggars Banquet BOP 1) brought the company its first U.K. Top 30 hit in September 1978. Finances were placed on solid footing for good with the emergence of Doll and Gary Numan's *Tubeway Army* in early 1979. Numan would go on to top the British singles and album charts twice within a year: "Cars" (Beggars Banquet BEG 23/Atco 7211; 1979), "Complex" (Beggars Banquet BEG 29; 1979), *Replicas* (Beggars Banquet/Atco 117; 1979), and *The Pleasure Principle* (Beggars Banquet/Atco 120; 1980)

Success led to further expansion, most notably the launching of two subsidiary labels, 4AD in 1980, and Situation 2 in 1983. The former label, in particular, developed its own easily identifiable sound, a moody impressionistic style characterized by colliding minor chords, swirling guitars, and swooping vocals. Key signings included the Cocteau Twins, Dead Can Dance, X-Mal Deutschland, This Mortal Coil, Modern English, Colourbox, Wolfgang Press, and Lush. In the meantime, the parent company maintained its own

successful track record with Bauhaus, the Associates, Icicle Works, and Wah! all releasing British hits during 1982–1984. The international popularity of the Cult's "She Sells Sanctuary" (Beggars Banquet U.K./Sire 0–20407 12-inch U.S. single; 1985), helped establish Beggars Banquet as a worldwide commercial force. A long run of chart hits — both in America and Great Britain — by the likes of Bauhaus spin-off Love and Rockets, the Charlatans UK, Loop, Buffalo Tom, Mercury Rev, and Luna further cemented the label's market viability (which has lasted into the 21st century), as well as its aesthetic reputation. [Thompson 2000.]

FRANK HOFFMANN

BÉGUÉ, BERNARD

French baritone, singer of minor roles at the Paris Opéra and later at the Metropolitan Opera. He made 10 cylinders for Columbia in 1898, among the first recordings of operatic arias (from *Carmen*, *Rigoletto*, *Huguenots*, *William Tell*, and *L'africaine*); other early arias on record were recorded for Bettini and Edison cylinders. Begue's Edison records included arias from Halévy's *Charles VI*; (#7256), *L'africaine* (#7372), and *William Tell* (#7424) in 1899. Other labels he worked for were Berliner and Zonophone.

See also Opera Recordings

BEIDERBECKE, BIX

(10 MAR 1903–6 AUG 1931)

American jazz cornetist and pianist, born Leon Bismarck Beiderbecke in Davenport, Iowa. He played with various groups in Chicago and St. Louis, then joined the Paul Whiteman band in 1927; he left Whiteman because of ill health in 1929. The earliest record by Beiderbecke was "Fidgety Feet" with the Wolverines Orchestra (Gennett 5408; 18 Feb 1924). He began recording with "Bix and His Rhythm Jugglers" — a small group that included Tommy Dorsey — in January 1925, beginning with "Toddlin' Blues" (Gennett 5654). His final recording with his own orchestra — including Bud Freeman, the Dorsey brothers, Benny Goodman, Gene Krupa, and Joe Venuti — was made on 8 Sep 1930 for Victor. Beiderbecke was last heard on disc performing with Hoagy Carmichael's Orchestra, in a Victor session of 15 Sep 1930. Among his other notable recordings: "Singin' the Blues" with the Frankie Trumbauer band (Okeh 40772; 1927), and "In a Mist" — his own composition, which he played on piano (Okeh 40916; 1927). Beiderbecke died in New York from alcoholism.



Bix Beiderbecke in the mid-'20s. Courtesy BenCar Archives

Beiderbecke's recordings have been reissued on various labels, both in the U.S. and abroad. Beiderbecke's Gennett recordings have been reissued on Milestone, originally on a two-LP set that is now available on CD (*And the Chicago Cornets*; Milestone 47019), as well as on various import labels. Columbia has reissued his classic small-group 1927 Okeh/Brunswick recordings on *Singin' the Blues* (Columbia 45450) and his work with Whiteman and other larger ensembles on *At the Jazz Band Ball* (46175). (The complete Okeh/Brunswick material is available on a seven-CD set issued on Mosaic Records 211.) Further Bix-Whiteman recordings are available on the Bluebird reissue, *Bix Lives!* (RCA Bluebird 6845).

BEKA RECORD GMBH

A company formed in Berlin, in October 1904. It was founded by the Bumb and K nig's Institute for Modern Inventions, which had been set up in 1903 by Heinrich Bumb and a partner named K nig; it is supposed that the firm's name emerged from their initials. Beka made double-sided discs in 1904, among the earliest to be marketed in Europe. Label names were Beka, Beka Grand Record, Beka Ideal, Beka Meister Record, Beka Saphir Record, and Beka Sinfonie Record, in seven-inch, eight-inch, 10-inch, 11-inch, and 12-inch

sizes. In 1906 Beka was selling seven-inch discs in Britain for only one shilling, forcing a price war with Zonophone. By 1907 the company was offering an international disc catalog of 224 pages, including items in Arabic and Asian languages. This catholicity resulted from a remarkable voyage made by Bumb in 1905–1906 to record local genres; he visited Eastern Europe, Egypt, India, Burma, Java, China, and Japan. Vocal recordings were dominant, but the singers were not of great distinction; an exception was Z lie de Lussan, who did four items in 1906. Although a special recording ensemble, the Meister Orchester, was established in 1911, the instrumental repertoire was not exploited. Beka records had a grotesque trademark evidently patterned on Nipper, showing a flamingo listening to a gramophone horn. There was overlapping in the output of Beka, Scala, and Coliseum labels; in some cases an identical singer appeared on more than one of them, using different names. The company also made gramophones, with tapered tone arms; a reprint of their 1911/1912 equipment catalog is found in *TMR* #50 (1978). The firm changed its name to Beka Record Actien-Gesellschaft in 1910. After 1916 the company was acquired by the Carl Lindstr m group. [*TMR* 50 (1978); Want 1976.]

FRANK ANDREWS

BEL CANTO (LABEL)

Disc record label of Bel Canto Record GmbH, Berlin, established in August 1909. Some of the material was British and some was from Dacapo recordings. The London agent was John G. Murdoch and Co., Ltd., who also did recording for Bel Canto. [Andrews 1990.]

BELAFONTE, HARRY (1 MAR 1927–)

American popular and folksinger, born Harold George Belafonte, Jr., in New York City. He lived with his family in Jamaica from 1935 to 1940, absorbing the calypso style that he later helped to make famous in the U.S. After navy service in World War II he appeared as a pop singer in Broadway clubs and then nationally. Belafonte achieved success as a folksinger at New York's Village Vanguard and elsewhere. He secured a Victor recording contract in 1952, and appeared on the *Ed Sullivan Show* and other television programs. Belafonte had 20 chart albums. His most important recordings were calypso songs he put to disc in 1956–1957, including "Jamaica Farewell" (Victor 6663; 1956), "Day-O (Banana Boat Song)" (Victor 6771; 1957), and the 1956 Victor album *Calypso* (#LPM 1248), which was on the charts 58 weeks. Belafonte won Grammys for two RCA Victor albums,

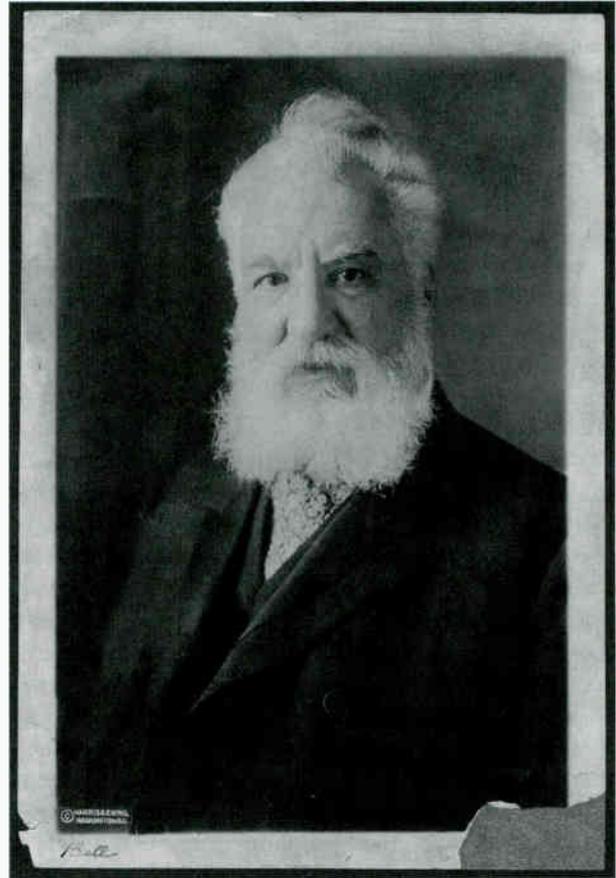
Swing dat Hammer (#LSP 2194; 1960) and *Belafonte Folk Singers at Home and Abroad* (billed as the Belafonte Folk Singers; 1961). *An Evening with Belafonte/Makeba* (Victor LPM 3420; 1965), was another Grammy-winning album. Belafonte has been less active as a recording artist since the mid-1960s, focusing his work on acting and political and social causes. He did participate in the "We Are the World" charity recording project in 1985. He was awarded a Grammy lifetime achievement award in 2000.

BELFER AUDIO LIBRARY AND ARCHIVE

Originally known as the Syracuse Audio Archive, and housed in the Syracuse (New York) University Library, The Belfer Audio Library and Archive was founded in 1963, with the Library's acquisition of the Joseph and Max Bell Collection of 150,000 early sound recordings. It is the third largest audio archive in the United States. Collections now number more than 300,000 recordings in all formats, including cylinders, discs, and magnetic tapes. Particular strengths lie in the archive's holdings of late 19th and early 20th century commercially released cylinders and phonodiscs of classical and popular performances. While the majority of its holdings comprise music recordings, the archive also contains early radio broadcasts, as well as thousands of spoken word recordings covering a wide range of personalities. Voices include Amelia Earhart, Thomas Edison, Albert Einstein, Lenin, and Oscar Wilde, among others. In addition, the archive contains an exhibit gallery for visitor education which houses a collection of early recording and reproducing equipment, on loan through the generosity of Charles Edison. In 1998, the archive began a project to digitize large portions of its collection for web access. It has also conducted sound preservation workshops throughout New York state as part of its educational mission. Walter L. Welch was the archive's first curator, serving until 1991 when he was replaced by Susan Stinson. [Website: libwww.syr.edu/information/belfer/main.htm.]

BELL, ALEXANDER GRAHAM (3 MAR 1847–2 AUG 1922)

Scottish/American inventor most famous for his development of the telephone, but one who was also active in early sound recording. He was born in Edinburgh, the son of Alexander Melville Bell, a specialist in vocal physiology. From 1868 to 1870 he worked with his father in London and studied anatomy and physiology at University College, developing a



Alexander Graham Bell. From the Emile Berliner Collection, The Library of Congress

keen interest in education of the deaf. When his family moved to Canada in 1870, Bell went on to Boston where he taught teachers of the deaf. During 1873–1876 he experimented with the phonograph and the telegraph, developing the theory of the "speaking telegraph" or telephone in 1874. In 1876 he transmitted the first intelligible telephonic message. In 1877 he organized the Bell Telephone Co. to produce and market the telephone, and after considerable patent litigation his rights to the invention were upheld by the U.S. Supreme Court.

Bell married Mabel G. Hubbard, a woman who had been deaf from childhood, in 1877, and settled in Washington, D.C., taking U.S. citizenship in 1882. He gave some ideas, as well as financial support, to his cousin, Chichester Bell, who worked with Charles Sumner Tainter on the graphophone cylinder player. His own voice was presumably used to make one of the first wax cylinder recordings, in 1881. (Sealed in the Smithsonian in 1881, this recording was supposedly played in public for the first time in 1937, but clear documentation is lacking for the event.) Bell (or, as some have said, Tainter) was then heard to say

BELL, CHICHESTER A.

"There are more things in heaven and earth, Horatio, than are dreamed of in your philosophy. I am a graphophone, and my mother was a phonograph." Bell also invented the Photophone system of recording by light rays, and experimented with binaural sound.

He had set up a laboratory in Washington in 1879, with Tainter employed as engineer; in 1881 he established the Volta Laboratory. From 1896 to 1904 Bell was president of the National Geographic Society. After 1897 he turned to aviation research and experimentation. He died in Nova Scotia. [Ford 1962.]

BELL, CHICHESTER A. (1848–1924)

Cousin of Alexander Graham Bell, and also a prominent inventor. In the Volta Laboratory in Washington, he and Charles Sumner Tainter worked in the early 1880s on improvements in cylinder recording and on transmitting sound through light (the Photophone). In place of tinfoil coating on cylinders, they used beeswax, and they applied the same surface to cardboard discs. Another area of novel experimentation may have been in magnetic recording. They made both lateral recordings and vertical-cut discs, and they approached the problem of angular versus linear velocity in disc players. The landmark product of their association was the graphophone, U.S. patent #341,214, filed 27 June 1885, issued May 4, 1886: a wax-covered cylinder device (though cylinder is not mentioned in the application, nor the word graphophone), for "recording and reproducing speech and other sounds," primarily a dictating machine. This patent was the center of legal controversy in the industry for many years. The Edison Speaking Phonograph Co. refused to buy the patent, so it remained with Volta, and later American Graphophone Co., until the patent expired in 1903. Edison had to be licensed to use the wax-cutting method of recording. Related patents by Bell and Tainter were U.S. #341,288 (filed 4 Dec 1885, granted 4 May 1886), which featured the wax-covered stiff paper cylinder; and U.S. #375,579 (filed 7 July 1887, granted 27 Dec 1887), which presented a foot-treadle operation, and wax-coated cardboard cylinders with finer threading and faster rotation than was found in earlier patents. The mineral wax compound ozocerite was introduced in U.S. patent #374,133 (filed 27 Apr 1887; granted 29 Nov 1887). Chichester Bell left Volta in 1885 to work in Europe. [Koenigsberg 1990.]

BELL, THOM (1941–)

Producer/arranger. Philadelphia-born Bell teamed up with Kenny Gamble for the first time when both were just teens, in 1959, working as the vocal duo,

the Romeos. A year later, he began a three-year association with Chubby Checker, leading the singer's backup band. After breaking with Checker in 1962, he continued to work for Checker's label, Cameo, as a session pianist and arranger. In 1968, he began his association with the vocal group, the Delfonics, arranging their first major hit "La La Means I Love You" (Philly Groove 150; #4 pop, #2 R&B) that year, followed by "Didn't I Blow Your Mind this Time" (Philly Groove 161; #10 pop, #3 R&B) in 1970.

He rejoined with Gamble, who was now working with songwriter/producer Leon Huff at Philadelphia International. From 1971 to 1974, Bell worked with the Stylistics and the Spinners, producing the enduring hits "Betcha by Golly, Wow" (Avon 4591; 1972; #3 pop, #2 R&B), and "I'll Be Around" (Atlantic 2904; 1972; #3 pop, #1 R&B), respectively. Gamble, Huff, and Bell formed the Mighty Three publishing company, which did much to promulgate the so-called "Philadelphia sound" during this era. Later in his career, Bell returned to working as a solo producer/arranger, working with the Bee Gees, the O'Jays, the Spinners, Al Jarreau, and Johnny Mathis, among others. In 2001, he produced a song for David Byrne's first solo album in four years.

BRAD HILL

BELL (LABEL) (I)

A disc issued by the Standard Music Roll Co., Orange, New Jersey, from ca. 1920 to 1923, and then by the Bell Record Corp., Newark, New Jersey, to July 1928. Records were made for the W.T. Grant department store chain, which sold them at \$.10 each. Bell was a subsidiary label to Arto until that firm went bankrupt in 1923. After that, W.T. Grant acquired pressings from Emerson, and some from Gennett; Plaza was a later source. Content of the records was primarily dance numbers, with some jazz and blues. Among the artists were Arthur Hall, Franklin Baur, and Charles Harrison. [Barr 1983; Rust 1978.]

BELL (LABEL) (II)

A children's record label issued by J.E. Hough in London during the mid-1920s.

BELL (LABEL) (III)

The company was established by Columbia Pictures in the mid-1950s as an outlet for soundtrack recordings. Show music and jazz were also released, primarily for the LP market. However, by the mid-1960s, the label expanded into the pop singles market,

through several production deals (notably the smash hit "The Letter" by the Memphis white-soul group the Box Tops, produced by independent Lee Dorsey) and licensing arrangements with other Memphis-based producers, including Dan Penn and Spooner Oldham, and smaller labels including Mala, Amy, Goldwax (Memphis), and New Voice/Dynovoice (New York). The label became well known for southern soul artists including Dorsey, James and Bobby Purify, James Carr, early Al Green, Oscar Toney, Jr., and Mighty Sam. However, Bell also produced some of the period's best blue-eyed soul with Mitch Ryder in addition to garage bands along the lines of the Syndicate of Sound.

In 1969, Larry Uttal took over the label, and changed its direction from being primarily a distributor to a producer of pop music. He focused on Top 40 singles by adult contemporary acts like the Fifth Dimension, Barry Manilow, and Melissa Manchester as well as the more bubblegum-oriented Tony Orlando and Dawn and the Partridge Family. At the same time, Dick Leahy established a U.K. division, which focused on the glam-rock craze, most notably Gary Glitter, the Sweet, Suzy Quatro, and the early Bay City Rollers.

Former Columbia Records CEO Clive Davis took control of the label in 1975 (with Uttal moving on to found Private Stock and Leahy going to GTO). Davis changed the label's name to Arista.

FRANK HOFFMANN

BELL LABORATORIES

SEE BELL TELEPHONE LABORATORIES

BELL RECORDING LABORATORIES

A subsidiary of the National Metals Depositing Corp. with offices in Mount Vernon, New York, and New York City. It advertised monthly in *TMW* from January 1922, offering to make masters, mothers, and stampers from the wax originals supplied by clients. In July 1922 advertising emanated from the Bell Recording Corp. C.R. Johnston, formerly a recording expert in Britain (1888-1889) and then with the Aeolian Co. in New York, was director of recording. While in England Johnston had made the famous recording of Florence Nightingale (the first notable woman to make a record). Louis Young was president of Bell Recording Corp. and also of the National Metals Depositing Corp. In August 1922 Johnston was described as vice president of Bell. Johnston was still with the company as late as January 1923.

FRANK ANDREWS

BELL TALKING MACHINE CO.

A firm located in New York. It made records with the Schubert Record label, marketed in 1918.

BELL TELEPHONE LABORATORIES

A research organization established in 1925 as a unit of AT&T (American Telephone and Telegraph Corp.). Many discoveries have issued from the Laboratories, including the transistor, solar battery, laser beams, transoceanic radiotelephone, the first communications satellite, and microwave radio relay systems. More than 25,000 patents have been acquired. Bell was the first major organization to conduct research in electrical recording, commencing in 1915; Joseph P. Maxfield and Henry C. Harrison were the investigators. An electrical system was developed by 1924.

In 1926 the laboratories created the Vitaphone records for motion picture soundtracks. These were the first 33 1/3 rpm discs. There were a number of projects in the area of recorded sound during the 1930s. In March 1932 a team of scientists led by Arthur Charles Keller experimented with stereophonic sound, using two microphones to create discs with two parallel tracks. The records, of the Philadelphia Orchestra, were demonstrated at the Chicago Century of Progress Exposition in 1933. In 1933 an extended range vertical-cut disc recording system was announced. It covered up to 10,000 Hz in both recording and reproduction, and as high as 15,000 Hz in recording alone. In 1937 the laboratories patented a precursor to stereo: a vertical-lateral disc system in which one sound channel was carried by motion 45 degrees to the right and the other channel 45 degrees to the left of vertical, producing a balanced effect. Also in 1937, engineer C.N. Hickman demonstrated a steel-tape recorder that operated at the slow speed of 16 inches per second; the tape was made of Vicalloy.

In 1947, Bell Labs developed the first solid-state transistor, which would quickly replace the vacuum tube in radios, home audio equipment, and all other sound reproducing equipment. This allowed for the revolution of the portable radio in the 1950s, which in turn allowed teenagers to take their music with them "on the road," fueling the growth of R&B and rock and roll. Over the following decades, Bell Labs has continued to work in sound technologies, during the 1990s and early 21st century focusing primarily on wireless communication and speech-recognition technologies. The labs became part of Lucent Technologies in 1996 as part of a spinoff of AT&T companies. [Website: www.bell-labs.com.]

BELLINCIONI, GEMMA
(18 AUG 1864–23 APR 1950)

Italian soprano/mezzo-soprano, born in Monza. Her debut was at age 15 in Naples; at 22 she sang at La Scala. Though she toured Europe and appeared in Buenos Aires, she did not sing in the U.S. On 17 Nov 1898 she sang in the premiere of *Fedora*, with Enrico Caruso, in the Teatro Lirico, Milan. Carmen was one of her most acclaimed roles. For most of her last half century she avoided the opera stage, devoting herself to concerts and teaching; in 1933 she was professor of singing at the Naples Conservatory. Bellincioni made just 14 recordings — all of poor sound quality — among them a fine “Voi lo sapete” (G&T 053018; 1903, and IRCC 3140) and “Ah fors’ ä lui” (G&T 053019; 1903). Among the Pathé records she made in Milan, in 1905–1906, was her famous “Habanera” (#4395). An LP reissue covered her *Cavalleria*, *Traviata*, *Fedora*, and *Mefistofele* roles (Olympus 214). She died in Naples. [Richards 1966.]

BELMONT, JOE
(22 JULY 1876–28 AUG 1949)

American baritone and bird imitator, born Joseph Walter Fulton in Shamokin, Pennsylvania. By 1900 he had become one of the most popular recording artists in America and Europe (on Favorite, Jumbo, and other labels in Britain). In addition to solo work, he sang with the original Columbia Quartet. Belmont is most remembered for his whistling. An early Edison cylinder, “Beautiful Birds, Sing On,” made with Byron G. Harlan (#8639; 1904), helped to give him the nickname of “the human bird.” A hit for Victor was made with Billy Murray: “Whistle While You Walk” (1915). There was also a highly successful duet with Murray on Edison Diamond Disc 50506 (1919), “Gentle Spring.” Belmont died in New York.

BELTONA (LABEL)

A 10-inch and 12-inch record sold in Britain by the Murdoch Trading Co., in 1922–1939, and afterwards by Decca (to 1968). Most of the masters were from Vocalion, Gennett, and Aco; they came through Guardsman (which was acquired by Aeolian Co., Ltd., in 1923), or from Aeolian Co., Ltd., and Vocalion Gramophone Co., Ltd. Edison Bell also supplied Beltona with masters, besides recording directly for the label. The Vocalion Gramophone Co. of Hayes, Middlesex, did the pressings. In 1927 Edison Bell Consolidated Phonograph Co., Ltd., took control of the label; then Decca assumed ownership in 1933. Content included Irish and Scottish numbers, dance music, and some jazz. [Rust 1978.]

FRANK ANDREWS

BENNETT, CHARLES K.

President of the Eclipse Musical Co., Cleveland, Ohio. In 1921 he was elected secretary of the National Association of Talking Machine Jobbers.

BENNETT, TONY (3 AUG 1926–)

American popular singer, born Anthony Dominick Benedetto in New York. After singing in clubs and with U.S. Army bands during military service, he was discovered by Bob Hope in 1950. Hope suggested a change from Joe Bari — the singer’s stage name — to Bennett; and he arranged for a New York stage engagement. A recording contract with Columbia in 1950 led to a series of hit records, notably “Boulevard of Broken Dreams” (#38825; 1950), and “Because of You” (#39362; 1951). Bennett’s style went out of fashion in the later 1950s, but he returned to favor with perhaps his most beloved hit in 1962, “I Left My Heart in San Francisco” (Columbia 42332), and followed it with more than a dozen chart songs, e.g., “Fly Me to the Moon” (Columbia 43331; 1965). His earlier singing was in the romantic ballad mode of Frank Sinatra and Vic Damone, but he developed a jazz-oriented style in his maturity.

Bennett’s career fell into eclipse during the “rock revolution” of the 1960s and 1970s, although he continued to record and perform. In the mid-1990s, he began a strong comeback, thanks to an appearance on “MTV Unplugged” and a renewed interest in classic American popular music. With the death of Frank Sinatra, Bennett became the best-known and most important of the remaining pop song stylists of his era. Bennett has won eight Grammy Awards, two in 1962 and the rest during the 1990s.

BENOIST, ANDRÉ
(4 APR 1879–19 JUNE 1954)

French/American pianist, born in Paris. He studied with Raoul Pugno and Camille Saint-Saens. On recordings he is heard primarily as an accompanist, with Pablo Casals, Jascha Heifetz, Fritz Kreisler, and Albert Spalding. “Rustle of Spring” (Edison Diamond Disc 50309; 1915), was among his solo records. He died in Middletown, New Jersey.

BENSON, ERASTUS A.

A director of the Central Nebraska Phonograph Co., and later president of the Nebraska Phonograph Co., in 1890, 1892, and 1893. In 1890 he was also a director of the Chicago Central Phonograph Co.

BENSON, GEORGE (MAR 22, 1943–)

Benson first attracted attention as a vocalist, winning a singing contest at the age of four. He would sing on the radio as "Little Georgie Benson" and with numerous rhythm and blues bands around his native Pittsburgh. Although Benson took up the guitar as an eight-year-old, he did not play in public until age 15. Shortly thereafter, he began playing sessions in studios outside Pittsburgh. While still a teenager, his groups, the Altairs and George Benson and His All-Stars, recorded for Amy Records. Moving to New York in 1965, he went on to record a series of widely admired, albeit moderate selling, instrumental jazz albums for Columbia, A&M, and CTI.

Signing with Warner Bros. in late 1975, Benson was encouraged to sing for the first time as a recording artist. His debut LP for the label, *Breezin'* (Warner Bros. 2919; 1976), won three Grammy awards and reached number one on the *Billboard Hot 100*. Its triple platinum sales were driven by "This Masquerade" (Warner Bros. 8209; 1976), the first single to ever reach number one on the jazz, R&B, and pop charts. His next seven albums — *In Flight* (Warner Bros. 2983; 1977), *Weekend In L.A.* (Warner Bros. 3139; 1978), *Livin' Inside Your Love* (Warner Bros. 3277; 1979), *Give Me the Night* (Warner Bros. 3453; 1980), *The George Benson Collection* (Warner Bros. 3577; 1981), *In Your Eyes* (Warner Bros. 23744; 1983), and *20/20* (Warner Bros. 25178; 1985) — all went gold (three achieved platinum status). His easygoing pop-funk style also led to more hit singles, including "On Broadway" (Warner Bros. 8542; 1978), "Give Me the Night" (Warner Bros. 49505; 1980), and "Turn Your Love Around" (Warner Bros. 49846; 1981).

Since the 1980s, Benson has divided his time between mainstream jazz projects (including live work with Dizzy Gillespie, Lionel Hampton, and Freddie Hubbard), and the more pop-inflected recordings. His ability to navigate a middle course is reflected by chart-topping contemporary jazz albums such as *Tenderly* (Warner Bros. 25907; 1989), with pianist McCoy Tyner, and *Love Remembers* (Warner Bros.; 1993). [Romanowski and George-Warren 1995.]

FRANK HOFFMANN

BENZLER, ALBERT W.**(13 NOV 1867–19 FEB 1934)**

American pianist and xylophonist, born in Newark, New Jersey. He was an early Edison artist, appearing in the 1903 catalog with "Alita (Wild Flower) on which he played orchestra bells (cylinder #8462). Until 1909 he was one of the Edison studio pianists; then he became musical director of the U-S

Phonograph Co. in Cleveland, Ohio, and recorded many piano, bell, and xylophone numbers for them. One of those, "Peter Piper March" (#223), may have been the cylinder played more times than any other; according to *TMW* (November 1910) it achieved 40,444 performances in a juke box with no discernible wear. Benzler played in various bands and groups around Newark after U-S Phonograph Co. folded in 1913; he had his own Benzler's Band for a time. He died in Newark.

BERANEK, LEO (15 SEP 1914–)

A noted researcher in acoustics and architectural acoustics, Dr. Beranek has an undergraduate degree from Cornell and D.Sc. degree from Harvard, 1940. After graduation, he formed and directed Harvard's first World War II research laboratory to study electroacoustics, followed in 1943 by formation of the Systems Research Laboratory for redesigning ships to fight the Japanese Kamikaze aircraft. In 1948, he received the Presidential Certificate of Merit for his war research contributions, notably advances in shoring up ship radar defenses. That same year, he help found Bolt, Beranek, and Newman, an acoustics engineering firm that has been responsible for the design of several notable concert halls. Under his presidency, BBN shifted its emphasis from acoustics to computer science and built the ARPANET, the predecessor to the Internet. A founder and former president of WCVB-TV Channel 5, Boston, Dr. Beranek has also long been active in civic organizations, serving as chairman of the board of trustees of the Boston Symphony Orchestra, member of the Harvard Board of Overseers, and president of the World Affairs Council of Boston. From 1989 to 1994, he was president of the American Academy of Arts and Sciences.

Beranek has written several important books, including *Acoustic Measurements; Acoustics; Music, Acoustics, and Architecture; and Concert and Opera Halls*, and has completed writing an entirely new book on concert halls and opera houses. He has received gold medal awards from the Acoustical Society of America, the Audio Engineering Society, and the American Academy of Arts and Sciences, in addition to five honorary degrees.

HOWARD FERSTLER

BERGER, ERNA**(19 OCT 1900–14 JUNE 1990)**

German coloratura and lyric soprano, born in Cossebaude. She made her debut in Dresden in 1925, and in the next few years was heard at Bayreuth and

BERGER, IVAN

Salzburg. She was with the Metropolitan Opera from 21 Nov 1949 (debut as Sophie) to 1951, and retired from the opera stage in 1955. Her main roles were Gilda, Rosina, and the Mozart heroines, though she also sang the other standard repertoire. Berger appeared as Queen of the Night in the notable complete recording of *Zauberflöte* conducted by Thomas Beecham (Victor VM541/542). She recorded from 1932 to 1959. She died in Essen. An LP reissue of 1981 included many of her finest arias (EMI Electrola 137/146). Her complete *Don Giovanni*, *Rigoletto*, and *Zauberflöte* have been released on CD. She died in Essen.

BERGER, IVAN (1939–)

Journalist and writer. Born in Brooklyn, New York, Berger was introduced to high fidelity by his high-school chemistry teacher, and started assembling his first component system while an undergraduate at Yale. His journalistic career was launched when a friend who knew of his ambition to be an audio writer showed him a magazine advertisement for just that kind of work. One thing led to another and he ended up spending the next 16 years writing for *Saturday Review's* music section. In addition, he contributed regularly to *High Fidelity*, *Hi-Fi/Stereo Review* (now *Sound & Vision*), *Audio*, *Popular Science*, the *Los Angeles Times*, and several other publications. However, for most of this period his primary work involved writing ad copy for audio and photo equipment and even for precision scientific microscopes.

In 1972, Berger joined *Popular Mechanics* as electronics and photography editor, moving in 1977 to a post as senior editor at *Popular Electronics*. In 1980, he joined with Lancelot Braithwaite to form Berger-Braithwaite Labs, with Braithwaite serving jointly with him as technical editor of *Video Magazine*. From 1982 to early 2000, Berger was technical editor at *Audio*; since it ceased publication, he has been writing manuals and white papers for commercial clients and contributing articles on audio and other topics for *The New York Times*, *Home Theater*, *The Audio Critic*, *Sound & Vision*, *Mobile Entertainment*, CNET.Com, and others. In 1983, he published *New Sound of Stereo*, a book he felt would have served him well when he was just getting started in the hobby. His works have appeared in about 200 magazines, newspapers, and websites and have been translated into at least seven foreign languages. Berger is also (like surprisingly many technically-oriented journalists) a published poet.

HOWARD FERSTLER

BERIGAN, BUNNY (2 NOV 1908–2 JUNE 1942)

American jazz trumpeter, born Rowland Bernart Berigan in Hilbert, Wisconsin. He played violin before turning to the trumpet, which he played with several famous bands (Paul Whiteman, the Dorsey Brothers, Benny Goodman) as well as in his own band after 1937. His most famous sides were made with Tommy Dorsey in 1937: "Marie"/"Song of India" (Victor 25523). Another hit, "I Can't Get Started" (Decca 790), became his theme song. He died in New York.

BERLIN PHILHARMONIC ORCHESTRA

One of the leading symphonic ensembles in the world, established as the Philharmonic Orchestra in 1882; Franz Wöllner was the first director. Hans Joachim conducted in 1884–1887, succeeded by Hans von Bülow (1887–1894), Arthur Nikisch (1895–1922), and Wilhelm Furtwängler (1922–1945), under whom the orchestra gained its great reputation. After World War II Leo Borchard and Sergiu Celibidache conducted, succeeded by Furtwängler once more, from 1947 until his death in 1954. Herbert von Karajan became conductor in 1954 and remained until he died in 1989. Following von Karajan's death, Claudio Abbado served as its director until 2002; Sir Simon Rattle was named as his successor.

The orchestra is significant in audio history as the first to make a "complete" recording of a symphonic score. This was a set of eight single-sided HMV's (#040784/91), issued in May–August 1914, offering a version of the Beethoven Fifth Symphony. Nikisch was the conductor of this truncated performance, which departed in many respects from the score (the orchestral forces had to be reduced for the studio, and tubas took the place of basses). The orchestra also recorded music from *Parsifal* in 1914, under Alfred Hertz. Later recordings of the orchestra are noted in the articles on its conductors. [Website: www.berlin-philharmonic.com/01/1_1_2_en.html.]

BERLIN PHONOGRAMM-ARCHIV

Founded in September 1900, the Berlin Phonogramm-Archiv remains a major center of comparative musicology. Part of the Ethnographical Museum, State Museum at Berlin, the archive's holdings comprise over 145,000 recordings of music from all around the world, excluding Western art and pop. The collection includes many kinds of sound carriers such

as Edison phonograms, analog and digital tapes, and all kinds of discs (from 78-rpm shellac discs to LPs and CDs).

In 1900 a Siamese theater group of musicians and dancers visited Berlin, and psychologist Carl Stumpf and physician Otto Abraham recorded them on an Edison cylinder. Stumpf used these Siamese cylinder recordings as the foundation for the new Berlin Phonogramm-Archiv. World War II interrupted the activities of the Phonogramm-Archiv. Most of the cylinder recordings were packed up between December 1944 and January 1945, and sent mainly to East Germany, with some going to West Germany. In 1950 approximately 9,000 cylinders were confiscated by the Russians and sent to Leningrad, and a significant number of 78-rpm disc recordings were smashed by Russian soldiers.

During the 1950s the cylinders stored in West Germany were returned to the archive. In 1959 most of the cylinders in Leningrad were returned to East Berlin, but not to the Phonogramm-Archiv, which was located in West Berlin. Erich Stockmann watched over the cylinders in East Berlin, and in the 1960s he assisted with the return of some cylinders until the East German government stopped him. On May 31, 1990, Stockmann and Artur Simon were present as a sealed room in East Berlin was opened, revealing many of the recordings. Early the next year, 27,347 cylinders and 1,283 78-rpm discs, which had been gone since 1945, were finally returned.

A project titled "The Saving of the Largest Collection of Old Sound Documents of Traditional Music from Around the World" was begun at the Phonogramm-Archiv in 1992 and continues today under the direction of Suzanne Ziegler, musicologist, and Albrecht Weidmann, sound engineer. Beginning in 1907, with the aid of the Presto company, the archive galvanized its wax cylinders, a process whereby a copper negative, called a galvano, was made from the wax cylinder. Copies were kept at the Phonogramm-Archiv, given to collectors, and shared with other archives around the world. As part of a project begun in 1992, a specially developed red wax is poured inside the galvanos to make new cylinder copies. Chips of wax are melted, painstakingly poured into the galvanos, and allowed to harden for an hour before removal. The red-wax cylinders are then copied onto DAT tape.

The archive's directors have included Erich Moritz von Hornbostel, 1905–1933; Marius Schneider, 1934–1945; Kurt Reinhard, 1952–1968; Dieter Christensen, 1968–1972; and Artur Simon, 1972–present. [A CD set on Wergo (174) collects 100 years of recordings from the Archiv.]

BERLINER, EMIL(E) (20 MAY 1851–3 AUG 1929)

Inventor of the gramophone. Born in Hanover, Germany, son of a Talmudic scholar, fourth of 11 children. His given name was Emil, to which he later added the final "e" in the United States. His formal education, in Wolfenbüttel, ended at age 14, and gave no indication of special talent. After working for a printer and as a salesclerk, he emigrated to America in 1870, settling in Washington, D.C. For three years he clerked in the dry goods store of a friend of the family before moving on to New York. There he taught himself electricity and acoustics while employed in menial occupations. He returned to Washington in 1876, set up a home laboratory for experimenting with electrical communication, and patented a telephone transmitter that utilized a principle basic to the development of the microphone. Bell Telephone purchased the patent from him in 1878, establishing a professional relationship between Bell and Berliner that allowed him to work on the problems of sound recording. In 1881 he married Cora Adler, by whom he had eight children.

Experimenting with sound recording, he tried cylinders first, influenced by the phonograph he had seen in the Smithsonian Institution, then in 1887 invented



Emile Berliner holding an early microphone. From the Emile Berliner Collection, The Library of Congress

the lateral (side-to-side) method of recording on a flat zinc disc. Pressings were on glass at first, then on celluloid, then — as mass production began in 1894 — on hard rubber. On 16 May 1888 Berliner demonstrated his device at the Franklin Institute in Philadelphia. It consisted of a recording machine and a reproducing machine (both illustrated in Chew 1981). On a visit to Germany in the following year he made another important demonstration, at the Elektrotechnische Verein, and arranged for the first commercialization of his invention: a toy gramophone manufactured by Kammer und Reinhardt of Waltershausen. (By coincidence, Edison was at the same time marketing his talking doll in America.) He also devised a duplicating system to make records from a master.

In 1890 Berliner returned to the U.S. and set up a structure for his gramophone work. He established the American Gramophone Co. in Washington in April 1891, and in the building that housed that firm he made the first seven-inch disc records (June 1892); these were issued beginning in late 1894 by the successor company to American Gramophone, the United States Gramophone Co. (established April 1893). That firm also made and sold gramophones. The discs — about 90 of them by the end of 1894 — were made of black celluloid at first, then of hard rubber, from zinc masters. The label was not a paste-on piece of paper, but an actual engraving into the record surface; it read “E. Berliner’s Gramophone” and gave the Berliner patent dates of 8 Nov 1887 (U.S. patent #372,786), and 15 May 1888 (U.S. #382,790).

In the following year the Berliner Gramophone Co. was formed in Philadelphia, and in 1896 the National Gramophone Co. was set up in New York by Frank Seaman to take care of Berliner advertising and sales. Another piece of the Berliner enterprise resided in Camden, New Jersey, across the Delaware River from Philadelphia: there inventor Eldridge Johnson contributed numerous improvements to the gramophone, including a spring motor (the first machines were hand cranked). Johnson also replaced the zinc master with a disc of wax. Johnson had powerful entrepreneurial impulses, which were matched by those of Frank Seaman, who headed the National Gramophone Co. Johnson’s version of the disc player, named the Improved Gramophone, included a new soundbox he had developed with the assistance of Alfred Clark; it was this machine that appeared in the famous Nipper painting (1899), and that was marketed in 1898 by Seaman under the trade name Zonophone. Seaman’s firm was sued by American Graphophone Co., with a claim for priority of the Chichester Bell and Charles Sumner Tainter patents, which dealt with recording processes using the method of cutting into wax (whether disc or cylinder). There

were years of litigation over patents in the recording industry, but by 1902 Berliner (Victor) and American Graphophone (Columbia) had taken control of the lateral disc market, and retained it until electrical recording and expiration of patents brought forth new competitors. Berliner himself received 12 U.S. patents in the sound recording field.

In Europe, Berliner worked toward the establishment of the Deutsche Grammophon Gesellschaft — headed by his brother Joseph Berliner — in Hanover; and the Gramophone Co. in London, developed by William Barry Owen. Both firms were set up in 1898: pressing was done in Hanover, and recording in London. Berliner himself took a less active part in the gramophone business after the demise of his Philadelphia firm. He retained a financial connection with Victor and with the Montreal company, acting as a consultant for them, but most of his time was devoted to various other interests after 1900. He was active in an educational campaign about the risks of drinking raw milk (this following the illness of a daughter); he studied aeronautics, and guided his son, Henry, in the development of a successful helicopter (1919). Research in sound waves led to the invention of sonar, used for submarine detection during World War II. He invented a practical acoustic tile for theaters and halls. According to a story in *TMW*, January 1918, he was also inventor of a “flying torpedo.” He died 3 Aug 1929 of a cerebral hemorrhage, at home in Washington. A few weeks before his death he received the Benjamin Franklin Medal for scientific achievement. [Andrews; Burlingame 1944; Koenigsberg; Smart 1985; Wile 1984; Wile 1990/1.]

BERLINER, JOSEPH (1858–1938)

German engineer, brother of Emile Berliner and founder with him of the J. Berliner Telephon-Fabrik in Hanover (Kniestrass 18) on 3 Aug 1881. The firm had branches in Berlin, Vienna, Budapest, Paris, and London. It was this company that introduced the telephone into Germany. In 1898 he and his brothers Emile and Jacob established Deutsche Grammophon Gesellschaft at the same Hanover address, and ran it until the takeover by the Gramophone Co. in 1900; it had several European branches. When Berliner retired in 1930, he donated 70,000 marks to the workers in his factory.

BERLINER (LABEL)

Emile Berliner used his own name for disc labels, beginning in 1889 with the five-inch, lateral-cut “plates” for the so-called toy gramophones made and sold in Germany and Britain. Contents included monologs in English or German, some of which were

delivered by Berliner himself. One disc, apparently recorded in 1890, features a four-trumpet rendition of a "Marsch No. 1." There were also songs, bugle calls, piano solos, and farmyard imitations. The first Berliners not sold as toys were marketed in Washington, D.C., in late 1894 by the United States Gramophone Co. Actual recording dates were as early as June 1892, made in the Berliner laboratory housed with his first U.S. firm, the American Gramophone Co. The first list of discs for sale was issued 1 Nov 1894; it contained 52 titles, including band music, cornet solos, a drum and fife number, a trombone solo, a piano solo, an instrumental quartet, a clarinet solo, a vocal quartet, children's songs, Native American Indian songs, baritone solos, soprano solos, and a recitation. These were seven-inch discs. A January 1895 "List of Plates" had 85 items.

Over the next six years the repertoire on Berliner's label grew to cover whistling, songs in various languages, instrumental solos and groups, operatic excerpts (described in Taylor 1990), and bands — with Sousa's Band recording in August 1897. Instead of paper labels, the discs were identified with letters etched into the centers, reading "E. Berliner's Gramophone" with the title of the content.

Sales were satisfying: in 1897 248,652 discs were sold; in 1898, the peak year, 713,859 were sold; by April 1900 the total sales had reached about 2 million discs. Typically, Berliners were single-sided. They included the angel trademark after late 1898, on discs sold in Europe. (Three double-sided discs bearing the Berliner name were discovered in 1975; they are described in Brooks 1975, where the suggestion is made that they were actually test records pressed by Eldridge Johnson). The playing speed was variable, from 60 rpm to 75 rpm, although it was usually 70 rpm. All Berliner discs are rare collectibles today, but the most valuable are those made by young Fred Gaisberg of opera singers in Europe. As a result of an injunction instigated by Frank Seaman, and brought by American Graphophone, production of Berliner discs in America ended in May 1900. The last one to be issued was #01304, "Doan You Cry, My Honey" by the Hayden Quartet. As the industry realigned, the Berliner label passed to the Gramophone Co. name in Britain and the Victor Talking Machine Co. name in the United States.

In 1988 a CD reissue covered 39 Berliner discs (Symposium 1058; described in Klee 1990/3 and Petts 1988). [Adamson 1974 (illustrating 20 label designs); Bayly 1988; Brooks 1975; Hoover 1971 (reprints the 1895 sales list); Klee 1990/3; Koenigsberg; Petts 1988; Rust 1978; Rust 1981 (a label list of seven-inch British issues); Sherman 1990 (reprints the November 1894 sales list); Smart 1985 (with an illustration of the 1895 sales broadside); Taylor 1990 (with comments by Peter Adamson in *HN* #174, p. 36); Wile 1979/2; Wile 1984.]

BERLINER GRAMOPHONE CO.

A firm established in Philadelphia, on 8 Oct 1895, by Emile Berliner, to manufacture discs and disc players under patents held by the United States Gramophone Co. A retail store was opened nearby, managed by Alfred Clark, to sell the products, and a laboratory was located in Washington, D.C. Sales rights were reserved for Washington, D.C., with the rights for the rest of the country contracted to Frank Seaman of New York; Seaman set up the National Gramophone Co. in Yonkers, New York, to handle his sales. The first year was unsuccessful, but business improved with the improvement of the product. During the years 1896–1900, the new spring motor machine of Eldridge R. Johnson replaced the old hand-cranked models, and shellac pressings created by the Duranoid Co. of Newark, New Jersey, provided "plates" with reasonably smooth playback. Sales of \$478,740 were listed for the fiscal year ending in 1898.

In 1897 the company opened a London office under William Barry Owen (to become the Gramophone Co. in April 1898), and in 1899 the firm was established in Canada as "E. Berliner, Montreal." There were four record presses there, and a shop where machines were assembled (the motors and turntables being imported



Early advertisement for Berliner's Gramophone. From the Emile Berliner Collection, The Library of Congress

BERNARD, AL

from Eldridge Johnson). About 43,000 gramophones were sold by April 1900.

However, litigations quickly caused difficulties for the company. In 1900 Johnson acquired the patents and even the Nipper trademark that Berliner had registered in July of that year. The Berliner Gramophone Co. shut down in September 1900, and the gramophone passed to the Consolidated Talking Machine Co.; then in 1901 to its successor firm, the Victor Talking Machine Co.. Berliner himself retained a one-third interest in Victor.

The Filbert Street building in Philadelphia was razed for construction of the Gallery II shopping mall in 1983. [Smart 1985; Wile 1979/2; Wile 1984.]

See also **Berliner** (label)

FRANK ANDREWS

BERNARD, AL (3 NOV 1888–9 MAR 1949)

American popular singer, born in New Orleans. He was the leading blues singer of the acoustic period, known also for minstrel songs. His first record for Edison was possibly the earliest authentic blues vocal to be released: "Hesitation Blues" (Diamond Disc 50524 and Blue Amberol cylinder 6621; 1919). His next offering, "Nigger Blues," sold well on Diamond Disc (50542; 1919), and Blue Amberol cylinder. Bernard's blues were rhythmic and humorous in style. Duets with Ernest Hare were especially amusing; one of the best being "I Want to Hold You in My Arms" (Diamond Disc 50558; 1919), which stayed in the catalog for 10 years. Bernard first recorded "St. Louis Blues" in July 1918 on Aeolian-Vocalion 12148, with backup by a group that was at one time thought to be "probably the Original Dixieland Jazz Band" (Walsh); but was in fact a studio band directed by Harry Yerkes. It later came out on Edison and became one of the all-time best sellers on that label (Diamond Disc 50620; 1919), issued also on 19 other labels. He became a popular Columbia artist also, beginning with "I Want My Mammy," a duet with Vernon Dalhart in 1922. Bernard's final record for Edison was made in 1927; then in 1949 he made a last appearance on disc with a two-78-rpm disc set entitled *Al Bernard's Merry Minstrel Show* (Celebrity #1). Bernard could not read music nor play any instrument. He sang under many pseudonyms, including John Bennett, Dave Sanborn, Al Simpson, and Uncle Joe. He died in New York. [Rust; Walsh 1974/3–12; Walsh 1975/1–2.]

BERNHARDT, SARAH

(22 OCT 1844–26 MAR 1923)

French actress; of interest to recorded sound because she made a number of early cylinders and discs. In early

1896 she inscribed monologs by Eugene Sylvestre and Victor Hugo for Bettini (no copies extant). In 1900, at the Phono-Cinéma-Théâtre Exposition in Paris, she did a scene from *Hamlet* and some readings from French authors in the earliest talking motion picture. Later, from 1902 to 1918, she recorded for Pathé, HMV, Zonophone, Edison, and Aeolian-Vocalion. [Marty 1979 has an illustration; Rust 1989.]

BERNSTEIN, LEONARD

(25 AUG 1918–15 OCT 1990)

American composer, pianist, and conductor, born Louis Bernstein in Lawrence, Massachusetts. He studied composition and conducting with such distinguished musicians as Fritz Reiner, Randall Thompson, Walter Piston, and Serge Koussevitzky. He was engaged as assistant conductor of the New York Philharmonic Orchestra in 1943, and became conductor in 1958. After a decade of international success, he resigned from the orchestra in 1969. Thereafter he composed, appeared as guest conductor in opera and concert around the world, wrote books, and gave acclaimed talks on television. On Christmas morning, 1989, Bernstein marked the reunion of East and West Berlin with a televised performance of the Beethoven Ninth Symphony (changing the "Ode to Joy" to an "Ode to Freedom"; Deutsche Grammophon CD 429–861–4.)

Bernstein's records of Haydn and Mahler have been most highly praised, but his discs of the complete Beethoven and Brahms symphonies, of Copland and Gershwin, and many others have been placed among the best interpretations available. His recordings won Grammy awards in 1964, 1967, 1973, 1977, 1989, 1990, and 1992. He was the first American appointed to head a major orchestra, and the first to conduct a regular performance at La Scala. Bernstein died in New York.

BEROLINA SCHALLPLATTEN GMBH

A recording firm established in Berlin on 31 Oct 1911 by Paul Kuchler and Albert Vogt. They issued two labels in 1912: Berolina for Germany, and Invicta for other countries; and they had rights to sell Syrena discs in Germany. There were 358 Invicta titles on sale in Britain by November 1912. After a dispute over trademark, Berolina changed its London outlet from Invicta Record Co., Ltd. to John Abrahams and Coin in 1913. Thus it turned out that the Invicta label was being sold by two London agents. [Andrews 1990/8–9.]

BERRY, CHUCK (18 OCT 1926–)

American popular singer, songwriter, and guitarist, born Charles Edward Anderson in San Jose,

California. After nightclub and miscellaneous work in St. Louis with a trio, he began to record for the Chess label in 1955. His first disc, "Maybellene" (Chess 1604; 1955), was one of the earliest hits of the new rock 'n' roll idiom. Most of his popular song records featured pianist Johnnie Johnson. For several years Berry was a leading and critically acclaimed rock star, making movies and records, and establishing much of the rock vocabulary. Top records included "Johnny B. Goode" (Chess 1691; 1958), "Carol" (Chess 1700; 1958), "Sweet Little Rock 'n' Roller" (Chess: 1709; 1958), "Bye Bye Johnny" (Chess 1754; 1960), "Nadine" (Chess 1883; 1964), and his only number one hit, "My Ding-A-Ling" (Chess 2131; 1972). His songwriting and innovative guitar playing may have influenced many of the British rock bands of the 1960s, including the Beatles and the Rolling Stones.

Berry has toured ceaselessly since the early 1970s, although his recording career has been spotty, with recordings announced from time to time but rarely appearing. In 1986, he was among the first inductees into the Rock and Roll Hall of Fame. Also that year, the film *Hail, Hail, Rock and Roll*, documenting his 60th birthday concert and celebration, featured many younger fans of Berry's music, including Rolling Stones's guitarist Keith Richards, who was instrumental in organizing the tribute concert.

BERTELSMANN MUSIC GROUP (BMG)

Bertelsmann AG is an international conglomerate, controlling large publishing and media interests. The firm was established in Gättersloh, Germany, in 1835, by Carl Bertelsmann. It printed hymnals and religious books and consequently was closed by the Nazis. After World War II Richard Mohn rebuilt the company. He initiated a book club, and acquired several publishers, achieving international diversification.

The BMG (Bertelsmann Music Group) Division acquired RCA Records from General Electric in 1986 after General Electric had acquired RCA. From 1989 the old RCA label was renamed "BMG Classics," with the venerable Red Seal becoming a Gold Seal. Both Gold Seal and Red Seal names were being used for the BMG Classics in 1991. Victor material is being reissued on CD, including one remarkable set initiated in 1990 that included (on 82 CDs) all the recordings made by Arturo Toscanini. BMG owns over 200 labels worldwide, including Ariola and Arista, in addition to RCA, as well as a large music-publishing operation. In 2000, BMG purchased a 50 percent interest in the file-sharing website Napster; according to some critics, its purpose was to dampen Napster's ability to allow for free swapping of music

files over the web. Over the next two years, Bertelsmann purchased Napster entirely, but by then the service had been so eviscerated by lawsuits that it was as good as dead; subsequently, BMG sold the rights to the Napster name and logo to the software maker Roxio in 2002. In late 2003, BMG was in discussions with Sony Music to merge their two labels; this merger has not yet been approved by regulators as this work goes to press. [Website: www.bertelsmannentertainment.com.]

BESERKLEY (LABEL)

Beserkley Records was formed by Baltimore native Matthew Kaufman and his associate Steve Levine as an outlet for Earth Quake, a Berkeley band under their sponsorship recently dropped from A & M following two poorly selling albums. The band's initial release, "Sitting in the Middle of Madness"/"Security" (Beserkley 5734; 1976), sold approximately 3,000 copies solely by mail and grassroots distribution, enabling Kaufman to release a second single, "Friday on My Mind"/"Tall Order for a Short Guy" (Beserkley 5737; 1976), which enjoyed even greater success. The band's debut album, *8.5* (Beserkley 0047; 1976), reached #151 on the charts despite the absence of the two singles.

Allegedly helped by Kaufman's racetrack winnings, the label built a roster that included four bands — Earth Quake, the Greg Kihn Band, Jonathan Richman & the Modern Lovers, and the Rubinoos — receiving considerable critical raves and a modicum of commercial success. By the 1980s, Kihn was the label's sole moneymaker, placing seven LPs on the charts: *Next of Kihn* (Beserkley 0056; 1978; #145); *With the Naked Eye* (Beserkley 10063; 1979; #114); *Glass House Rock* (Beserkley 10068; 1980; #167); *Rockihnroll* (Beserkley 10069; 1981; #32), featuring "Breakup Song" (Beserkley 47149; 1981; #15); *Kihntinued* (Beserkley 60101; 1982; #33); *Kihnspiracy* (Beserkley 60224; 1983; #15), including "Jeopardy" (Beserkley 69847; 1983; #2); and *Kihntagious* (Beserkley 60354; 1984; #121). Quirky and original, but too mainstream to be marketed as part of the burgeoning punk/new wave movement, the others were unable to become more than cult favorites.

The fact that Beserkley was unable to nurture any talent beyond this core — all of whom became disillusioned and either disbanded or moved on to other labels — was evidently due at least in part to Kaufman's eccentric leadership. He released disco records with nothing in the grooves, initially pursued distribution deals with companies whose names ended in "c" or "y" based on dictates of "the wheel of

BETHEL QUARTET

fortune," and — perhaps of greatest import — concentrated on the European market during Beserkley's formative years.

FRANK HOFFMANN

BETHEL QUARTET

Also known as the Bethel Jubilee Quartet, a male group that recorded for Victor from 1923 to 1928. Members in 1928 were Norman Chestang and W.W. Coleman, tenors; B. McCants, baritone; and Robert Joseph, bass. Their output was religious and inspirational, e.g., "Guiding Angels, Please Guide Me" (their last disc, #47081-2; 21 Sep 1928). [Rust 1970.]

BETTINI, GIANNI (1860-1938)

Italian army officer, born in Novarra. He emigrated to the U.S. in the mid-1880s, marrying an American socialite, Daisy Abbott of Stamford, Connecticut. Although he had no scientific training, he experimented in sound recording, attempting to improve on Thomas Edison's cylinder reproducer. On 13 Aug 1889 he received three U.S. patents (#409,003; #409,004; #409,005 — described in Koenigsberg 1990) for a "spider," an attachment that connected a mica diaphragm to a stylus with a view to capturing more vibrations (detail photo in Marty 1979). The actual effect of the spider was to shift the response downward, strengthening the bass and weakening the treble; it improved the rendition of the female singing voice. Eventually (1902) Edison bought the patent from him. Bettini also patented reproducing devices for copying cylinders (U.S. #488,381, described in Koenigsberg 1990, which gives later patents also). He received a total of 14 U.S. patents in the sound recording field.

In 1891 or 1892 he went into business as the Bettini Phonograph Laboratory in the Judge Building, New York. The firm was a maker of cylinders. His May 1897 catalog styled those cylinders as Micro-Phonograph "Excelsior" Records. Due to the social position of his wife he met the great singers of the day — Enrico Caruso, Nellie Melba, Victor Maurel, Mario Ancona, Giuseppe Campanari, Pol Planáon, and others, as well as Lily Langtree, Ellen Terry, Sarah Bernhardt, and Mark Twain, and engaged them to record for him. He also personally recorded the voices of Pope Leo XIII and ex-President Benjamin Harrison. His sales were good: in 1897 he was able to produce a 12-page catalog, which grew to 32 pages in the next year. He offered more than 200 items of serious music, copied to order (at relatively high prices, \$2-\$6 each; competitors were selling at \$0.50), without mass production. These records are very rare today, since most

of the inventory was destroyed in France during World War II. One expert listening to 15 surviving cylinders pronounced them to be badly sung and poorly recorded (Fassett 1976), but the prevailing view is that they were excellent. Bettini also sold his micro-diaphragm. The music reproducer was available in 1899 in models suitable for the Edison Home or Standard phonograph, as well as for the Columbia graphophone.

Bettini established his name in France in 1898 by selling French rights to the Compagnie Microphonographes Bettini. In 1901 he moved to Paris, setting up the Société des Micro-phonographes Bettini, and leaving the New York firm under new management at 80 Chambers Street. His successors used the name Bettini Phonograph Co. That firm sold a German disc machine called the Hymnophone, the first to have an inside horn (anticipating the Victrola).

Five years later he abandoned the record business. In a 1904 advertisement in *TMW*, he was offering to manufacture discs or to teach anyone how to do so; his address then was 32 Avenue de l'Opéra, Paris. Bettini lost most of his fortune in the stock market crash of 1929, but continued to experiment, working on various projects including television and games. He died in San Remo, Italy, on 27 Feb 1938. [Fassett 1976/7; Favia-Artsay 1955/12 (reprints Bettini catalogs of 1897, 1898, 1899); Feinstein 1984; Koenigsberg; Koenigsberg 1990; Marty 1979 (color photos of Bettini phonographs, and of the spider); Moran 1965 (fullest coverage of the Bettini material); Taylor 1990 (on the operatic records).]

BEVERIDGE, HAROLD N.

(13 JULY 1914- 24 JUNE 1996)

Born in Upper Sackville in New Brunswick, Canada, Beveridge worked summers in the wilds of Quebec, supplying firefighting outposts with radio equipment to raise money for his tuition at McGill University. Described by colleagues as a consummate engineer, inventor, and businessman, who also had a knack for recruiting top talent, he was instrumental in developing radar technology during and after World War II for the U.S. and Canadian navies. Some of his radar innovations are still in use on vessels around the world.

Beveridge worked for Raytheon and Arrow Physics before starting his own company, Defense Research Corporation, in 1960. Although a serious designer of high-tech industrial goods, Beveridge had also long been interested in loudspeakers. He opened a shop in downtown Santa Barbara, California, and from 1972 to 1980 sold about 600 pairs of \$9,000 speaker systems that some knowledgeable enthusiasts believe were the best line-source designs ever made. About

two-thirds of his legendary speakers were sold overseas for as much as \$27,000 a pair.

HOWARD FERSTLER

BIAFRA, JELLO (1959–)

Although best known as the leader of hardcore music pioneers, the Dead Kennedys, Jello Biafra is also a successful indie record label executive, spoken-word artist, and political activist. Born as Eric Boucher ca. 1959 in Boulder, Colorado, he matriculated to the San Francisco punk scene in the late 1970s. There, he formed the Dead Kennedys in 1978 along with guitarist East Bay Ray, bassist Klaus Floride, and drummer J.H. Pelligro. From the beginning, the band used a rapid-fire punk sound in criticizing the Moral Majority, U.S. imperialism and fascism, and America's plastic suburban lifestyle.

Although never a mainstream act, a 12-inch single, "Too Drunk To Fuck"/"The Prey" (Cherry Red 12; 1981), reach the Top 5 in Great Britain despite a radio ban. Following one album on the I.R.S. label, *Fresh Fruit for Rotting Vegetables* (SP 70014; 1981), the band formed its own record company, Alternative Tentacles, to provide a mouthpiece for unsigned hardcore acts. The label was thrust into the public spotlight when the release of the Dead Kennedys' *Frankenchrist* (Alternative Tentacles VIRUS 45; 1985), led to charges of distributing pornography to minors as interpreted by newly revised U.S. obscenity statutes; the controversy centered on inclusion of a poster reproducing H.R. Giger's surrealist painting, *Landscape XX*, which depicted genitalia and various sex acts. Although a hung jury led to dismissal of the case, the protracted struggle undermined band relations, resulting in a breakup after the release of *Bedtime for Democracy* (Alternative Tentacles VIRUS 50; 1986). The Dead Kennedys reappeared in the headlines in 1993 when reissues of their first album were inadvertently included with CDs that were shipped to Christian radio stations nationwide.

Biafra has continued to speak out on political issues, most notably free speech, through solo spoken-word recordings, collaborations with other artists (e.g., D.O.A., NOMEANSNO), and college lecture tours. The bulk of his energies, however, have gone into administering Alternative Tentacles, which continues to release albums by socially conscious underground artists.

FRANK HOFFMANN

BIAMPING

A technique whereby the woofer and tweeter (or tweeter/midrange) in a speaker system are driven by separate

amplifiers. By dividing the audio frequency spectrum between two amplifiers, the effective output headroom of the system is increased. There may also be better damping control over cone motion if an electronic crossover is used, and there may also be adjustment-flexibility advantages with an electronic crossover. Disadvantages of these systems are the increased cost and bulk that result from having a second power amplifier and possibly an electronic crossover network. It is also possible to triamp, which involves separate amplification for the woofer, midrange, and tweeter.

HOWARD FERSTLER

BIANCHI, "PROFESSOR"

This is the identification given to the music director of Columbia Phonograph Co. in the 1890s. Except that he was a former bandmaster, biographical data are lacking BIAS.

In tape recording, a high-frequency alternating current, usually between 75 kHz and 100 kHz, applied to the tape record head along with the audio signal with the purpose of reducing distortion and enhancing signal-to-noise ratio. The reason for applying bias is the nonlinearity of the magnetic recording medium. Various tape types require different amounts of bias. There are no absolute standards for bias or equalization, which leads to problems of compatibility between tapes and equipment. "Biasing" is also achieved by superimposing a magnetic field on the signal magnetic field during recording.

See also **Cassette**

BIAS TRAP

A low-pass filter in a tape relay circuit, intended to reduce any excessive high frequency bias present.

BIELEFELDER KATALOG

The periodic listings of classical and popular recordings in print in Germany; equivalent to the American Schwann set. Beginning in the late 1990s, the catalog has been available on CD-ROM as well as in its print edition.

BIELING, JOHN

(18 MAR 1869–20 MAR 1948)

American tenor, born in New York. He had an unusual recording career, singing very few solos. Most of his work was in quartets, some in duets. Bieling was a member of the first quartet to make records, the

BIG BAND

Manhasset Quartet. The Edison Quartet succeeded it, with Bieling as first tenor. He was also first tenor for the American Quartet, Hayden Quartet, and the Premier Quartet. Many of his duets were with Harry MacDonough. Experiencing voice trouble in 1913, he gave up recording and went into the business end of the industry. He was a representative for the New York Talking Machine Co. in 1918, and in 1920 he opened a Victrola shop in Hempstead, Long Island. Bieling retired in 1926, and died in Hempstead.

Most of the tenor's records were made for Edison and Victor. His earliest Victor was a duet with MacDonough, "The Silver Slipper" (#B-409; 10 Sep 1903); his first Edison cylinder was also with MacDonough, "Somebody's Waiting 'Neath Southern Skies" (#8628; Mar 1904). By 1912 he had made 25 Victors and 12 Edisons in addition to his quartet material, but none were carried into catalogs of the electric era. [Walsh 1942/7-8, 1948/6, 1950/12, with corrections in 1952/5.]

BIG BAND

The large swing orchestra that dominated popular music from about 1936 to about 1950; representing an international phenomenon most pervasive in the United States and in Britain. Some of the big bands had started out as smaller jazz groups in the 1920s. The typical ensemble consisted of a four- or five-piece rhythm section (piano, double bass, guitar, and percussion), four or five saxophones, three or four trumpets, and three or four trombones. There was usually a pair of solo singers (a male and a female), and often a vocal group. In America the outstanding big bands were those of Louis Armstrong, Desi Arnaz, Charlie Barnet, Count Basie, Bunny Berigan, Ben Bernie, Will Bradley, Les Brown, Henry Busse, Benny Carter, Larry Clinton, Coon Sanders, Bob Crosby, Xavier Cugat, Jimmy Dorsey, Tommy Dorsey, Eddy Duchin, Duke Ellington, Shep Fields, Dizzy Gillespie, Benny Goodman, Glen Gray and the Casa Loma Orchestra, Lionel Hampton, Phil Harris, Coleman Hawkins, Erskine Hawkins, Horace Heidt, Fletcher Henderson, Earl Hines, Ina Ray Hutton, Harry James, Isham Jones, Spike Jones, Dick Jurgens, Sammy Kaye, Hal Kemp, Stan Kenton, Wayne King, Gene Krupa, Kay Kyser, Ada Leonard, Ted Lewis, Guy Lombardo, Jimmie Lunceford, Glenn Miller, Vaughn Monroe, Russ Morgan, Ray Noble, Red Norvo, Jan Savitt, Artie Shaw, Jack Teagarden, Claude Thornhill, Chick Webb, Ted Weems, Lawrence Welk, Paul Whiteman, and Teddy Wilson.

Britain had its own big bands, such as that of Lew Stone, Jack Hylton, Ambrose and His Orchestra, and Roy Fox; Ray Noble was British by birth, and had established himself in the U.K. before leaving for the

U.S. in September 1934. Many American groups performed in London.

Although a certain sound — based on tightly harmonized brasses, an ensemble swing, and a pervasive dance beat — characterized these bands, there were many subtypes among them.

The most sophisticated (as we see them now) were the jazzy groups with complex arrangements and freely improvised solos: Armstrong, Basie, Tommy Dorsey, Ellington, Goodman, Kenton, Miller, and Shaw. Most of the bands fell into a less venturesome category of sweet-swing. Some became so sweet that the swing was lost: e.g., Brown, Duchin, Gray, Kaye, and Lombardo. A number were essentially accompanists for the great soloists who led them: Hawkins, James, Krupa, Norvo, and Thornhill.

The famous Latin bands were led by Arnaz and Cugat. Two "all-girl" orchestras were headed by Hutton and Leonard. Comic elements were characteristic of a few, like Spike Jones and Kyser.

Most of the great vocalists came from the bands; many remained in that milieu, while others went on to solo careers. Bing Crosby started with Whiteman (but left him before the big band era); Frank Sinatra with Tommy Dorsey; Ella Fitzgerald with Webb. Peggy Lee was with Goodman; Doris Day with Brown; Perry Como with Weems. Dinah Shore made early records with Cugat.

With the end of the big band era there came also the end of the time when one style of popular music was appealing to all age groups. The same quintessential image of the period emerged from high-school proms as much as from the great adult ballrooms: a vast throng of dancers, moving "cheek to cheek" to a slow fox-trot, while a singer gave forth a romantic ballad, followed by a dreamy instrumental chorus. [Fenton 1971; Rust 1972; Simon 1974.]

BIG TOP (LABEL)

The New York-based Big Top was formed in the late 1950s by the Aberbach brothers. The label — which issued popular music, rock 'n' roll, and comedy — was run by their nephew, Johnny Bienstock. The majority of recordings were made available in the singles configuration; comparatively few albums were released over the years. The bulk of these titles were multitrack studio productions, still a rarity during that time period.

The artist roster included Andrea Carroll, Don Covay, Jamie Coe, Don and Juan, Miss Toni Fisher, Little Lou Fowler, Johnny Gibson, Johnny and the Hurricanes, Lou Johnson, Maximillian (aka Max Crook), Bobby Pedrick, Jr. (aka Robert John), Cliff Richard, the Shepherd Sisters, Arlene Smith (lead

singer of the girl group, the Chantels), Ocie Smith (aka O.C. Smith), Travis and Bob, Sammy Turner, and the V.I.P.s.

Del Shannon — whose hits included “Runaway” (Big Top 3067; 1961; #1), “Hats Off to Larry” (Big Top 3075; 1961; #5), “Little Town Flirt” (Big Top 3131; 1962; #12, and the first Beatles song to chart stateside, “From Me to You” (Big Top 3152; 1963; #77) — was the label’s biggest star. His managers, producer Harry Balk and Irving Micahnik, supplied a number of Detroit-area acts to Big Top, taking care to retain song publishing rights. When the company ceased operation in the mid-1960s, the Balk and Micahnik partnership also fell apart. Balk would go on to manage Chubby Checker as well as forming labels like Impact (1966), Inferno, and Twirl.

The moniker was revived in the 1990s by a domestic postpunk label whose artists include the Boom, Forty, June of 44, Les Savy Fav, New Sweet Breath, Orange Drive, the Screamin’ Cheetah Wheelies, Tugboat Annie, the Up On In, and the Wicked Farley.

FRANK HOFFMANN

BIG TREE (LABEL)

SEE MORRIS, DOUG

BIGARD, BARNEY

(3 MAR 1906–27 JUNE 1980)

American jazz clarinetist, born in New Orleans as Albany Barney Leon Bigard. He started as a saxophone player, working in New Orleans and from 1925 in the Chicago area. He joined King Oliver and began to emphasize clarinet, developing a particularly liquid tone and a vivid low register. In 1927 he entered into a 15-year association with Duke Ellington, and made outstanding records like “Mood Indigo” — his own composition — (Brunswick 4952; 1930), and “Clarinet Lament” — a work written for him by Ellington, said to be first jazz concerto for solo instrument and orchestra — (Brunswick 7650; 1936). Leaving Ellington in 1942, he freelanced, then became one of the Louis Armstrong All-Stars (1947–1952, 1953–1955, 1960–1961) making a world tour and recording notable discs of “Tea for Two” (Decca 9-28099/28100; 1947), “C-Jam Blues” (Decca 9-28102; 1947), and “Just You, Just Me” (Decca 9-28175; 1951). He moved to Los Angeles in 1956, playing with his own ensemble, and from 1969 giving lectures on jazz to university students. He continued performing through the 1970s, in Europe and America. Bigard died in Culver City, California.

BIGGS, E. POWER

(29 MAR 1906–10 MAR 1977)

British/American organist, born in Westcliff. He studied at the Royal Academy of Music, and came to the U.S. in 1930, becoming a citizen in 1937. His concert and recording career did much to establish the organ as a solo instrument outside of the church environment, and to bring Baroque music into the repertoire. Beginning on the Technichord label in 1938, then going to Victor, Biggs recorded Bach on an Aeolian-Skinner organ at Harvard University; he also made a series of discs illustrating “Historic Organs of England” and recorded on organs in other European cities. From 1942 to 1958 he gave weekly radio recitals from Harvard, then finally gave up concert work because of arthritis. He died in Boston in 1977. He never performed on electric organs, but did enjoy the harpsichord; among his odd recordings are some Scott Joplin ragtime pieces on a pedal harpsichord made for him by John Challis. Columbia issued an LP album illustrating the great variety of his interests in 1981 (35180).

BIHARI BROTHERS

Jules Bihari (born September 9, 1913; died November 1984), Saul Bihari (born 8 Mar 1920; died February 1975), and Joe Bihari (born May 30, 1925).

They grew up in the South and the Midwest, but their father was of Hungarian Jewish descent, and their grandfather had been a professor at the University of Budapest. Together, Jules, Saul, and Joe started the Los Angeles-based Modern Records in early 1945. Their older brother, Lester (born 12 May 1912; died September 1983) started his own label, Meteor, in Memphis in 1952 but folded it five years later to join his brothers as sales manager. Modern became one of the leading independent jazz and blues labels. B.B. King was their major artist. They launched subsidiaries such as Kent and RPM, and a budget LP label, Crown. The brothers broadened their enterprise to manufacturing and distribution before selling the catalogs in 1980.

COLIN ESCOTT

BIKEL, THEODORE (2 MAY 1924–)

Austrian/American actor and folksinger, born in Vienna. He went with his family to Palestine in 1938, becoming a British subject. While working as a farm laborer he began a lifelong study of languages. He was in theater work in Tel Aviv from 1943 to 1947, and then in London. Bikel appeared in *A Streetcar Named Desire* in London, and in the film *African Queen* (1951), as well as other motion pictures during the 1950s. His major debut as a folksinger took place in

BILL, EDWARD LYMAN

Town Hall, New York, on 5 Oct 1958; he recorded this concert for Elektra and commenced an international concert career. His most important stage role was Baron von Trapp in the *Sound of Music* (1959). He became an American citizen in 1961.

BILL, EDWARD LYMAN (5 JUNE 1862–1 JAN 1916)

Born in Lyme, Connecticut, Bill served in the Dakota State Militia, and was also said to have served with Teddy Roosevelt's Rough Riders. Apparently based on this military service, Bill took to calling himself "Colonel E.L. Bill" by the time he came to prominence in New York City life in the early 1900s. Bill served as president of the Police Board (noted in a 1903 article in *The New York Times*), and, in 1904, was treasurer of the New York State Commission to the St. Louis World's Fair. Bill was the founder, editor, and proprietor of the journal *Talking Machine World*, 1905–1916, which he developed out of the earlier *Music Trade Review*, which he purchased sometime earlier. His son, Raymond Bill, was also an editor of *TMW*. Bill also published books on industry topics, including a guide to piano tuning. He had a large estate in Larchmont, New York, which his son, Edward Jr., converted into the Bonnie Briar Country Club in 1921. Bill died in New Rochelle, New York.

REV. CARL BENSON

BILLBOARD (MAGAZINE)

Billboard has long been recognized as the leading entertainment trade weekly worldwide. Although documenting record industry developments has been its primary focus in the post-World War II era, the periodical represents a compendium of American popular culture since the late 19th century, covering at one time or another burlesque, the circus, fairs, medicine shows, minstrel performances, vaudeville, wild west spectacles, rodeos, zoos, lyceum and chautauqua, theatrical productions, musicals, motion pictures, skating rinks, bathing establishments, and coin-operated machines.

The publication, originally known as *Billboard Advertising*, was founded in Cincinnati by William H. Donaldson and James F. Hennegan. In the first issue (1894), editor Donaldson stated that it would be "devoted to the interests of the advertisers, poster printers, billposters, advertising agents, and secretaries of fairs." By 1897, the masthead title was changed to *The Billboard* (changed to simply *Billboard* in 1961) in an effort to reflect its expanding editorial concerns.

Following a period of separation from the publication due to editorial differences, Donaldson purchased

Hennegan's interest in the enterprise in 1900 in order to forestall bankruptcy. He converted it from a monthly to a weekly effective 5 May 1900, thereby placing an added emphasis on the timely reporting of entertainment industry news. However, he also strengthened other types of coverage, including insightful, hard-hitting editorials and regular columns or departments concentrating on the leading show business fields. Offices were opened in New York and Chicago early in the 20th century as a means of facilitating immediate, accurate dissemination of information. The publication's close ties with the recording industry originated with coverage of coin-operated entertainment devices. From intermittent ads and news in 1899, *Billboard* expanded to a section entitled "Amusement Machines" in March 1932. With the jukebox an increasingly important segment of this field, the magazine inserted a "Record Buying Guide" beginning 7 Jan 1939 to assist in the selection process. Charting — perhaps the best known aspect of *Billboard* — first appeared as "Tunes Most Heard in Vaudeville Last Week," in the early 1900s. With the advent of sound recordings, *Billboard* prepared weekly listings of the top sellers for the major labels. By 1938, the earliest form of a national survey combining all recordings and companies appeared, the "Music Box Machine" charts, supplemented later by the "Best Sellers in Stores" (20 July 1940–), and "Most Played by Disc Jockeys" (1945–) charts. Following World War II, the number of record charts proliferated to reflect the growing sophistication and importance of the music business, encompassing various genres (e.g., country, rhythm and blues, pop, classical, children's releases), formats (singles, LPs, radio, jukeboxes, sheet music, etc.), and locales. By 1987, *Billboard* would include eight weekly charts for albums alone: "Black," "Compact Discs," "Country," "Hits of the World," "Latin," "Rock Tracks," "Spiritual," and "Pop."

The publication has incorporated a number of physical format changes in order to increase speed of publication and enhance its visual appeal. A five-column tabloid newspaper layout was introduced 4 Nov 1950, while coated paper was first used with the 5 Jan 1963 issue. The latter development opened the way to photojournalism and four-color halftone illustrations.

While *Billboard* has continued to offer a fairly consistent breakdown of features, columns, departments, reviews (generally of a descriptive, promotional nature), charts, and advertisements, augmented by regularly appearing supplements (e.g., "Billboard Campus Attractions," "Billboard International Directory of Recording Studios"), the content is constantly changing to reflect the dynamic flux of the entertainment industry. The editorial and news material is provided largely by staff writers, with additional contributions by experts within the trade.

Billboard has further enhanced its profile by branching out into book publishing in cooperation with New York's Watson-Guption. The long-running syndicated radio and television series, *American Top Forty*, based much of its information on the publication's chart data. Furthermore, a number of chart compilers have developed their own reference tools from the weekly charts, most notably Joel Whitburn, owner of the Menomonee Falls, Wisconsin-based publisher, Record Research.

FRANK HOFFMANN

BINAURAL RECORDING

SEE STEREOGRAPHIC RECORDING

BINAURAL SOUND

Two-channel sound in which each ear receives only one of the channels. To record binaurally, microphones are mounted on a dummy head, possibly with actual models of human ears on it. Ideally, playback is through headphones at the same respective sound levels that were received by the microphones. One of the early experimenters was Alexander Graham Bell (in ca. 1881). During World War I, a binaural apparatus consisting of two receiving trumpets spaced several feet apart, connected by rubber tubes to the ears of an operator, was used to locate enemy airplanes. The principle was applied in World War II in underwater submarine detection. Radio use of binaural sound began experimentally in Germany in 1925, in broadcasts from the Berlin Opera House. In the same year there were binaural transmissions from New Haven, Connecticut, on station WPAJ. Listeners used two radio sets, tuned to slightly different frequencies, each attached to a tube going to one ear. The need for two radio sets was a deterrent to progress and binaural work was soon abandoned, despite the attractive results that had been achieved.

At the Chicago Century of Progress Exposition in 1933, General Electric engineers demonstrated a binaurally equipped dummy named Oscar (originally displayed in 1932 at the Academy of Music in Philadelphia). Oscar's two microphones picked up sounds from various parts of the room, which could be precisely located by listeners with binaural headphones. With the rise of stereo tape-recording in the 1950s, the term binaural became confused with stereo, and since stereo did not require special headphones, the binaural systems faded from sight for two decades.

There is a significant difference between the binaural and stereophonic modes: with binaural listening the listener wears earphones that critically separate left ear

sounds from right ear sounds — *as if he were listening with two ears at the microphone location*. This gives dimension and depth to the music, but... [also] a fatiguing reaction caused by the violation of the normal listening position. With stereo listening you are transported to the best seat in the concert hall, for the effect is *like listening with two ears at the audience location*. Here we find that all discomfort has vanished, and not only the music, but the beneficial tonal qualities of the concert hall itself are included in the living room reproduction (Crowhurst 1960).

In the 1970s some experimental discs were made in Japan that provided remarkable environmental realism. But problems inherent in the system remain to be solved. For example, a sound source moving perpendicularly across the front of the dummy head will produce in the listener the effect of a source describing an arc rather than a straight line; and a circle around the microphones becomes an oval to the listener. Experiments of the 1980s have included Hugo Zuccarelli's "holophonics" — a digital system based on the way we perceive (rather than receive) sound. A firm called Optimax III has made "total dimensional" sound systems for motion pictures and television, using individual stereo headsets. [Crowhurst 1960; Sunier 1986.]

See also **Stereophonic Recording; Surround Sound**

BINDER

A glue used to fasten magnetic particles to the base material on a tape. Thickness in use for open-reel tape is 0.56 mil; for cassette tape it is 0.24 mil. In preparation of the tape, the coating is mixed with the binder — both wet — so that the magnetic particles are evenly dispersed. The binder when dry has to remain flexible, and it must adhere firmly to the base without attaching itself to adjacent layers when the tape is tightly wound.

BINGHAM, RALPH

(2 AUG 1870–27 DEC 1925)

American comedian, born in Richmond, Virginia. He was a child prodigy on the violin, but soon became more interested in monologues. He became famous for his Negro and Jewish dialect stories. In 1915 he recorded "Mrs. Rastus at the Telephone" (Victor 17818), and went on to make seven other discs for the label. The final effort was "Mrs. Rastus Johnson's Joy Ride" (Victor 18517; 1919), One of the Mrs. Rastus monologs was in the catalog of 1927, along with "Goldstein behind the Bars" (#18231). Bingham died in Philadelphia. [Rust 1989; Walsh 1964/4.]

WOLF/BINGOLA (LABEL)



Bingola label, c. late '20s. Courtesy Kurt Nauck/Nauck's Vintage Records

WOLF/BINGOLA (LABEL)

A rare disc issued by the Bing-Wolf Corp. of New York, between ca. 1927 and ca. 1930. It was associated with Grey Gull. Only eight issues have been traced, all dance and popular numbers. One is "Last Rose of Summer" sung by Arthur Fields (#2703A). [Barr 1982; Kendziora 1987/3; Rust 1978.]

BIRD SOUNDS

SEE *ANIMAL IMITATIONS*; *WHISTLING RECORDINGS*; *WILDLIFE SOUNDS ON RECORDS*

BIRNBAUM, THEODORE B. (27 FEB 1865–19 MAR 1914)

British recording industry executive, born in Islington, London. He and his brother went into the importing business, and evidently included talking machines among their stock. In 1898 he became associated with William Barry Owen, who was establishing the Berliner interests in London in what was to be the Gramophone Co. When that firm took over the International Zonophone Co. of Berlin in 1903, Birnbaum was made director there. Birnbaum became managing director of the Gramophone Co. in April 1904, remaining with the organization until 1910, when he returned to the import business. He was designer of the Gramophone angel trademark. [Martland 1989.]

BIS (label). Begun in 1973, in Sweden, by Robert von Bahr, who served as owner, producer, and chief engineer, BIS has earned a reputation as a company that produces recordings of very high technical and artistic quality. BIS specializes in both mainstream composers and more obscure ones, such as Aagesen, Hashimoto, Orban, Tubin, Tomasson, and Zechner. Unlike what one finds with some other companies, every recording BIS has produced remains available. [Website: www.bis.se.]

HOWARD FERSTLER

BISCUIT

The plastic material from which a commercial disc is pressed.

See also *Disc*

BISHOP, MICHAEL (14 JUNE 1951–)

Bishop has been engineering award-winning recordings since the 1970s. He was awarded the 1997 Grammy award for best-engineered classical recording, received two Grammy nominations in 1999, and again for 2000 in the same category, and is a member of AES, MPGA, NARAS, ASCAP, AQHA, and NRHA. As part of the engineering and production team at Telarc Records, he has overseen many major orchestral, jazz, blues, and pop recordings. Having worked on pop quadrasonic mixes in the early 1970s, he has applied that early experience to produce some of Telarc's most notable surround-sound releases. He currently lives in Burton, Ohio, with his wife, country music singer Wendy Bishop, and their two daughters.

HOWARD FERSTLER

BISPHAM, DAVID SCULL (5 JAN 1857–2 OCT 1921)

American baritone, born in Philadelphia. He made his operatic debut in London, in 1891; sang first at the Metropolitan Opera in 1896, and remained on the roster there until 1903. His voice is heard on two of the Mapleson cylinders (1903), and on Columbia cylinders beginning in 1906. A favorite recording was Schubert's "Der Wanderer" (Columbia #36476; 1913 [with orchestra; earlier with piano in 1906]). His final records were "Dixie" (Pathé 11526B; 1917), and "The Two Grenadiers" (Pathé #025099A; 1918). Bispham died in New York. [Hervingham-Root 1970.]

BIZARRE (LABEL)

SEE *ZAPPA, FRANK*

BJORK (21 OCT 1965–)

From child prodigy to darling of avant-garde rock enthusiasts, Bjork (born Bjork Guðmundsdóttir) has long been Iceland's most prominent recording artist. Her recorded legacy embraces the cream of the Iceland music scene as well as notable foreign musicians such as 808 State, Talvin Singh, Tricky, and the Brodsky Quartet.

Radio airplay of Bjork's treatment of the Tina Charles hit, "I Love to Love," led to an eponymous LP (Falkinn 006; 1977), which included covers of materials by the Beatles, Melanie, Edgar Winter, and others. Following time as vocalist/keyboardist with the band Exodus, she departed with bassist Jakob Magnusson to form Tappi TiKarrass (translation: Cork the Bitch's Arse) in 1981. The group released two hardcore punk albums, *Bitid Fast I Vitid* (Spor 4; 1981), and *Miranda* (Gramm 16; 1983). After several more short-term collaborations, she joined the Goth rock ensemble, Kukl ("Sorcery" in English), which produced two LPs for the British label, Crass: *The Eye* (#1984-1; 1984), and *Holidays in Europe (The Naughty Nought)* (#4; 1986).

Bjork's next project of note, the Sugarcubes, would go on to achieve international stardom, beginning with the debut single, "Birthday" (One Little Indian 7; 1987; #65 UK), lauded for her wailing vocals and ethereal production accented by a throbbing bass figure. The group recorded four albums over a five-year period, including the jazz-inflected *Life's Too Good* (Elektra 5; 1988; #54 US, #14 UK); the grating post-punk exercise, *Here Today, Tomorrow, Next Week* (Elektra 15; 1989; #70 US, #15 UK); *Stick Around for Joy* (Elektra 30; 1992; #95 US, #16 UK), with its frenetic melodic constructions and brass-heavy arrangements, including the funky, dance-oriented "Hit" (Elektra 62; 1991; #17 UK); and a collection of club remixes, *It's It* (Elektra 40; 1992; #47 UK; CD edition included bonus disc).

Embarking on a solo career, Bjork enlisted a wide range of alternative dance artists to produce the house-oriented *Debut* (Elektra 31; 1993; #61 US, #3 UK). Although far more popular in Europe, she edged closer to the U.S. pop mainstream with the eclectic *Post* (Elektra 51; 1995; #32 US, #2 UK). The experimental *Homogenic* (Elektra 71; 1997; #28 US, #4 UK), represented a stylistic retrenchment of sorts, featuring more subdued electronic textures, and a lyrical bent somewhat tempered by her willful weirdness. More likely to be heard these days on film soundtracks than via the radio or dance venues, Bjork remains one of the most interesting — and unpredictable — artists currently active within the rock scene.

FRANK HOFFMANN

BJÖRLING, JUSSI**(5 FEB 1911–9 SEP 1960)**

Swedish tenor, born Johan Jonatän Björling in Stora Tuna. He began to sing as a child in the family's male quartet, which toured Sweden in 1916–1919 and then came to the U.S. The group spent four years in the East and Midwest, singing mostly for Swedish immigrants. They recorded some hymns and traditional songs for Columbia in 1920. When the father died in 1926, young Björling worked at odd jobs in Stockholm until he was able to secure some singing engagements and make radio broadcasts; eventually he got a recording contract with EMI (the first record accepted was "Torna a Sorrento," HMV X-3376; 1929). On 21 July 1930 he made a debut at the Royal Opera in a small part; in the next month he sang Don Ottavio, and he remained with the company until 1939. EMI (Swedish HMV) recorded him doing film songs and popular items in 1932–1933, under the pseudonym of Erik Odde.

Björling's Metropolitan career began on 24 Nov 1938, as Rodolfo; he remained — with a wartime interruption, and minus the 1954/1955 season — until 1957, gaining recognition as one of the greatest singers of the French/Italian repertoire since Enrico Caruso. He made outstanding recordings of all the major arias, for Victor and HMV, and complete recordings of *Aida* (with Zinka Milanov), *Bohème* (with Victoria de los Angeles), *Cavalleria rusticana* (twice: with Zinka Milanov in 1953 (Victor CD 6510), and with Renata Tebaldi in 1958 (Victor LSC-6059)), *Madama Butterfly* (with de los Angeles), *Manon Lescaut* (with Licia Albanese), *Rigoletto* (with Roberta Peters), and *Trovatore* (with Milanov). All are available on CD. A 1959 album on the London label, *Björling in Opera*, won a Grammy. EMI issued an LP album of three discs in 1979 covering the recordings of 1919–1936: *The Art of Jussi Björling* (#715). He died in Sialf, Sweden. [Henrysson 1984; Stroff 1988.]

BLACK PATTI (LABEL)

A short-lived label (issued for only six months in 1927), now extremely rare and sought after; recorded by Gennett and produced by the Chicago Record Co. The name of the label came from a legendary Black soprano of the later 19th century, Sissieretta Jones, who had been compared to Adelina Patti. Of the 55 known issues (110 sides), most are jazz, blues, and sacred. Rust (1978) describes the label itself as "purple, framed and printed in gold and embodying on the entire top half a peacock with tail feathers fully extended." One writer describes the label as the most beautiful in all recording history — "a masterpiece of art" (Henriksen 1979). The first release of Black Patti

BLACK SABBATH



Black Patti label; this artwork was later adopted by Nick Perls for his blues reissue label, Yazoo. Courtesy Kurt Nauck/Nauck's Vintage Records

records, as announced in the *Chicago Defender* (a newspaper for the Black community) on 21 May 1927, consisted of 24 10-inch discs, numbered 8001–8024, selling by mail at \$0.75 each. Artists included Papa Harvey Hull, Mozelle Alderson, Hattie Garland, Eloise Bennett, and Trixie Williams. [Henriksen 1979.]

BLACK SABBATH

Black Sabbath is the quintessential heavy-metal band; its members helped develop many of the genre's major conventions, including the blues-rock-derived signature riff, power chording, pronounced guitar feedback and sustain, ponderously slow tempos, wailing melismatic vocals, aggressive posturing, and escapist song lyrics. Frontman Ozzy Osbourne would become the charismatic spokesman for legions of working-class youth who didn't feel comfortable with the more abstract, elitist concerns of progressive-rock artists.

Black Sabbath's original members — Osbourne, guitarist Tony Iommi, bassist Terry "Geezer" Butler, and drummer Bill Ward — were all born in Aston, an industrial section of Birmingham, England. While acquainted with each other since childhood, they played in different groups until becoming aware of their musical compatibility. The foursome combined forces in the late 1960s as Earth; however, after being informed in 1969 that a more established mainstream rock act had already staked a claim to the name, they became Black Sabbath.

Steady touring, especially on the European mainland where the group first gained a large following, led to a recording contract with Vertigo (a label owned by the Dutch recording company, Polydor). Their debut album, *Black Sabbath*, was released in the U.S. by Warner Bros. (#1871; 1970; #23). It remained on the charts for 65 weeks, providing the needed momentum to propel the next LP, *Paranoid* (Warner Bros. 1887; 1971; #12) to triple platinum status. Although generally damned by critics for their heavy-handed approach, Black Sabbath's album continued to sell well throughout the 1970s, with the following achieving platinum sales: *Master of Reality* (Warner Bros. 2562; 1971; #8), *Black Sabbath, Vol. 4* (Warner Bros. 2602; 1972; #13), *Sabbath Bloody Sabbath* (Warner Bros. 2695; 1974; #11), and *We Sold Our Soul for Rock 'n' Roll* (Warner Bros. 2923; 1976; #48).

Osbourne's decision to embark on a solo career in 1978, however, caused many of the group's fans to defect with him. The group — with Iommi and Butler continuing to cowrite much of the material — limped through a transitional phase, first with American Ronnie James Dio (previously with Elf and Ritchie Blackmore's Rainbow), as lead singer between 1979–1982 (he would return from 1990 to 1993), followed by countless other configurations, most notably with former Deep Purple vocalist Ian Gillan (1983–1984), and a revamped lineup featuring sole original member Iommi and singer Glenn Hughes, whose resume included Trapeze, Deep Purple, and the Hughes-Thrall band (1985–1987).



Black Sabbath album cover featuring typical gothic Heavy Metal imagery. Courtesy Frank Hoffmann

After more than a year of band inactivity, Osbourne, Butler, and Iommi reunited to headline Ozzfest 1997. Ward was invited to participate in two December 1997 shows in Birmingham; the resulting live album, *Reunion* (Epic; 1998; #11), earned the group its first Grammy for best metal performance ("Iron Man"). Black Sabbath continued touring through December 1999. As of mid-2001, the band was still together, working on a studio album.

FRANK HOFFMANN

BLACK SWAN (LABEL)

Records made by the Pace Phonograph Corp., established in 1921 in New York. The "Black Swan" for whom the label was named was the soprano Elizabeth Taylor Greenfield (1809–1876). It was founded by music publisher Harry Herbert Pace (1884–1943), who from 1913 to 1920 was the partner of the composer W.C. Handy in the Pace & Handy music publishing company. Its mission was to appeal to Black listeners with a roster of Black artists, without the stigmatic tag of race records used by white-owned companies for their Black performers. It had a distinguished board of directors, including activist author W.E.B. DuBois, and employed jazz musician Fletcher Henderson as recording manager and noted composer William Grant Still as music director. Black Swan records were in fact pressed by the Olympic Disc Record Corp. of Long Island, and a number of issues appear under both the Olympic and Black Swan



Black Swan label. Courtesy Kurt Nauck/Nauck's Vintage Records

labels, identical except for the names of the performers. (Examples are cited in Kendziora 1955.) Pace and John Fletcher purchased the Olympic Corp. in July 1922 and renamed it Fletcher Record Co., Inc. The new firm pressed Black Swan discs thereafter. Pace changed the firm's name to Black Swan Phonograph Co. in February 1923, but a few months later ceased producing records. In April 1924 the label was acquired by Paramount, which reissued many of the pressings as a race series. Color scheme of the label was black and gold, with a swan — not always black — at the top. Ethel Waters and Trixie Smith made successful records for the firm. [Andrews; Kendziora 1955; Kunststadt 1987; Rust 1978.]

BLACKER, GEORGE

(8 FEB 1931–6 JULY 1990)

American disc jockey and writer, known for his extensive research and publication in the field of recorded sound; born in Cheshire, Connecticut. Blacker wrote primarily for the journal *Record Research*, contributing regularly from 1955 to 1990. His column "Discoing In" was the outlet for much of his investigations. For articles in other periodicals, see the Bibliography. Blacker died in Cheshire, Connecticut.

BLACKMAN, J. NEWCOMB

(1881–3 JULY 1958)

American record industry executive, born in New York. After some work in the bicycle business, he formed the Blackman Talking Machine Co. in 1902. He was vice president of the Eastern Talking Machine Jobbers Association in 1907, 1909, and 1910; later president of the National Association of Talking Machine Jobbers (1912 and 1917). He was a friend of Thomas Edison. The record brush was his invention. With the decline of the record business in the 1930s, Blackman diversified his interests: selling electrical appliances, then consulting in the investment field. He died in Brightwaters, Long Island, New York, a community he had helped to incorporate. [Koenigsberg.]

BLACKMAN TALKING MACHINE CO.

A New York firm established on 1 May 1902 by J. Newcomb Blackman; it sold records and players, Edison products at first, then exclusively wholesale Victor products after April 1919, in addition to Playrite and Melotone steel needles and Cleanrite record brushes. The name was changed to Blackman Distributing Co. in 1926 or 1927, marking a diversification of inventory to include various electrical appliances. The firm was liquidated in 1932.

BLACKMER, DAVID E.
(11 JAN 1927–21 MAR 2002)

Born in Urbana, Ohio, Blackmer graduated from High Mowing School in Wilton, New Hampshire, studied radar electronics while in the U.S. Navy, and went on to do formal studies at both MIT and Harvard University. After graduation, he worked as an engineer for a number of companies, including Lafayette Radio, Trans-Radio Recording Studio, Epsco, HiCon Eastern, and Raytheon. He was also involved in the design of the telemetry systems for the Mercury space program. An inventor by nature, he held many patents, and went on to found three different audio electronics companies: dbx, Kintek, and Earthworks, with the first of the three being responsible for a number of major recording-technology breakthroughs. He was also a cofounder of Instrumentation Laboratory, a medical-electronics company. A hands-on engineering generalist with a love for precision sound recording and reproduction technologies, he was a longtime fellow of the Audio Engineering Society and a life member of the Institute of Electrical and Electronics Engineers.

HOWARD FERSTLER

BLACKWELL, "BUMPS"
(23 MAY 1918–9 MAR 1985)

Born Robert A. Blackwell in Seattle, Washington, Blackwell is famous for his work as an arranger/producer for Los Angeles-based Specialty Records in the 1950s. After World War II, Blackwell settled in Los Angeles to study composition at UCLA, leading a band and writing and performing in local revues at night. Blackwell hooked up with Art Rupe of the small Specialty label by the mid-1950s, and was sent to New Orleans to search for talent. There he discovered Little Richard, helping him rewrite and record his first major hit, "Tutti Frutti" (#17 pop, 1956; Specialty 561). He oversaw most of Richard's classic recordings, cowriting many of his songs (including his next release and greatest success, the #6 pop, #1 R&B hit, "Long Tall Sally"), and also managing him. Back in LA, he worked as a producer of the gospel group the Soul Stirrers's sessions for Specialty, encouraging the group's lead singer to try secular material, and thus launching the career of Sam Cooke. He worked with Cooke at Keen Records through 1959. Blackwell later produced other musicians, including Johnny "Guitar" Watson and Aaron Neville; his last production work was as coproducer of the title track of Bob Dylan's 1981 album, *Shot of Love*. He died of complications from pneumonia in Los Angeles in 1985.

CARL BENSON

BLACKWELL, CHRIS (22 JUNE 1937–)

London-born Chris Blackwell developed a love of jazz during a six-month visit to New York in 1959. Soon after, in Jamaica, Blackwell recorded a group led by blind pianist Lance Hayward and released the cuts on newborn Island Records. The company's first office was in Jamaica, and its first hit single was "Little Sheila" (Laura Aiken), a number one hit in that country. Over time, Island Records sold more in England than on the island, and Blackwell moved his headquarters to London in 1962. Even so, Blackwell concentrated on recording Jamaican-sourced Ska during the 1960s, while simultaneously producing pop records through his BPR Music production company. Island's first major pop signing was the Spencer Davis Group, featuring young organist/vocalist Stevie Winwood; in 1967, Blackwell signed on as manager for Winwood's new band, Traffic, and Island began solely focusing on rock acts, turning over its back catalog of Jamaican recordings to Trojan Records. Island was known for its innovative marketing and packaging; it was one of the first labels to emphasize the rock album over singles, and Blackwell gave his artists considerable freedom, as well as nurturing many artists who never achieved great chart success. In the early 1970s, Island's biggest act was singer-songwriter Cat Stevens. Then, the company returned to its first focus with the release of the Wailers's *Catch a Fire* album. Group leader Bob Marley became the label's hottest act, and reggae helped propel it to new heights of financial success. By the 1980s, however, the label had a diversified lineup, including long-time artist Steve Winwood (who enjoyed a commercial comeback mid-decade) along with new acts like U2. In 1989, Island was sold to A&M, then a division of Polygram. It is now part of the Universal Music Group.

BRAD HILL

BLADES, RUEBEN (16 JULY 1948–)

Widely acknowledged to be one of the foremost innovators and interpreters of salsa, Ruben Blades has been instrumental in disseminating the genre worldwide. His role as a musical ambassador is based largely on his high profile as an actor (e.g., *The Milagro Beanfield War*, *Mo' Better Blues*), and political activist.

Born in Panama City, Blades first attracted attention as the vocalist/songwriter for the Willie Colon combo. Their collaborations included *Siembra* (Fania 537; 1978), one of the most popular salsa albums in history. In 1982, Blades formed his own band, Seis del Solar, recording for both the Latin-jazz label Fania and Elektra. His *Buscando America* (Elektra 60352; 1982), was a salsa milestone, employing synthesizers and other rock instrumentation as well as literate, politically oriented lyrics — by Colombian author Gabriel

Garcia Marquez — in opposition to the more frivolous subject matter typifying the genre. Two of his early recordings — *Escenas* (Elektra 60432; 1986; included a duet with Linda Ronstadt), and *Antecedente* (Elektra 60795; 1988) — won the Grammy award for best tropical Latin performance. His first all-English album, *Nothing But the Truth* (Elektra 60754; 1988), spent almost two months on the *Billboard* pop albums chart, reaching as high as number 156.

Blades's music career was temporarily shelved in the early 1990s due to political activities; he founded Papa Egoro, a Panamanian political party concerned with social inequities, in 1992, and ran (unsuccessfully) for the Panamanian presidency in 1994. However, he returned to win another Grammy for *La Rosa de los Vientos* (Sony Discos International 81992; 1996), while *Tiempos* (Sony Discos International 81384; 1999) was acclaimed by critics to be his finest effort to that point.

FRANK HOFFMANN

BLAINE, HAL (5 FEB 1929–)

Hal Blaine may have the longest resume of any session drummer of the rock era. At a time when rock groups attempted to perpetuate the myth that they played all the instruments on their records, Blaine was used in “countless thousands of recording dates with virtually every big name in the business” [Jud Cost. Liner notes to *Deuces*, “*T’s*,” *Roadsters & Drums*], including the Beach Boys, the Byrds, John Denver, Duane Eddy, Jan and Dean, Dean Martin, Elvis Presley, Paul Revere and the Raiders, Simon and Garfunkel, Frank and Nancy Sinatra, and Phil Spector’s roster of artists.

Born Harold Simon Belsky in Holyoke, Massachusetts, Blaine grew up watching Count Basie, Tommy Dorsey, Benny Goodman, and other big bands performing at Hartford’s State Theater across the street from where his father worked during the 1930s. When his family moved to southern California in the 1944, Blaine began playing the drums during club jam sessions. Following a stint in the army during the Korean War, he used the G.I. Bill to earn a degree at the Roy Knapp School of Percussion in Chicago.

Back in Los Angeles, he began performing on demos for a local deejay with songwriting aspirations. He eventually got an assignment to play on Tommy Sands’s recording of “Teen-Age Crush” (Capitol 3639; 1957; #2). The record’s success opened doors for other recording sessions. Blaine’s ability to read music gave him a decided advantage over other studio drummers. He and the other informally dressed young turks playing early 1960s recording sessions in California — including Leon Russell, Glen Campbell, and Jerry Cole — were eyed with suspicion by the older, established musicians. Hearing comments such as, “These kids are gonna

wreck the business,” [Cost] led Blaine to christen his cohorts the “Wrecking Crew.”

Sessions with Lee Hazlewood, producer of Duane Eddy’s classic singles, led to a contract with RCA to record the only album in which Blaine received star billing. Recorded on 25 Oct 1963 and released without any promotional tour or advertising, *Deuces*, “*T’s*,” *Roadsters & Drums* (RCA; reissued by Sundazed 12856; 2001), by Hal Blaine and the Young Cougars, was destined for the cut-out bins. Two singles for the label — “Hawaii 1963”/“East Side Story” (RCA 8147; 1963), and “(Dance with the) Surfin’ Band”/“The Drummer Plays for Me” (RCA 8223; 1963) — had been released earlier in the year, also to marginal sales. Nevertheless, Blaine’s studio legacy, which has spanned some 40 years and a wide array rock and pop styles, was sufficient to earn him induction into the Rock and Roll Hall of Fame in 2000.

FRANK HOFFMANN

BLAKE, EUBIE (7 FEB 1883–12 FEB 1983)

American ragtime pianist and composer, born in Baltimore. After various jobs playing piano and organ



Eubie Blake (right) with Ethel Waters, c.mid-'20s. Courtesy David A. Jasen

BLAKEY, ART

in hotels and cafes, and some vaudeville work, he joined the Noble Sissle band in 1915, maintaining a sporadic association into the late 1930s. He and Sissle wrote the songs for *Shuffle Along* (1921), which played 504 performances on Broadway; the hit song was "I'm Just Wild about Harry," which Blake recorded on Victor 18791. Another hit song, "Memories of You," was in the Blake/Andy Razaf score for *Blackbirds of 1930*; (recorded by Blake on Columbia C2S-847). He was still performing in concert and on television at nearly 100 years of age. In the 1970s, he formed his own record label, Eubie Blake Music, to reissue his early recordings and to release new recordings by himself and his contemporaries. Blake died in New York. [Montgomery 1978 lists his piano rolls; Rose 1979 includes a discography.]

BLAKEY, ART (11 OCT 1919–16 OCT 1990)

American jazz drummer, born in Pittsburgh. He worked in many idioms — most influentially in bebop — and with many groups from 1939 until his death, offering a hard, loud style that was particularly effective with strong soloists. He began as a pianist, then turned to the percussions, working in New York with Fletcher Henderson (1939), Mary Lou Williams (1941), Billy Eckstine (1944–1947), numerous soloists (notably Thelonious Monk), and most importantly with his own Jazz Messengers (from 1954). The Blue Note label recorded the best of the last-named group on two LPs: BLP 1507/08 (1954). Some of Blakey's finest work is in the album *Jazz Messengers with Thelonious Monk* (London LTZ-K15157). His 1984 album, *New York Scene* (Concord Jazz CJ-307), won a Grammy. Blakey died of lung cancer in New York. More than 40 CDs of Blakey performances are available.

BLATTNERPHONE

A magnetic recorder produced by Ludwig Blattner, a licensee of patents registered by the inventor Kurt Stille. Blattner, a filmmaker, intended to synchronize sound with image, but a London demonstration was unsuccessful. The machine used a six-millimeter wide steel tape, traveling at six feet per second, with a playing time of 20 minutes. A basic problem was the erratic speed drive, powered by a battery-operated DC motor, that required an operator to monitor a tachometer dial and make manual adjustments. Despite this flaw, the BBC saw the promise of the Blattnerphone in broadcasting, and acquired two of them in 1930. An improved model, substituting an AC motor for the original battery or DC motor, using three-millimeter wide tape, was produced by the British Blattnerphone Co., with a playing time of 30 minutes for each tape.

Rights were later assigned to Marconi's Wireless Telegram Co., from which a further improved model emerged in 1934 (U.K. patents #458,255 and #467,105). By the time of World War II, BBC had eight machines running. They were abandoned with the introduction of plastic tape.

See also **Magnetic Recording**

BLAUERT, JENS (20 JUNE 1938–)

Born in Hamburg, Germany, Blauert attended elementary and secondary schools in Dresden and Hamburg, and went on to study communication engineering at Aachen, where he received a doctor of engineering degree in 1969. In college, he concentrated in signal theory, electro-acoustics, and psychoacoustics, and since 1974 he has held a chair in electrical engineering and acoustics at the Institute of Communication Acoustics of the Ruhr-Universität at Bochum. His major fields of current interest are binaural technology, models of binaural hearing, architectural acoustics, noise engineering, product-sound design, speech technology, and virtual environments. He has authored or coauthored more than 130 monographs, including the highly regarded *Spatial Hearing: The Psychophysics of Human Sound Localization*, and has been awarded several patents. Blauert has also been awarded an honorary doctorate from the University of Aalborg, is a former chairman of the ITG committee on electroacoustics, was former dean of the faculty of electrical engineering and computer science at Bochum, is a former chairman of the board of the European Acoustics Association, and is currently the president of the German Acoustical Society. In addition to being a member of several other European scientific organizations, committees, and societies, Blauert is also a fellow of the Acoustical Society of America, the Institute of Electrical and Electronics Engineers, and the Audio Engineering Society. His list of major awards and commendations is too extensive to list here.

HOWARD FERSTLER

BLAUVELT, LILLIAN

(16 MAR 1873–29 AUG 1947)

American coloratura soprano, born in Brooklyn. She studied violin at first, then voice in New York and Paris. Having concertized in Europe, she made her opera debut in Brussels in 1893. In 1899 she performed for Queen Victoria and sang at Covent Garden. Blauvelt recorded for Victor from 1903 to 1906, making a number of discs that have maintained lasting interest with collectors. Among them were her earliest record, "Merci, compagnons" from *Vàpres siciliennes* (Victor

81067; reissued on IRCC 8), and the "Jewel Song" from *Faust* (recorded in 1903, and again in 1906, her final Victor). She made 11 records for Columbia in 1907–1909, notably "Una voce poco fa" from *Barbiere di Siviglia* (#30150). She died in Chicago.

BLEND CONTROL

A device in a stereo amplifier that mixes small portions of the signals coming from both channels. The purpose is to create a smoother sound front across the two speakers.

BLESSER, BARRY (3 APR 1943–)

Blesser has been providing consulting services for 35 years in a wide range of fields, with specialization in digital signal processing for audio. He received his S.B, S.M, and Ph.D. degrees from MIT in the fields of electrical engineering communications and was an associate professor of electrical engineering and computer science at that school from 1969 to 1978. During that time, he helped to found Lexicon (1970), and in 1976 he invented the first commercially available, all-digital delay line, which was marketed as the EMT-250 in West Germany in 1978.

Since 1978 he has been providing product development for more than 50 companies, and has been a principle in several start-up companies and has numerous patents and published papers. Dr. Blesser was president of the Audio Engineering Society in 1980 (he cochaired the first AES conference on digital audio that same year), and has been on the organization's editorial review board since 1975. His landmark paper on digital audio, first published in 1978, is still being distributed, and he has been awarded numerous patents. Dr. Blesser provides both technology development services as well as management of complex hardware and software projects. He has received the AES bronze medal, Board of Governors award, as well as publications awards, and in 1981, the society awarded him its silver medal for his accomplishments in audio and digital audio research.

HOWARD FERSTLER

BLEYER, ARCHIE

(12 JUNE 1909–20 MAR 1989)

Born in Corona, Queens, New York, Bleyer became a prominent composer/arranger and record label owner, starting Cadence Records in the 1950s, the home of the Everly Brothers and Andy Williams. Bleyer studied piano as a child and showed strong musical talents, but was originally interested in becoming an electrical engineer. He attended Columbia studying engineering from

1927 to 1929, but dropped out to form his own dance band playing local jobs. By the mid-1930s, the band had a recording contract with Brunswick, and featured a young lead vocalist who would eventually have a career as a major songwriter, Johnny Mercer. In 1938, Bleyer went to Hollywood, where he was hired as staff arranger/bandleader for the popular Arthur Godfrey radio show. He remained with Godfrey through the early 1950s, and in 1952 formed Cadence Records as an outlet for performers who gained popularity on Godfrey's many shows, including Julius LaRosa and the vocal group the Chordettes. LaRosa had several hits immediately, including the number four "Anywhere I Wander" (Cadence 1230), in 1953, and Bleyer's own band scored big with the camp classic, "Hernando's Hideaway" (#2, 1954; Cadence 1241), which was featured in the film *The Pajama Game*. The Chordettes scored a number one on the Bleyer-produced candy-coated vocal hit, "Mr. Sandman" (Cadence 1247; Bleyer provides the tongue-in-cheek response "Yes" to the girl's pleading "Mr. Sandman?" on the record), and, in 1958, with the equally sweet "Lollipop" (#2; Cadence 1345). In 1956, Cadence scored big with crooner Andy Williams's "Canadian Sunset" (#7; Cadence 1297), and "Butterfly" (#1; Cadence 1338), and in 1958 with "Are You Sincere" (#3; Cadence 1340).

In 1957, Wesley Rose of Acuff-Rose publishing recommended a young country duo to Bleyer, the Everly Brothers. Bleyer produced their great initial hits, including 1957's "Bye, Bye Love" (#2; Cadence 1315), and "Wake Up, Little Susie" (#1; Cadence 1337), and 1958's two number one hits "All I Have to Do Is Dream" (Cadence 1348), and "Bird Dog" (Cadence 1350). The twangy guitarist Link Wray brought his tough-guy sound to the label in 1958 with the number 16 hit "Rumble" (Cadence 1347). Bleyer also signed teen popster Johnny Tillotson to the label that year. However, the Everlys were soon lured away by Warner Bros. and Andy Williams by Columbia, and Bleyer had difficulty attracting new talent. Bleyer had his last hit with the comedy album *The First Family* (Cadence 3060) in 1962, a takeoff on the Kennedys by a talented young impressionist named Vaughan Meeder. Cadence folded in 1964, and Bleyer retired from the music business. Andy Williams purchased the label's back catalog, setting up Barnaby Records to hold the catalog. Bleyer died in Sheboygan, Wisconsin, of Parkinson's Disease.

CARL BENSON

BLONDIE

Blondie melded tuneful 1960s pop-rock with the attitude and aggression of the emerging New York City punk revolution in laying the groundwork for the new



Blondie during the "Heart of Glass" era. Courtesy Frank Hoffmann

wave genre. The band's glam image — which centered around their street-smart Marilyn Monroe figure, lead singer Debbie Harry — would also provide a model for the Neo-Romantics of the early 1980s, a fashion-conscious movement encompassing the likes of Adam Ant, Bow Wow Wow, Duran Duran, the Thompson Twins, and Boy George of Culture Club.

Formed by August 1974 by former Wind in the Willows vocalist Harry and her boyfriend, guitarist Chris Stein, Blondie — whose classic lineup also included keyboardist Jimmy Destri, bassist Frank Infante, and drummer Clem Burke — separated itself from the rank-and-file punk groups identified with the New York club scene with a polished debut album, *Blondie* (Private Stock 2023; 1976), produced by Richard Gottferrer. The band's pinup poster good looks attracted a new label, Chrysalis, and with the release of *Plastic Letters* (Chrysalis 1166; 1978; #10 UK, #72 US), significantly broadened their American following while making them stars in Great Britain, where the single, "Denis" (Chrysalis 2180; 1978) reached number two on the charts.

Teamed with British power pop producer, Mike Chapman, Blondie produced the critically acclaimed *Parallel Lines* (Chrysalis 1192; 1979; #1 UK, #6 US), which yielded four hits: "Hanging on the Telephone" (Chrysalis 2366; 1978; #5 UK), "Heart of Glass" (Chrysalis 2275; 1979; #1 UK, #1 US), "Sunday Girl" (Chrysalis 2320; 1979; #1 UK), and "One Way or Another" (Chrysalis 2336; 1979; #24 US). Having penetrated the dance venues with "Heart of Glass,"

and the disco-inflected LP, *Eat to the Beat* (Chrysalis 1225; 1979; #1 UK, #17 US), the band enlisted electro producer Georgio Moroder to record "Call Me" (Chrysalis 2414; 1980; #1 UK, #1 US) for the *American Gigolo* soundtrack. As disco encountered a backlash in the U.S., Blondie shifted gears, topping the *Billboard Hot 100* with the reggae number, "The Tide Is High" (Chrysalis 2465; 1980; #1 UK, #1 US), and an early attempt at mainstreaming hip-hop, "Rapture" (Chrysalis 2485; 1981; #5 UK, #1 US). The album containing the latter tracks, *Autoamerican* (Chrysalis 1290; 1980; #3 UK, #7 US), and *The Hunter* (Chrysalis 1384; 1982; #9 UK, #33 US) reflected the band's stylistic impasse, which appears to have contributed to the breakup in mid-1982.

Harry, Destri, and Burke all pursued solo careers, while Stein's plans for his own Chrysalis-backed label, Animal, were stymied by a prolonged illness. The foursome would re-form Blondie in 1998, releasing the poppy, but hardly trailblazing, LP, *No Exit* (Beyond-RCA/Logic 78003; 1999; #3 UK, #18 US), which included the hit single, "Maria" (Beyond-RCA/Logic 78040; 1999; #1 UK, #82 US).

FRANK HOFFMANN

BLOOD, SWEAT AND TEARS

Blood, Sweat and Tears were the first important big band-rock act; they attempted to fuse the stylistic and harmonic diversity possible with a swing-era ensemble with the power possible with a rock rhythm section. However, the absence of a first-rate songwriter and the group's constantly shifting personnel lineup caused a loss of the creative momentum that had fueled their first few albums. By the early 1970s, the genre's major innovators included Chicago, England's Audience, and Canada's Lighthouse.

The guiding light behind the formation of Blood, Sweat and Tears was Al Kooper; as a keyboardist with the Blues Project, he expressed the desire to test the stylistic limits of the blues — incorporating classical, folk, and jazz influences — by means of an expanded horn section. He recruited the Blues Project's rhythm guitarist, Steve Katz, who, in turn, contacted an associate, drummer Bobby Colomby, then with folksinger Odetta. During 1967 the threesome went about pulling additional musicians into their orbit, including bassist Jim Fielder, and horn players from various New York jazz and studio aggregates: Fred Lipsius, Dick Halligan, Randy Brecker, and Jerry Weiss.

The debut album, *Child Is Father to the Man* (Columbia 9619; 1968; #47), exhibited considerable musical promise, incorporating material by Nilsson, Tim Buckley, Randy Newman, Gerry Goffin, and

Carole King, and Kooper himself. Recorded after a personnel shakeup — Kooper, Brecker, and Weiss departed, and were replaced by vocalist David Clayton-Thomas, trombonist Jerry Hyman, trumpeter Chuck Winfield, and trumpeter Lew Soloff — the follow-up release, *Blood, Sweat & Tears* (Columbia 9720; 1968), reached number one, selling more than 3 million copies and generating three gold singles: “You’ve Made Me So Very Happy” (Columbia 44776; 1969; #2), “And When I Die” (Columbia 45008; 1969; #2), and “Spinning Wheel” (Columbia 44871; 1969; #2). Winning the 1969 Grammy for album of the year, it set an artistic and commercial standard that the band was unable to equal again.

Although the next LP, the jazz-tinged *Blood, Sweat & Tears 3* (Columbia 30090; 1970; #1), quickly achieved gold status, later releases — *B, S & T; 4* (Columbia 30590; 1971; #10), *Greatest Hits* (Columbia 31170; 1972; #19), *New Blood* (Columbia 31780; 1972; #32), *No Sweat* (Columbia 32180; 1973; #72), *Mirror Image* (Columbia 32929; 1974; #149), *New City* (Columbia 33484; 1975; #47), and *More Than Ever* (Columbia 34233; 1976; #165) — met with increasing public apathy. By the mid-1970s, BST had become a middle-of-the-road nostalgia band, performing regularly at Las Vegas and other glitzy venues. Colomby (the last original member, who left in 1976 to do A&R work, but retained co-ownership of the band’s name and catalog), and Clayton-Thomas would maintain control of BST, which continued to perform through the 1990s. Recording — with ABC-Paramount, LAX, and other labels — has been sporadic since the early 1980s due to the fact that none of the band’s releases have charted since August 1976.

FRANK HOFFMANN

BLOOD TONE ARM

A device (named for its inventor) sold by the Jewel Phonograph Co., Chicago, in 1921, compatible for lateral- or vertical-cut discs.

BLOOMFIELD, MICHAEL (28 JULY 1944–15 FEB 1981)

Michael Bloomfield was perhaps the most gifted American guitarist within the 1960s blues revival movement. Although his later solo recordings remain relatively unknown to pop music enthusiasts, he can also be heard on a wide range of classic albums that helped define the emergence of progressive rock.

Although the Chicago-born Bloomfield grew up in the relatively prosperous North Shore area, he spent much time downtown observing the guitar-playing

techniques of the leading exponents of the Chicago blues style. While still in his teens, he graduated to performing in the local clubs. Impressed by his talent, harmonica player Paul Butterfield invited him to be a member of the Paul Butterfield Blues Band in 1963. Bloomfield, as lead guitarist, helped distill the groundbreaking sound of the band’s first two LP releases, *The Paul Butterfield Blues Band* (Elektra 7294; 1965), and *East-West* (Elektra 7315; 1966). Whereas the group’s debut album primarily updated the Chess Sound as defined by Muddy Waters, Albert King, and others, the second album stretched electric blues conventions to their limit, incorporating lengthy, jazz-influenced jamming and Indian raga flourishes.

The band’s backup role for Bob Dylan’s famed electric performance at the Newport Folk Festival in 1965 has been released on various bootleg recordings, including *Live in Newport 1965* (Document 004; 1988). Earlier that year, Bloomfield had also played lead guitar on Dylan’s critically acclaimed, *Highway 61 Revisited* (Columbia 9189; 1965), which featured the hit single, “Like a Rolling Stone” (Columbia 43346; 1965; #2).

Tired of constant touring and wanting to have more creative control, Bloomfield departed the Butterfield band to form the Electric Flag with longtime associate, singer Nick Gravenites. Put off by the massive hype surrounding his new band, he moved on again after playing on one album, *A Long Time Comin’* (Columbia 9597; 1968). For a time he seemed content to merely tread water, collaborating with Al Kooper and Stephen Stills on a couple of slapdash studio jam LPs, *Super Session* (Columbia 9701; 1968), and *The Live Adventures of Mike Bloomfield and Al Kooper* (Columbia 6; 1969).

With the exception of a couple a stabs at the commercial bigtime — *Triumvirate* (Columbia 32172; 1973), with Dr. John and John Paul Hammond, and *KGB* (MCA 2166; 1976), featuring keyboardist Barry Goldberg, bassist Rick Grech, drummer Carmine Appice, and vocalist Ray Kennedy — Bloomfield focused on solo work for the rest of his career. The results received mixed critical response; many pointed out that the creative fire of his best 1960s work was no longer in evidence. However, one release, *If You Love These Blues, Play ‘Em as You Please* (Guitar Player 3002; 1976), a compendium of blues guitar licks intended as an educational tool for magazine subscribers, received a Grammy award nomination. With his studio works failing to provide adequate financial support, Bloomfield resorted for a time to scoring pornographic films, primarily for the San Francisco-based Mitchell Brothers. He died of an apparently accidental drug overdose in his parked 1971 Mercury on San Francisco’s Dewey Street in 1981. In 2000,

BLUDISC (LABEL)

authors Jan Mark Wolkin and Bill Keenom published an oral history of Bloomfield's life and music, *Mike Bloomfield: If You Love These Blues* (Backbeat Books). [Romanowski and George-Warren 1995.]

FRANK HOFFMANN

BLUDISC (LABEL)

A short-lived American record sold by the Blu-Disc Record Co., New York, in 1924. Nine items were released in December (Kendziora 1973/6 reproduces the advertising poster). Duke Ellington's piano is heard on three of them, but the two sides credited to his orchestra are really by "a commercial white band of no jazz interest whatever" (Rust). [Kendziora 1973/6; Rust 1978.]

BLUE AMBEROL

The name given by Thomas Edison to his best line of cylinder records, introduced in October 1912. It was an improvement on his 1908 Amberol, having a smooth hard celluloid surface over a plaster of Paris core; said to be unbreakable and playable for 3,000 or more times with no wear. Its exterior was a rich glossy blue — examples from different periods show various shades of color, ranging into the purple area (a later "celebrity series" was colored reddish purple). Run at 160 rpm, a Blue Amberol cylinder played four minutes or longer. The Amberola phonograph was fitted with a diamond point reproducer for these new records, and the acoustic results were excellent. Record slips, giving information about the artist, the music, and advertising for other records, were included from 1912 to 1914. Blue Amberols sold for \$0.50.

Competition from discs was mounting, and after a few years the primary product for Edison had become the Edison Diamond Disc. But \$2.5 million came in as late as 1920 from Amberola and Blue Amberol sales, most of the customers being in rural areas. In 1913 there were a million cylinder players in use in America. Until 1914, all Blue Amberol cylinders were direct live recordings; but in December of that year transfers were introduced via dubbing from discs. Dubbing became the standard recording process in 1915. Cylinder sales fell drastically after 1922, due to competition from radio, and dealers began to drop their Edison franchises. Figures in Dethlefsen show an impressive total sale in the period 1911–1929: 21,400,000 records and 356,000 players; but in the years 1927 and 1928 operating losses were posted. The last Blue Amberol catalog appeared in 1927, the final Amberolas were made in 1928, and cylinder production ceased in 1929 with Edison's abandonment of

phonographs and entertainment records in all formats, with the exception of Edison School Records. [Dethlefsen 1980; Wile 1990/3.]

BLUE HORIZON (LABEL)

Blue Horizon was founded in February 1965 by blues collectors Mike and Richard Vernon as an outgrowth of their fanzine, *R&B Monthly*. Mike had the more impressive music industry credentials of the two brothers, having worked with the likes of Champion Jack Dupree, the Graham Bond Organization, and Otis Spann as an assistant producer at Decca Records's West Hampstead studio. Both the business and recording ends of the operation were initially based in his Surrey, U.K. home.

The label's first phase consisted of 12 singles and two albums, mixing reissued masters and exclusive recordings by vintage blues interpreters such as Eddie Boyd, J.B. Lenoir, Hubert Sumlin, and Sonny Boy Williamson. The Vernons also instituted two subsidiaries; Outasite differed little from the parent label regarding releases, whereas Purdah focused on British talent, most notably John Mayall, Tony McPhee, and Savoy Brown.

Blue Horizon signed a national distribution agreement with CBS Records in November 1969. Its premier act was Fleetwood Mac, then featuring Peter Green on guitar and vocals, whose "Albatross" (Epic 10436; 1969), reached number one on the British charts. The label also signed rock artists such as Chicken Shack and Duster Bennett as well as reissuing seminal blues recordings by Slim Harpo, B.B. King, Lightnin' Slim, Magic Sam, and Otis Rush, among others.

When CBS — anticipating the end of the blues boom — dropped the company in 1970, Blue Horizon hooked up with Polydor Records. While maintaining its schedule of classic reissues, the label's biggest successes came with contemporary prog-rock bands like Holland's Focus and Jellybread.

Blue Horizon ceased operations in 1972, shifting commercially viable titles to Polydor. Mike Vernon became a producer, helping Bloodstone, Dexys Midnight Runners, Level 42, and the Olympic Runners record hits. He would go on to reactivate Blue Horizon in 1988 with a roster that included Blues 'n' Trouble, the DeLuxe Blues Band, Dana Gillespie, and Lazy Letter.

FRANK HOFFMANN

BLUE NOTE (LABEL)

A premier American jazz label for 30 years, established in 1939 by Alfred Lion and Frank Wolfe in New York City. Albert Ammons and Meade Lux



Blue Note 78 label, c. 1940s. Courtesy Kurt Nauck/Nauck's Vintage Records



Bluebird label, c. early '30s. Courtesy Kurt Nauck/Nauck's Vintage Records

Lewis performed boogie-woogie in the first session on 6 Jan 39 (“Boogie Woogie Stomp”; Blue Note #2). Among the star performers to follow were Sidney Bechet, Earl Hines, Bud Powell, Thelonious Monk, and Art Blakey. Quality of recording was high, in part due to the practice of paying artists for rehearsal time, although pressing materials were often poor. Designer Reid Miles was engaged in the early 1950s, and created about 1,000 distinctive album covers.

In 1966 Lion and Wolff sold the label to Liberty Records, which was later acquired by Capitol. Abandoned in 1981, the Blue Note label was revived by Capitol/EMI in 1984, under the guidance of Bruce Lundvall. Blue Note was subsequently combined with Mosaic Records, a jazz label specializing in complete boxed-set reissues, which EMI also purchased. It has continued to sign new artists, including noted jazz vocalist Casandra Wilson and pop-jazz singer Norah Jones, while also reissuing classic recordings from the back catalog. [Cuscuna 1988 is a complete discography through 1987; Website: www.bluenote.com.]

BLUE THUMB (LABEL)

SEE LIPUMA, TOMMY

BLUEBIRD (LABEL)

A subsidiary of Victor, issued from 1932 to 1950 and reactivated in 1976 for a few years. Originally an eight-inch format, it moved to a standard 10-inch size

in 1933, selling at \$0.35. Pricing was competitive with Decca, Columbia’s chain store products, and discount labels that came out during the Depression, all of which were cutting into sales of Victor’s regular \$0.75 line. With notable artists and high standards of recording, Bluebird was a quick success. Big bands like those of Shep Fields, Vincent Lopez, Freddy Martin; vocalists like Dick Todd; and jazzmen like Earl Hines and Fats Waller were major attractions. Artie Shaw and Glenn Miller recorded for Bluebird; Miller’s most famous contributions being “Moonlight Serenade” (#10214; 1939), and “Chattanooga Choo Choo” (#11230; 1941). The Bluebird name has been revived from time to time, most notably in the mid-1970s for a series of reissues of jazz and country music of the 1930s and 1940s.

BLUEBIRD TALKING MACHINE CO.

A firm located in Los Angeles. In October 1920 it sold Bluebird record players. Four models were marketed by 1922. The general manager was F. Flybush.

FRANK ANDREWS

BLUES RECORDINGS

Blues refers to a style of music marked by a melancholy mood (and lyrics) and — as it developed — a standard chord pattern typically occupying 12 measures. Blues singing emerged in the Black culture of the southern United States during the mid-19th century.

BLUES RECORDINGS

The first instrumental blues record was "Memphis Blues" (Victor 17619; 25 Sep 1914). "Memphis Blues" was also the first vocal blues record, sung by Morton Harvey: (Victor 17657; January 1915 — with accompaniment by the New York Philharmonic Orchestra). But these were not authentic blues renditions. Al Bernard's "Hesitation Blues" (Edison Diamond Disc 50524; Blue Amberol cylinder 6621; 19 Feb 1919), was possibly the first authentic vocal blues number to be released, albeit by a white singer. The earliest Black blues vocal was "That Thing Called Love"/"You Can't Keep a Good Man Down" (Okeh 4113; February 1920, released in July), sung by Mamie Smith, accompanied by a group named the Rega Orchestra; Smith had made a rejected test record of "That Thing Called Love" for Victor in January. She went on to make many more Okeh blues discs, achieving great success, the last being "Keep a Song in Your Soul" (Okeh 8864; 19 Feb 1931). Her great hit was "Crazy Blues" (#4169; 10 Aug 1920). Another pioneer singer was Lucille Hegamin, with "Jazz Me Blues" and "Everybody's Blues" (Arto 9045; November 1920); she sang for many labels until 1932.

Victor was the only major company to hold back from recording blues by Black artists, leaving the market to Columbia — which did not move aggressively either — and new independents like Okeh, Paramount, and Black Swan. Other prominent Black artists of the 1920s were Alberta Hunter, Ma Rainey, Bessie Smith ("Empress of the Blues"), Trixie Smith, and Ethel Waters.

The term race records was generally used in the industry at this time to identify blues and other material performed by Black musicians for a Black audience. By 1923 Columbia had become a major race label, signing Bessie Smith in 1923; she became the best-selling blues singer. Okeh and Paramount prospered as well. Victor did little, and Edison made only a few race records. Gennett made some attempts at blues without great success. Ajax, a Canadian label, was active in blues from 1923 to 1925, offering items by Rosa Henderson and Mamie Smith, among others. Vocalion was able to put out only two dozen race records, by minor performers, but when it was acquired by Brunswick in 1924 the situation changed. Brunswick entered the blues market in 1926, establishing a race record division under Jack Kapp. Nearly all the blues vocalists were women, but in 1924 Paramount had several successful discs with Charlie Jackson, and in 1926 with Blind Lemon Jefferson. Among white performers, Al Bernard stands out as a leading blues singer of the acoustic period.

Peak years for blues records were 1927–1930, as the various labels issued 10 new items a week. Columbia acquired Okeh and became the major player. Victor made another move into the market during 1927,

recording on location in Atlanta, Memphis, and New Orleans. "Sun Brimmer's Blues" and "Stingy Woman Blues" (#20552; 24 Feb 1927), by the Memphis Jug Band was an immediate hit; the group followed it with more than 70 other records until 1934. The Black Patti label had a brief but distinguished career in 1927. Paramount was successful with material by Charley Patton. Leroy Carr began to record for Vocalion in June 1928, with a major hit "How Long How Long Blues" (#1191); Carr became the leading blues artist of the next several years. He was the first notable blues pianist, as well as a singer. Blues was not fully amenable to the piano, since the style relies on pitches that fall between the piano keys; blues offshoots like barrelhouse and boogie-woogie came in to fill the void.

A 1930s idiom called urban blues developed in the difficult Depression years in Chicago. It is marked by a more aggressive sound and by group performance, e.g., by Tampa Red, a guitarist with a small combo. Big Bill Broonzy was a leading figure of this school. But the 1930s were bad years for record makers in any genre. Paramount, Gennett, and Columbia were bankrupt. Brunswick, bought by Warner Brothers and then transferred to Consolidated Film Industries in 1931, survived as a label, and had good market results with discs by Tampa Red and Leroy Carr. Victor made further attempts to get a share of the race market, using its Bluebird label; they scored with Joe Pullum's "Black Gal What Makes Your Head So Hard?" (#B-5459; 1934), and with Washboard Sam, one of the most popular singers of the late 1930s.

The new Decca label, 1934, did well with its low-priced discs (\$0.35, compared to the standard \$0.75). Among their artists were Sleepy John Estes, Rosetta Howard, Louis Jordan, Ollie Shepard, Johnnie Temple, Peetie Wheatstraw, and the Norfolk Jubilee Quartet. There were other cheap labels, sold in Woolworth's and other dime stores for \$0.25. One was Melotone, which had Josh White's successful "Crying Blues" (#M12727), issued also by Perfect, Romeo, Oriole, and Banner. An important noncommercial record producer, the Library of Congress Archive of Folk Song, released important material throughout this period, including songs by Leadbelly and Muddy Waters. The archive made more than 4,000 records on location between 1933 and 1942.

The postwar period saw a considerable revival of interest in blues recordings, both through reissues of earlier 78-rpm recordings, and new recordings of "rediscovered" artists from earlier years. Chess Records of Chicago was one of the leading labels in documenting the new blues scene there, with artists like Muddy Waters, Howlin' Wolf, and Little Walter. During the "folk revival" of the 1960s, other labels issued new recordings of both acoustic and electric

blues performers. The jazz label Prestige launched its Bluesville imprint, releasing records both by older performers like Rev. Gary Davis and new revivalists like Geoff Muldaur. During the mid-1960s through early 1970s, ABC Records had a label called ABC/Bluesville, which featured B.B. King among its roster of pop-blues performers. Folk label Vanguard Records had a number of classic blues artists on its roster, including Mississippi John Hurt and Skip James. Arhoolie Records another folk-oriented label, also issued recordings by rural blues musicians, including Mississippi Fred McDowell and John Jackson. Out of Chicago, Delmark and later Alligator Records took up the mantle of Chess Records as the primary outlets for local musicians during the later 1960s through the 1980s.

Among the first labels to reissue earlier blues 78s were Origin of Jazz Library (OJL), and RBF (Record, Book and Film, a division of Folkways Records), both of which began reissuing blues material in the later 1950s. During the mid-1960s, collector Nick Perls began his Yazoo Records label, which became the most important outlet for blues reissues aimed at the acoustic blues scene. He subsequently created the affiliated Blue Goose label for new recordings. In 1962, major label Columbia Records issued a single LP of 1930s-era recordings of blues man Robert Johnson; later, in the mid-1990s, they issued a two-CD box of his complete recordings, which enjoyed enormous sales for a blues package. Columbia launched its Legacy label following its success to reissue other back catalog blues recordings, although none sold as well as Johnson did. When MCA purchased the extensive Chess catalog, they began a reissue program in a series of complete box sets of its major blues artists. [Dixon 1970; Oliver 1980.]

See also American Folklife Center

REV. CARL BENSON

BLUESVILLE (LABEL)

A subsidiary record of Prestige, issued from the early 1960s to 1965. Rotante gives a list of 91 issues, most of them blues. Big Joe Williams, Tampa Red, and Victoria Spivey were among the artists. Some of the albums were assigned to a lower price Prestige line, Status. [Rotante 1966.]

BLUM & CO., LTD.

A British firm established 23 Feb 1911 by Joseph Leonard Blum in London. Beginning in August 1911 it advertised a Diploma label disc, said to be British-made, with 350 titles available. Edison Bell matrices

were used. In 1912 the company merged with Kalliope Musikwerke AG. of Leipzig, and began to issue a new label named Stella. Stella's debut with 300 titles was disturbed by the discovery that Pathé was already using that label name; so the record name was changed to Victory. Blum also produced a Famous label from September 1912, for 10-inch discs (Victory was a 12-inch record). Victory was very successful, but following some legal altercations between Blum and Kalliope in 1913 the name Victory was changed to Diploma. In the industry price war of 1913 Blum introduced the Pelican label at one shilling. Pelican was replaced in early 1914 by Pioneer, selling at 1s.6d, marked "made in Germany," indicating that old ties were still there. Despite considerable success with all his labels, Blum decided to wind up his firm in May 1914. However, a second company of the same name was founded on 17 June 1914; it continued the release of Diploma and Pioneer records. A final liquidation of the Blum interests took place on 15 Jan 1917; Columbia Graphophone Co., Ltd., took over the Blum trademarks. Blum himself left the record industry until 1927, when he surfaced as managing director of a new firm, Metropole Gramophone Co., Ltd. He left that firm after a dispute among board members in August 1930. [Andrews 1988/10.]

BLUMLEIN, ALAN DOWER (1903–7 JUNE 1942)

British electroacoustics engineer; one of the research team at Columbia Graphophone Co., Ltd., in London from 1929. He and H.E. Holman developed a moving coil microphone — known as the EMI type HB-1; patenting this device (U.K. #350,998), and also a single turn moving coil cutting head (U.K. #350,954 and #350,998). However, he is best known for his pioneering research into stereophonic recording, having demonstrated stereo discs in the early 1930s that illustrated the same principles employed commercially a quarter century later. He designed and patented a stereo system in 1931, and directed a recording of the London Philharmonic, under Thomas Beecham, partly in stereo, on 19 Jan 1934. He also made a successful stereo motion picture soundtrack (1935). He died in a Halifax bomber crash.

BLUMLEIN STEREO RECORDING

A variant of the coincident recording technique, it involves the use of two dipolar microphones located very close together and aimed 90 degrees apart, meaning that sounds reaching them are primarily intensity controlled, rather than controlled by time-of-arrival clues. First described by Alan Blumlein in 1931, and

BMG CLASSICS (LABEL)

sometimes known as stereosonic, it was modified and applied by EMI during the early days of the stereo LP in England. Because the microphones are bidirectional, sounds coming from the audience area are recorded out of phase from those up front.

See also Coincident Stereo Recording Technique; Microphone

HOWARD FERSTLER

BMG CLASSICS (LABEL)

SEE BERTELSMANN MUSIC GROUP

BOBOLINK TALKING BOOK

An imitation of the American Bubble Books, offered in Britain from 1922 to 1923. Each book included two seven-inch discs. Ten titles were offered, priced from 1s 6d to 6s. The publisher was A.C. Gilbert and Co., New Haven, Connecticut, who first advertised these releases in the U.S. in 1921.

BOGART, NEIL (3 FEB 1941 [SOME SOURCES GIVE 1943]–8 MAY 1982)

Born Neil Bogartz in Brooklyn, New York, Bogartz began his career with aspirations to be a pop singer. In the early 1960s, he got a job with the music industry publication, *Cash Box*, as an ad salesman, and then moved on to work as a promotion man at MGM and then quickly became sales manager at Cameo-Parkway. He was hired by the new Buddah label in 1965 as the label's general manager. There he developed several bubblegum acts, including the Ohio Express. In 1973, he went independent and formed Casablanca Records, signing the glam-rock group Kiss and, in the mid-1970s, disco diva Donna Summer. Bogart spent money like there was no tomorrow promoting his most successful acts, and also on lavish offices and drugs. The label was purchased by Polygram at the end of the 1970s for \$10 million, but was by then riddled with debt. Bogart eventually was forced out, and formed one last label, Boardwalk Records, signing rock singer Joan Jett, before his death in Los Angeles from cancer in 1982.

CARL BENSON

BOGGS, DOCK (7 FEB 1898–7 FEB 1971)

Early country-blues banjo player. Boggs was "discovered" by a scout for the Brunswick label in 1927, and made 24 recordings over the next year for it. His

recordings attracted little attention at the time, and he returned to his full-time occupation as a coal miner. In 1952, eccentric record collector Harry Smith included a cut of Boggs's most popular 78, "Country Blues," on his landmark Anthology of American Folk Music Collection. This brought new interest in Boggs, and folklorist Mike Seeger went in search of the player. He found him and subsequently Boggs recorded again, for the Folkways label, and also toured until his death. — CARL BENSON [Boggs's early recordings have been reissued on *Country Blues: Complete Early Recordings 1927–29* (Revenant 205); his 1960s recordings made by Mike Seeger are available on CD on *Folkways Years 1963–68* (Smithsonian/Folkways 40108).]

BÖHM, KARL (28 AUG 1894–14 AUG 1981)

Austrian conductor, born in Graz. His career was shaped in a number of major opera houses, as he moved as director from Munich (1921), to Hamburg (1931–1933), Dresden (1934–1943) and Vienna (1944–1945; 1954–1956). In Dresden he also conducted the Saxon State Orchestra. He appeared first in the U.S. with the Chicago Symphony Orchestra in 1956, then with the Metropolitan Opera in 1957, conducting there intermittently through 1974. He made a notable tour of the U.S. and Japan with the Berlin Philharmonic Orchestra in 1963–1964.

His favored composers were Alban Berg, Mozart, Wagner, and Richard Strauss, and he recorded most of their works. With the Saxon State Orchestra in 1938–1939 he put to disc for HMV many of the outstanding items in their catalog, including a group reissued in four LP albums by EMI/Electrola in 1982 (#1C-137–53500–53519). CDs of eight Mozart operas under his direction were issued in 1990. The recording of *Wozzeck* (DGG 2707023; 1965) won a Grammy. He died in Salzburg.

BOLET, JORGE (15 NOV 1914–16 OCT 1990)

Cuban pianist, born in Havana. He went to the U.S. in 1926 to study at the Curtis Institute in Philadelphia, and eventually became head of the piano department there. Among his teachers were Leopold Godowsky, Moriz Rosenthal, Abram Chasins, and Rudolf Serkin. Bolet became known for his virtuosity, receiving special acclaim for his interpretations of Chopin and Liszt; he recorded those composers on LP for Victor, and then made CDs of the major Liszt works for Decca in 1984–1986.

BONCI, ALESSANDRO
(10 FEB 1870–8 AUG 1940)

Italian tenor, born in Cesena; described by Hurst as “the perfect tenor.” His operatic debut was in Parma in 1896; then he was heard at La Scala and at Covent Garden (debut as Rodolfo in 1900, creating a sensation). He continued at Covent Garden, while performing also in America. In 1906–1909 he sang with the Manhattan Opera in New York, and in 1907–1910 with the Metropolitan Opera (debut as the Duke on 22 Nov 1907). Bonci’s recordings for Fonotipia in Milan, ca. 1905–1908, are much prized by collectors. His first disc was a splendid “Una furtiva lagrima” (#39083). Perhaps the finest of the early records was “A te, o cara” from *Puritani* (#39084; 1905). His *Rigoletto* arias, recorded for Columbia in 1913, are also noteworthy: “Questa o quella”/“La donna è mobile” (#A-1286); and he made a distinguished “Che gelida manina” as well (#A-5449). Bonci made seven Edison Diamond Discs in 1913–1914, and in 1926 — after his prime — his only electrics, for Columbia. He died in Viserba, Italy. [Hutchinson 1957.]

BONGIORNO, JAMES (2 APR 1943–)

Educated at Westfield Academy and Central, as well as Deveaux School, and graduating in 1961, Bongiorno initially went to work for the Wurlitzer Organ Company. From there his interest in all aspects of audio sound reproduction resulting in his working for a large variety of top-tier audio and audio-related companies, including Hadley Laboratories, Marantz Corporation, Rectilinear Research, Dynaco, SAE, Crown Radio (of Japan), and Rotel. He also founded several companies of his own, including GAS, Sumo, and Spread Spectrum Technologies, and also worked as a consultant for Harmon-Kardon. During this time, he was responsible, or in part responsible, for the design of several notable products, including the Marantz Model 15 power amplifier, the Dynaco Stereo 400 power amplifier and AF-6 tuner, several SAE, Sumo, and GAS amplifiers, preamps, and tuners (including the renowned Ampzilla), the redesigned Harmon-Kardon Citation 23 tuner, and several Crown Radio of Japan amplifiers and an electronic crossover. Over the years, Bongiorno has written a number of articles for *Popular Electronics*, *Audio*, *Radio-Electronics*, and *Audio Amateur*, and was also winner of the *Stereo Sound* “State of the Art of the World” award in both 1976 and 1980. He is a member of the American Federation of Musicians, the Audio Engineering Society, and ASCAP, and is listed in *Who’s Who in America*.

HOWARD FERSTLER

BONINSEGNA, CELESTINA
(26 FEB 1877–14 FEB 1947)

Italian soprano, born in Reggio Emilia. She was heard at age 15 in Reggio Emilia, before undertaking formal study. In 1896 she made a formal debut in Fana as Gilda, then toured Italy and South America specializing in the Verdi operas. She sang at Covent Garden in 1904–1905, and made her Metropolitan Opera debut as Aida on 21 Dec 1906, but did not return for the next season. Having retired from the stage in 1920, she devoted herself to teaching. She died in Milan,

Boninsegna began to record in 1904, for G&T in Milan; her first disc was “In quelle trine morbide” from *Manon Lescaut* (#53372). Between 1904 and 1918 she made more than 30 recordings for that label. In 1905 she recorded in Paris for Pathé, and then made some of her most acclaimed records for Columbia in the U.S., in 1909–1910. Her arias from *Aida* show her at her best: “Ritorna vincitor” (Columbia 30381), and “O patria mia” (Columbia 30382). Later she worked for various labels in Europe and America, and was represented in many LP series of historical reissues. [Williams 1958.]

BOOGIE-WOOGIE

A style of popular piano playing that developed from the blues in the 1920s. It is characterized by ostinato bass figures in the left hand, often with eight notes to the bar, harmonized in blues chord progressions. Clarence “Pinetop” Smith is credited with the first boogie composition and recording: “Pinetop’s Boogie Woogie” (1928). Early performers of the idiom on record included Romeo Nelson, Arthur Taylor, and Charles Avery. Widespread enthusiasm for the style came in the mid-1930s with the performances of Albert Ammons, Pete Johnson, and Meade Lux Lewis. One of the hit songs of World War II was “Boogie Woogie Bugle Boy” sung by the Andrews Sisters. A basic boogie-woogie collection was issued by the Solo Art label on 11 discs in 1941. A CD collection, *Best of Boogie Woogie* (EPM ZET-740; 1991), offers a representation of the major artists.

BOOKER T. & THE MGS

Although best known for a series of tight, funky instrumental hits released in the 1960s, Booker T. & the MGs exerted a far greater influence as the house band for all Stax/Volt recording artists. In addition, two members — keyboardist Booker T. Jones and lead guitarist Steve Cropper — handled key songwriting (Cropper wrote such hits as Otis Redding’s “Dock of the Bay,” Wilson Pickett’s “In the Midnight Hour,” and Aretha Franklin’s “See Saw”), arranging, and production duties for the label.

BOOMBOX

The band's core members — which included, in addition to Jones and Cropper — drummer-guitarist Al Jackson, Jr. and bassist Donald “Duck” Dunn — coalesced around the Stax studios in Memphis as backup musicians during the early 1960s. One of the informal jam sessions led to a decision to record “Green Onions,” jointly composed by Booker, Cropper, Jackson, and drummer Lewis Steinberg. The single (Stax 127; 1963) would reach number one on the R&B charts, then crossing over to pop (#3). Booker T. & the MGs continued to produce best-selling singles, including the Top 40 hits “Hip Hug-Her” (Stax 211; 1967), “Groovin’ (Stax 224; 1967), “Soul-Limbo” (Stax 0001; 1968), “Hang ‘Em High” (Stax 0013; 1968), “Time Is Tight” (Stax 0028; 1969), and “Mrs. Robinson” (Stax 0037; 1969). The group's LPs were also commercially successful, 11 of them — including *Green Onions* (Stax 701; 1962), *Hip Hug-Her* (Stax 717; 1967), *Back To Back* (Stax 720; 1967), *Uptight* (Stax 2006; 1969), *The Booker T. Set* (Stax 2009; 1969), and *Melting Pot* (Stax 2035; 1971) — making the pop album charts.

The Booker T. & the MGs' first phase ended with Jones's decision to relocate to Los Angeles in 1970 following a dispute with Stax. He would record albums in the 1970s with his wife, Priscilla Coolidge, and do production work for Rita Coolidge, Earl Klugh, Willie Nelson, and Bill Withers. In the meantime, Cropper became in-house producer at TMI Studios. The band reorganized as the MGs in 1973 around Jackson and Dunn; new members included Bobby Manuel and Carson Whittsett. When Stax went out of business in 1975, plans were made to reconstitute the original quartet. Eight days later, however, Jackson was killed in a shooting incident. The others decided to go ahead with the reunion, bringing in drummer Willie Hall, a Stax alumnus who'd worked with the Bar-kays and Isaac Hayes. Over the years, the band has continued in a low-key mode, combining recording and performing as a group with separate activities by individual members. [Stambler 1989.]

FRANK HOFFMANN

BOOMBOX

Slang name given to large, portable stereo cassette/radios that were popular during the '80s in the days before the introduction of the Walkman. Websters dated the term to 1981, although the first commercial machines appear to have been made around 1976, combining high-quality speakers with AM/FM radios and cassette players. These machines were larger and better quality machines than typical portable units, but not as bulky as home systems. They were also pejoratively called “ghetto blasters” because of their popularity



Listening to a boombox on the streets of Harlem, New York, July 7, 1984. © Owen Franken/CORBIS

among Black teenagers, who would walk urban streets carrying these players perched on one shoulder, with the music blaring out for all to hear. Sony was a major manufacturer of these units, which by the 1990s also featured CD players. However, by that time, portable radio/players with headphones had been introduced, and boomboxes were gradually replaced by all-in-one units designed for placing on bookshelves at home.

CARL BENSON

BOONE, PAT (CHARLES EUGENE BOONE) (1 JUNE 1934–)

Pat Boone was the most successful of the teen idols; only Rick Nelson came close to equaling his 38 Top 40 hits. His accomplishments are tainted, however, because many of his early hits were cleaned-up cover versions that outsold the aesthetically superior originals, including Fats Domino's “Ain't That a Shame,” the El Dorados' “At My Front Door,” Little Richard's “Tutti Frutti” and Long Tall Sally,” Ivory Joe Hunter's “I Almost Lost My Mind,” Joe Turner's “Chains of Love,” and the Five Keys' “Gee Whittakers!”

Allegedly a direct descendant of frontier legend Daniel Boone, he lettered in three sports and served as student body president while attending high school in Nashville. Marrying country and western star Red Foley's daughter, Shirley, he attended David Lipscomb College in Nashville before transferring to North Texas State. While there he won a local talent show, which led to an appearance on Ted Mack's program and then a one-year stint on Arthur Godfrey's amateur hour.

In the mid-1950s Boone recorded a number of modestly successful singles for Nashville's Republic Records. His recording of "Two Hearts" (Dot 15338; 1955) was the first of 59 charting singles (through late 1966) for that label. His number one hits included "Ain't That a Shame" (Dot 15377; 1955), "I Almost Lost My Mind" (Dot 15472; 1956), "Don't Forbid Me" (15521; 1956-1957), "Love Letters in the Sand" (Dot 15570; 1957), "April Love" (Dot 15660; 1957), and "Moody River" (Dot 16209; 1961). During the late 1950s, he was arguably surpassed only by Elvis Presley as a pop culture hero. He starred in 15 films, most notably *Bernadine* (1957), *April Love* (1957), and *State Fair* (1962). In addition, he had his own television series, *The Pat Boone-Chevy Showroom* (ABC) from 1957 to 1960.

When the hits stopped coming, Boone continued recording for various labels, including Tetragrammaton and Curb. He continued to write books dispensing advice, including *Pray to Win* (1981) and the teen-oriented *Twixt Twelve and Twenty*, *Between You, Me and the Gatepost*, and *The Care and Feeding of Parents*. Since 1983 he has hosted a contemporary Christian radio show heard nationwide on approximately 200 stations. In addition to appearing on many TV programs, he has starred in a number of stage productions (e.g., *The Will Rogers Follies* in Branson, Missouri). [Romanowski and George-Warren 1995.]

FRANK HOFFMANN

BOOTLEG

SEE PIRATED RECORDINGS

BORI, LUCREZIA (24 DEC 1887-14 MAY 1960)

Spanish soprano, born Lucrecia Borja y Gonzales de Riancho in Valencia. She made her debut as Micaela in Rome in 1908, then appeared in Paris, La Scala, and Buenos Aires. Her Metropolitan Opera debut was in *Manon Lescaut*; she remained with the company until 1935/1936. (missing the seasons 1916-1920), then retired. Her greatest successes came in the roles of Mimi and Manon Lescaut. She recorded "Mi chiamano Mimi" on Edison Blue Amberol, and made 10 Edison

Diamond Discs between 1913 and 1923. There were many outstanding Victor records, including the *Rigoletto* quartet with John McCormack, Josephine Jacoby, and Reinald Werrenrath (#89080), which sold at the premium price of \$4. There were 11 solos and two duets as well in the 1917 Victor catalog, and 15 items in the 1927 catalog. They included the notable "In quelle trine morbide" from *Manon Lescaut* (#40032) and a 1910 reissue of "Mi chiamano Mimi" (#40036). Bori died in New York. [Richards 1948; Richards 1973.]

BORWICK, JOHN (2 JUNE 1924-)

Born in Edinburgh, Borwick obtained a B.S. degree in physics from Edinburgh University. He later served in the Royal Air Force as a signals officer, mostly in India and Sri Lanka, before joining the British Broadcasting Corporation as a program engineer in 1947. He balanced and supervised the recording and broadcasting of music programs of all types, and later taught at the BBC Engineering Training School, writing the BBC's internal instruction manual *Programme Operations Handbook*. After leaving the BBC he became a frequent broadcaster on audio/recording and has written or edited a number of books including *Microphones: Technology and Technique* (1990), *Sound Recording Practice* (4th ed., 1994), and *Loudspeaker and Headphone Handbook* (3rd ed., 2001).

Borwick was for many years secretary of the Association of Professional Recording Services and is now an honorary member. He is a fellow and life member of the Audio Engineering Society, has served as the society's vice president in Europe, and helped to set up the British AES section in 1970, serving as its first secretary. He helped to formulate the unique four-year bachelor of music (Tonmeister) degree course at the University of Surrey in 1971 and was senior lecturer (recording techniques) for about 10 years. He has acted as a consultant to a number of bodies, including British Phonograph Industry and the Advertising Standards Authority, and is on the Law Society register of expert witnesses. He received an award from the Federation of British Audio in 1986 "for outstanding service to the industry." Borwick joined *Gramophone* magazine in 1964 as audio editor/director and contributed to the magazine's audio pages in practically every issue until the company was bought out 36 years later.

HOWARD FERSTLER

BOSE, AMAR (2 NOV 1929-)

Bose has S.B., S.M., and Sc.D. degrees in electrical engineering from Massachusetts Institute of Technology, with the latter degree earned in 1956.

BOSE CORPORATION

From 1957 to 1960, he was an assistant professor at the institution, becoming an associate professor in 1960, and a full professor in 1966. From 1958 until 1964, he worked as a consultant for Epsco, Edgerton Germeshausen and Grier, and Standard Oil. In 1964, he founded the Bose Corporation, one of the largest and most successful audio-equipment manufacturers in the world. He is currently chairman of the board and technical director of that company.

Bose holds numerous patents in the fields of acoustics, electronics, nonlinear systems, and communication theory, and his research in those areas led to the formation of the company that bears his name. Prior to the company entering the consumer-audio field, Dr. Bose's electronic patents formed the basis of the research and development that Bose secured with the armed forces, NASA, the DOT, and the AEC.

He is a fellow of the Institute of Electrical and Electronics Engineers, and a member of the Audio Engineering Society, and also has an honorary doctorate of music degree from the Berklee College of Music (1994), and an honorary doctorate of science degree from Framingham State College (1990). Numerous other honors and awards include the Western Electric Fund Award (N.E. Section), the Baker Memorial Award for Outstanding Teacher (MIT), membership in The Audio Hall of Fame, membership in the National Academy of Engineering, membership in the American Academy of Arts and Sciences, membership in the Radio Hall of Fame, and listings in *Who's Who in the World* and *American Men and Women of Science*. Dr. Bose has also published numerous articles in *MIT Research Laboratory of Electronics*, *Technology Review*, *International Symposium on Circuit and Information Theory*, and other journals and conference reports, and coauthored *Introductory Network Theory* with Kenneth Stevens (Harper and Row, 1965).

HOWARD FERSTLER

BOSE CORPORATION

American audio manufacturer, located in Framingham, Massachusetts, founded by Amar Bose, a professor at MIT, in 1964. The company's first products were high-power amplifiers produced under contract to the U.S. military. Proprietary technology created for those units has since been used by Bose in a variety of consumer products — now the foundation of the corporation's success. Bose is best known for creating products that combine high technology with simplicity and small size. The highly successful — and since imitated — Wave radio and Bose home theater products are examples of the company's philosophy: music, not equipment, is considered the ultimate benefit.

Over the years, Bose products and technologies evolved. The company introduced the world's first factory-installed, acoustically customized music system for automobiles, pioneered active noise-cancellation technology employed in their pilot and consumer headsets, and are also installed in sports arenas, performing arts centers and other professional venues. With this diversification, Bose is now one of the premier audio-product manufacturers in the world, annual sales in 2001 exceeded \$1.1 billion. The corporation has operations across the world, including the United States, Europe, Canada, Australia, Japan and India.

However, among audio enthusiasts the company may still be mainly identified by its first marketable system, the 901 loudspeaker, which was introduced in 1968 and still makes use of nine small and same-sized, full-bandwidth speaker drivers. Eight of the drivers faced the front wall of the room, with only one facing outward into the listening area, in contrast to more conventional, forward-facing woofer/midrange/tweeter designs produced by most other manufacturers. The idea was to simulate the direct/reflecting nature of typical concert halls. The 901 had no crossover at all, and to compensate for power-response losses in the bass and treble, the system utilized active equalization. Shortly after it was introduced, the system was lauded by *Stereo Review's* Julian Hirsch as being superb for realistic reproduction in home-listening situations, and this helped to launch the company into the mainstream, where it has remained to this day. The model 901 system has gone through many alterations since its introduction, and remains a controversial design in audio circles. Some enthusiasts still consider it a reference standard. [Website: www.bose.com.]

HOWARD FERSTLER

BOSS RADIO

A term given to the format for popular music broadcasts that originated in Los Angeles in 1965 at station KHJ; Bill Drake and Ron Jacobs devised the approach. Boss programming was rather automatic, depending heavily on multiple plays of Top 40 records, plus four or five uncharted items. The disc jockey — sadly tarnished in the payola scandals of the 1950s — became little more than an announcer, with program selections made by the program director. But a competing format, free-form programming, emerged quickly and restored initiative to the deejay.

BOSTON

Boston has gained its success by defying many business tenets of the music business. The group has

allowed considerable time to elapse between releases, with virtually no photo-ops to keep them in the public eye. Yet, Boston has enjoyed multi-platinum sales with a richly textured, power-guitar sound that remains essentially unchanged since the release of their first album in 1976. That release, eponymously titled *Boston* (Columbia 34188), was the brainchild of guitarist Tom Scholz. An unlikely rock star, Scholz earned a master's degree in mechanical engineering from MIT and, as a senior product designer for Polaroid Corporation, was limited to creating his music during leisure hours. His demo tapes, produced in his own 12-track basement studio, led to a recording contract with Epic Records. These tracks formed the core of the album, although Scholz and his supporting band — including vocalist Brad Delp, guitarist Barry Goudreau, bassist Fran Sheehan, and drummer Sib Hashian — recut some of the material on the West Coast with producer John Boylan. *Boston* was a huge success, selling more than 11 million copies; in 1995, *Billboard* called it the third-best-selling LP ever, behind Michael Jackson's *Thriller* and Fleetwood Mac's *Rumours*.

The follow-up release, *Don't Look Back* (Columbia 35050; 1978), although reaching number one, sold only 6 million copies. Apparently concerned about a further erosion of public interest, Scholz spent eight years working on the next album. When *Third Stage* (MCA 6188) became available in 1986, Scholz and Delp — whose soaring vocals helped define the group's intricately layered sound — were the only members left from the original lineup. Driven by the number one single, "Amanda" (MCA 52756; 1986), the album topped the charts, becoming a 4-million seller. At this point, Scholz's creative focus was compromised by a series of lawsuits involving former band member Goudreau and CBS Records. He also found time to invent the Rockman, a small guitar amplifier with headphones used by many musicians.

With Delp having departed in 1991 to form a band called RTZ with Goudreau, Scholz was forced to dispense, once and for all, with the fiction of group collaboration. Nevertheless, utilizing a new studio built from the money won in his successful countersuit of CBS, Scholz produced a fourth album, *Walk On* (MCA), in 1994, before disappearing from the public eye once again.

FRANK HOFFMANN

BOSTON ACOUSTICS

Founded in 1979 by Andy Kotsatos, current CEO, and Frank Reed (both of whom had previously held important positions at KLH and Advent), Boston Acoustics

is a well-established and respected member of the hi-fi audio industry. The company designs, manufactures, and markets high-performance audio products for use in home music and audio-video systems, after-market automotive systems, and personal desktop audio systems. Well known for its sophisticated loud-speaker designs and manufacturing techniques, including the use of advanced robotics and computerized quality testing, the company's extensive in-house design capability has earned it numerous awards and citations, including those from *Audio/Video International* magazine and the EIA, as well as many "best buy" and "product of the year" recognitions from leading consumer publications and enthusiast publications. [Website: www.bostonacoustics.com.]

HOWARD FERSTLER

BOSTON AUDIO SOCIETY

Founded in the Boston area, in 1972, by Alvin Foster, with the help of Peter Mitchell, Richard Goldwater, and James Brinton, it is the country's oldest, still-active audio-hobby club. Initially, it was tied in with the radio program, *Shop Talk*, on WBUR. The club was influential beyond its often modest membership size (there are members in areas far removed from Boston), and many individuals who later became influential audio journalists, or were (or would become) important in the audio manufacturing business were, and continue to be, members of the BAS. The club publishes a small newsletter, the *BAS Speaker*, that continues to be read by notables in the audio community. [Website: www.bostonaudiosociety.org.]

HOWARD FERSTLER

BOSTON SYMPHONY ORCHESTRA

Established in 1881, one of the oldest and most distinguished American orchestras, and the first to make recordings. The pioneer recording was of the Tchaikovsky Fourth Symphony, made in the Victor Camden studios (#6050; 1917); it remained in the Victor catalog into the electrical era until it was replaced by Serge Koussevitzky's version. Victor held the exclusive contract for the orchestra until 1969, when Deutsche Grammophon acquired it. Later the ensemble was heard on CBS, Philips, and other labels. Among the outstanding recordings by the orchestra were Debussy pieces made under Munch, e.g., *La Mer* (#LM 2111); and contemporary works commissioned for them under Serge Koussevitzky (by Bartók, Bliss, Britten, Ibert, Milhaud, Ravel, Villa-Lobos, Walton, and others). A large collection of noncommercial recordings (acetates) of the orchestra is at the Library

BOSTON TALKING MACHINE CO.

of Congress (described in Young 1990). In 2000, the Symphony issued a 12-CD set documenting radio broadcasts made from Symphony Hall between 1943–2000.

Koussevitzky led the orchestra from 1924 to 1949, gaining world renown for both championing contemporary works and also reviving the classics. More recently, Seiji Osawa has led the orchestra from 1973 to 2002, beating Koussevitzky's previous record of 25 years of service by four years.

The Boston Pops Orchestra, drawn from the symphony's members, began to give informal concerts modeled on the London Promenade events of the 1920s, and engaged Arthur Fiedler as conductor in 1930. The Pops performs the lighter repertoire and has recorded extensively under Fiedler and his successor (in 1979), John Williams. Other spinoff groups include the Boston Symphony Chamber Players (founded in 1964), and the Tanglewood Festival Chorus (organized in 1970). Symphony Hall in Boston, designed by McKim, Mead, and White in 1900, is one of the finest acoustical auditoriums in the United States. [Website: www.bso.org.]

BOSTON TALKING MACHINE CO.

A record manufacturer located in Boston, issuing the Phonocut label from 1910. After two or three years, the label was sold to a Philadelphia businessman named Morris Keen, who renamed it Keen-O-Phone; later it took the name Rex.

BOSWELL SISTERS

American vocal trio (Connie or Connee; Martha; Helvetia, known as Vet), all born in New Orleans. They were the leading female vocal group of the early 1930s, appearing with major jazz bands; they also had jazz stars as backup for many records. They were radio and movie performers as well. The group broke up in 1936, but Connie continued her career into the 1950s.

The first Boswell Sisters record to be issued was made for Victor in New Orleans on 22 Mar 1925, "I'm Gonna Cry" (#19639). They went on to many other labels, especially Brunswick. "Between the Devil and the Deep Blue Sea" was a notable hit (Brunswick 6291; 1932), with Bunny Berigan and the Dorsey brothers among the musicians heard. Another acclaimed song was "I'm Gonna Sit Right Down and Write Myself a Letter" (Decca 671; 1936), backed up by Russ Case, Artie Shaw, and others. Connie made some notable duets with Bing Crosby in 1937: "Basin Street Blues"/"Bob White" (Decca 1483; 1937). The Silver Swan label issued many of their hits on LP #1001 in 1976.



The Boswell Sisters, c. the mid-'30s. Courtesy David A. Jasen

BOTTOM

A term for the bass response of a sound system.

BOTTOM RADIUS

SEE GROOVE

BOULEZ, PIERRE (26 MAR 1925–)

French composer and conductor, born in Mottrisson. He studied composition at the Paris Conservatory, graduating in 1945. He became a theater and ballet conductor, then directed major orchestras and opera companies in Europe and the U.S. In 1971 he was appointed music director of the New York Philharmonic Orchestra, and began a vigorous promotion of 12-tone and avant-garde works. His choice of repertoire brought mixed reactions from the concert subscribers, and his tenure in New York ended in 1978. Thereafter, he was active as an opera conductor while also devoting himself to electronic composition. In 1995, he was named principal guest conductor of the Chicago Symphony Orchestra.

During the 1950s and 1960s, Boulez composed several pieces using techniques from the then-popular *musique concrète* style, i.e., manipulating taped sounds by editing together bits of tape to construct a composition. Continuing his interest in new sound

possibilities, in 1974 Boulez established the Institut de Recherche & Coordination Acoustique/Musique (IRCAM) in Paris, which has become a center of research into electronic music; it is now housed at the Centre Pompidou. IRCAM offers composers the opportunity to use the latest electronic equipment, including synthesizers and computers, with the aim of creating a new repertoire. Boulez remained the Institute's director for 18 years. Boulez's 1981 composition *Répons*, was the first piece he created using the advanced computers at the center; he expanded the piece in 1994, and it was issued on CD in 1998 by Deutsche-Gramophon, winning Boulez a Grammy for contemporary composition two years later. His recording of *Boulez Conducts Boulez* won a 1997 Grammy for best small ensemble issue. Boulez has also won numerous Grammys as a conductor, both of orchestral music and for his opera productions. His most recent award (at the time of this writing) came in 2002 for *Boulez Conducts Varèse*.

REV. CARL BENSON

**BOULT, ADRIAN, SIR
(8 APR 1889–22 FEB 1983)**

English conductor, born in Chester. He was one of the few major conductors to have a high academic qualification, the doctorate in music from Oxford (1914). In 1918 he conducted in London, and for the Ballets Russes. He became music director for the British Broadcasting Co. (BBC) in 1928 and organized the BBC Symphony Orchestra, remaining as conductor until 1950. From 1950 to 1967 he was conductor of the London Philharmonic Orchestra. Boult was knighted in 1937 for his service to British music, which he championed vigorously. His principal recordings were from the British 20th-century school, e.g., Holst's *The Planets* (HMV GM387, on seven 12-inch discs), Elgar's Second Symphony (HMV GM378, on six discs), and Vaughan Williams's "Fantasia on a Theme of Thomas Tallis" (Victor 769, two discs). All these were made with the BBC Orchestra. In 1960 he recorded a stereo accompaniment for a 1953 recital by the late Kathleen Ferrier (originally with monophonic accompaniment). Boult died in Tunbridge Wells.

BOUNDARY EFFECTS

Important in both recording situations and during playback in home-listening rooms, boundary effects involve wave cancellations and reinforcements that exist when audio signals interact with a room, its larger furnishings, and even a speaker cabinet itself. Perhaps

the most audible manifestation involves multiple-boundary effects, which are called standing waves.

HOWARD FERSTLER

BOWEN, JIMMY (30 NOV 1937–)

American record producer and record company executive, born James Allen Bowen in Santa Rita, New Mexico. After starting out as a recording artist with the number 12 hit "I'm Stickin' with You" in 1957, Jimmy Bowen turned to the business side of the music industry and worked at Reprise Records where he produced Dean Martin's number one hit "Everybody Loves Somebody" in 1964. He then worked for MGM Records for a while, and then joined MCA's Nashville division in 1978. He moved to Elektra/Nashville, where he produced hitmakers like Eddie Rabbitt and Hank Williams, Jr., in the late 1970s and early 1980s. In 1984, he returned to MCA, shaping the career of Reba McEntire. He moved to Capitol by the early 1990s, where he helped launch mega-selling country star Garth Brooks. He retired in 1994, and three years later published his memoirs, *Rough Mix: An Unapologetic Look at the Music Business and How It Got That Way*.

WILLIAM RUHLMANN

BOWERS, JAMES F. (1858–11 NOV 1925)

American music and record industry executive. He was president of the Music Publishers' Association for 14 years, and president of the National Association of Talking Machine Jobbers for 12 years. Most of his career was spent with Lyon & Healy; during 55 years with that music instrument company he was president and finally chairman of the board. He died in Chicago.

BOWERS, JOHN (1922–20 DEC 1987)

Born near Worthing on the south coast of England, Bowers spent the war years as a special operations executive in clandestine radio contact with Allied resistance operatives in occupied Europe during World War II. He specialized in electronics and radio-transmission, and after the war he opened a retail hi-fi store in Worthing with his business partner Roy Wilkins. In 1966, he decided to go into the loudspeaker manufacturing business on his own, and formed B&W Electronics, later renamed B&W Loudspeakers, with his friend John Hayward. (Wilkins may not have been involved with the new manufacturing operation, and it remains a mystery why the company was not called B&H.) The company thrived under his leadership, in part because of his emphasis on serious research and

development, and it eventually became one of the powerhouses of the audio industry.

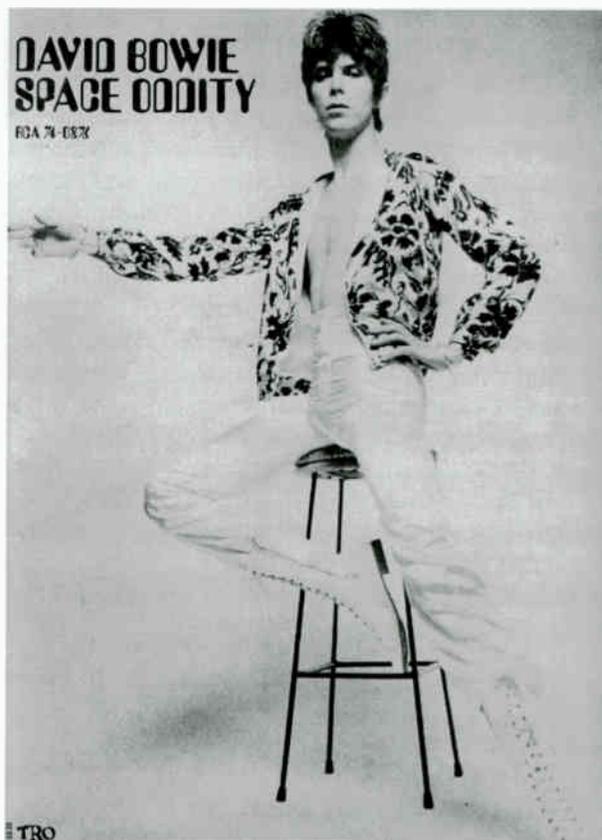
HOWARD FERSTLER

BOWIE, DAVID (8 JAN 1947–)

Best known for his wide-ranging repertoire of alter-egos — represented in recordings by means of a dizzying array of popular music styles — the multitalented Bowie has excelled as a songwriter, musician (most notably, on vocals, guitar, and saxophone), producer, and conceptual artist capable of communicating profound aesthetic and sociopolitical themes. Following his initial commercial success in the late 1960s, he managed to assume a rapid succession of personas in chameleon-like fashion, typically remaining one step ahead of prevailing cultural trends.

Born David Robert Jones in Brixton, England, he recorded briefly with several bands beginning in 1964 — the King Bees, the Mannish Boys, and, as featured performer, the Lower End — before embarking on a solo career with the Bowie surname in order to avoid confusion with fellow countryman Davy Jones, later of the Monkees. After releasing about a dozen singles and an Anthony Newley-styled album, *David Bowie* (Deram 1007; 1967), without making the charts, he achieved his first taste of mass popularity with “Space Oddity” (Philips 72949; 1969; #5 UK), from the LP, *David Bowie – Man of Words, Man of Music* (Philips 7912; 1969; issued in the U.S. on RCA 4813 in November 1972 as *Space Oddity*). Two hard rock releases — *The Man Who Sold the World* (Mercury 613251; 1971), and *Hunky Dory* (RCA 4623; 1971; #93), the latter sporting a transvestite cover (in the British edition), the FM radio staple, “Changes” (RCA 2160; 1972; #66), and the first appearance of his classic backing band, the Spiders from Mars (featuring lead guitarist Mick Ronson) — further enhanced his reputation, but *The Rise and Fall of Ziggy Stardust and the Spiders from Mars* (RCA 4702; 1972; #75 US, #5 UK), a loose concept piece about an alien invader with decidedly glam leanings.

Bowie continued to mine the sci-fi glitter rock vein with *Aladdin Sane* (RCA4852; 1973; #17 US, #1 UK), the covers tribute LP, *Pin-Ups* (RCA0291; 1973; #23 US, #1 UK), and *Diamond Dogs* (RCA 0576; 1974; #1 UK). Hiring a new band built around guitarists Carlos Alomar and Earl Slick, he moved in the direction of Philadelphia soul and disco with *Young Americans* (RCA 0998; 1975; #9 US, #2 UK), driven by the hit single, “Fame” (RCA 10320; 1975; #1 US, #17 UK), which included backing vocals from John Lennon. Although possessing a veneer of commercial polish, *Station To Station* (RCA 1327; 1976; #3 US, #5 UK),



David Bowie's "Space Oddity" sheet music cover, c. early '70s. Courtesy David A. Jasen

featuring the single “Golden Years” (RCA 10441; 1975; #10 US, #8 UK), exhibited a preoccupation with stark themes such as totalitarianism and fascism. Bowie would further separate himself from the pop mainstream by recording three experimental collaborations with Brian Eno: *Low* (RCA 2030; 1977; #11 US, #2 UK), *Heroes* (RCA 2522; 1977; #35 US, #3 UK), and *Lodger* (RCA 3254; 1979; #20 US, #4 UK).

Scary Monsters (RCA 3647; 1980; #12 US, #1 UK) — which included two Top 10 British hits, “Ashes To Ashes” (RCA 12078; 1980; #1 UK), which resurrected his Major Tom character from “Space Oddity,” and “Fashion” (RCA 12134; 1980; #70 US, #5 UK) — hailed a return to the mainstream. Following an extended hiatus, Bowie enlisted ex-Chic guitarist Nile Rodgers as producer of the slick, rhythm and blues-oriented LP, *Let's Dance* (EMI America 17093; 1983; #4 US, #1 UK). It was his biggest seller, due largely to the presence of several hit singles: “Let's Dance” (EMI America 8158; 1983; #1 US, #1 UK), “China Girl” (EMI America 8165; 1983; #10 US, #2 UK; best remembered for a controversial promotional video), “Modern Love” (EMI America 8177; 1983; #14 US, #2 UK), and “Without You” (EMI America 8190; 1984; #73). The next two albums, *Tonight* (EMI

America 17138; 1984; #11 US, #1 UK) *Never Let Me Down* (EMI America 17267; 1987; #34 US, #6 UK), were rather tepid affairs, although the former did contain one notable single, "Blue Jean" (EMI America 8231; 1984; #8 US, #6 UK).

Although always guaranteed a substantial following, his later work — including three releases between 1989–1992 with his hard rock group, Tin Machine — has been uneven at best. More recent releases — most notably, the ambient-tinged collaboration with Eno, *Outside* (Virgin 30702; 1995; #21 US, #8 UK), and *Earthling* (Virgin 44944; 1997; #39 US, #6 UK), which incorporated drum-and-bass and other contemporary dance features — reflect a valiant struggle to remain artistically and commercially viable, albeit with mixed results.

FRANK HOFFMANN

BOWLLY, AL (7 JAN 1899–17 APR 1941)

Popular singer, born in Natal, South Africa. He was self taught on the piano, banjo, guitar, and ukulele. Having toured South Africa and the Far East with Edgar Adeler's band in 1923, he received world acclaim and moved to Britain in 1928. In 1931 he began a long association with Ray Noble, and he sang also with Lew Stone's band from 1932. In 1934 he transferred to the U.S. Bowllly's recorded output was vast: more than 1,500 discs (most on HMV, Columbia, Decca, Victor and Bluebird), are credited to him (in Rust 1989), made from 1927 to 1941. Among his most elegant renditions is "The Touch of Your Lips" (by Ray Noble; Victor 25277; 1936). Bowllly's rendition of



Al Bowllly, c. mid-'30s. Courtesy David A. Jasen

"Midnight, the Stars, and You," with Noble (1934), was used in the motion picture *The Shining*. He was killed in a London air raid.

BOXING RECORDINGS

The first record of any sporting event was the one made by the first Black firm to issue records. It was the Jack Johnson Record, describing the championship match between Jack Johnson and Jim Jeffries on 4 July 1910. The bout between Jack Dempsey and Gene Tunney, 22 Sep 1927, was recorded on five discs by Paramount. *Great Moments in Boxing* was a 1961 LP released on the Coral label.

BOYD, BILL (29 SEP 1911–7 DEC 1977)

American western singer and guitarist, born William Lemuel Boyd near Ladonia, Texas, and raised as a cowboy. He should not be confused with the actor of the same name, who played "Hopalong Cassidy." Boyd had a radio show in Dallas from 1932 into the 1960s. In 1934 he began recording with Victor, and eventually made more than 300 records. He was in a number of western movies in the 1930s and 1940s. He retired in the early 1950s.

Bill Boyd and his Cowboy Ramblers were the group that initiated the Victor series of western discs, with "I'm Gonna Hop Off the Train" (#B-5740), and nine other numbers made on 7 Aug 1934 in San Antonio. The group performed 10 more songs on 27 Jan 1935. On 12 Aug 1935 they recorded one of their major hits, "Get Aboard that Southbound Train" (#B-6085).

BOYD, JOE

SEE HANNIBAL (LABEL)

BOYZ II MEN

Boyz II Men have proven that a mainstream pop group emphasizing ballads is capable of outselling more trendy alternative rock and rap competitors. Their sound — a blend of doo-wop, the 1960s Motown singing groups (particularly the Temptations), and 1970s Philly soul, accented by contemporary vocal nuances — appears unlikely to ever seem dated.

Formed in 1988 at Philadelphia's High School for the Creative and Performing Arts, the quartet — comprised of Michael McCary, Nathan Morris, Wanya Morris, and Shawn Stockman — was championed during their formative years by the New Edition's Michael Bivins. Their debut LP, *Cooleyhighharmony* (Motown 6320; 1991; #3), driven by three Top 20

singles, ultimately sold more than 9 million copies. A single from the film *Boomerang*, "End of the Road" (Motown 2178; 1992), had — for the time — the most successful chart run ever during the rock era, remaining number one on the *Billboard Hot 100* for 13 weeks. The group's other albums — *Christmas Interpretations* (Motown; 1993), *II* (Motown; 1994; #1 pop, #1 R&B; over 13 million copies sold), *Remix Collection* (Motown; 1995), *Evolution* (Motown; 1997; #1 pop, #1 R&B; a Spanish-language version also released), and *Nathan Michael Shawn Wanya* (Universal; 2000) — maintained the group's hot streak, despite competition from countless imitators, most notably 'N Sync and the Backstreet Boys.

Assisted by state-of-the-art video clips and a romantic, nonthreatening image, Boyz II Men have also gone on to become one of the top singles groups of all time. According to Joel Whitburn's *The Billboard Book of Top 40 Hits*, they have recorded three of the six most successful songs since 1955: "My Sweet Day" (Columbia 78074; 1995; #1 16 weeks; with Mariah Carey — rated 1st); "I'll Make Love to You" (Motown 2257; 1994; #1 14 weeks — rated 3rd); and "End of the Road" (rated 6th). Other number hits have included "It's So Hard To Say Goodbye To Yesterday" (Motown 2136; 1991; #1 R&B), "On Bended Knee" (Motown 0244; 1994; #1 pop), "4 Seasons of Loneliness" (Motown 0684; 1997; #1 pop), and "A Song For Mama" (Motown 0720; 1997; #1 R&B).

FRANK HOFFMANN

BOZAK, RUDOLPH THOMAS (1910–1981)

A noted speaker designer and former owner of Bozak Loudspeakers, Bozak was born in Uniontown, Pennsylvania, and studied at the Milwaukee School of Engineering. He went to work for Allen-Brady as a designer in 1933, moved to Cinaudagraph in 1935 (Bozak helped to set up the company's speakers in a huge PA system at the World's Fair in 1939), joined the Dinion Coil Company during the World War II years, and transferred to Wurlitzer in 1948. After leaving Wurlitzer later that same year, he went on to found his own speaker company in 1952, and, working at times with people like Lincoln Walsh and Emory Cook, created some of the most prestigious, visually imposing speaker systems of the 1950s. In 1965, the Audio Engineering Society awarded him a fellowship, and in 1970 it presented him with its prestigious John H. Potts award (later to become the gold medal).

See also Loudspeaker

HOWARD FERSTLER

BRADLEY, OWEN (21 OCT 1915–7 JAN 1998)

Producer, songwriter, bandleader. Best known and most influential as the head of the Decca/MCA record label, Owen Bradley helped crystallize the "Nashville sound" of the late 1950s and 1960s. Originally working as a bandleader for radio station WSM in Nashville beginning in 1947, Bradley was approached by Decca's country head Paul Cohen to serve as a session musician/producer/recording engineer in the early 1950s. Bradley opened the first studio on Music Row in 1952, building his famous quonset-hut studio behind an old turn-of-the-century mansion. Positioning himself on the leading edge of country-music modernization in his use of pop sounds and stylings, Bradley worked with Bobby Helms, Del Reeves, Charlie Walker, Kitty Wells, Patsy Cline, Brenda Lee, and others. The Patsy Cline vehicles "Crazy," "I Fall to Pieces," and "Walkin' After Midnight" are regarded as classics and enduring benchmarks that continue to set a standard of excellence in country music recording. Bradley was named a staff producer for MCA (Decca's parent company) in 1962, and continued to oversee Decca's country roster through most of the 1960s. Owen Bradley, who died in 1998, also produced Loretta Lynn's "Coal Miner's Daughter." In his later career, he was called out of retirement to work with a diverse range of artists, from Elvis Costello to k.d.lang.

BRAD HILL

BRAIN, DENNIS (17 MAY 1921–1 SEP 1957)

British hornist, the first to make significant solo recordings of his instrument. He was born in London, son of the eminent horn player Aubrey Brain. He was principal hornist of the Royal Philharmonic and Philharmonia orchestras. Among his notable discs, which spanned the concert repertoire of the horn, were the four Mozart concertos, made with Herbert Von Karajan and the Philharmonia Orchestra in 1953 (Angel 35092; HMV ASD-1140); and a composition written for him, the "Serenade for Tenor, Horn and Strings" by Benjamin Britten, recorded with Peter Pears and the Boyd Neel String Orchestra (Decca D-ED7, on three 12-inch 78s). He was also heard in the Hoffnung Music Festival, playing on a garden hose (Angel 35500; HMV SLS-5069). Brain died in an automobile accident in Hertfordshire.

BRANSON, RICHARD (18 JULY 1950–)

Founder, Virgin Records. A precocious entrepreneur, Branson planted the seeds of his eventual Virgin empire

as a teenager, when he founded a high-school newspaper called *Student*. Two years into its publication, Branson began offering mail-order record albums at discount prices, and experienced a response so overwhelming he spun the enterprise into a separate business called Virgin. The label's first important artist signing was Mike Oldfield, whose album *Tubular Bells* had been rejected by other companies. Its success established Virgin Records in the record-label landscape, and the company eventually released material by the Sex Pistols, the Rolling Stones, Phil Collins, Peter Gabriel, Janet Jackson, and other international acts. In 1992, Branson sold the label to the Thorn-EMI conglomerate to focus on his over 200 other businesses, including a transcontinental airline and a soft-drink maker.

BRAD HILL

BRASS INSTRUMENT RECORDINGS

Recordings offer a historical perspective of brass music from the pre-Baroque period to the present. Early music on contemporary musical instruments include recordings featuring clarion trumpet, slide trumpet, the 16th- and 17th-century cornetto (cornett), sackbut, serpent, and other instruments of the Middle Ages, Renaissance, and Baroque eras. The band and orchestral repertoire presents solo and ensemble parts for trumpet, cornet, horn, trombone, bass trombone, euphonium, baritone horn, and tuba.

Periodicals of interest include: *Brass Bulletin*, *Cadence*, *International Horn Society Horn Call*, *International Trombone Association Journal*, *International Trumpet Guild Journal*, *T.U.B.A. Journal*.

See also **Cornet Recordings; Military Band Recordings; Trombone Recordings; Trumpet Recordings; Tuba Recordings**

BREAM, JULIAN (15 JULY 1933–)

Born in London, England, Bream was a prolific recording and performing artist on the classical guitar and lute, specializing in Elizabethan-era music but also recording more popular-oriented material. While studying at the Royal College of Music in London, Bream made his professional debut at age 17, and was signed to RCA Records in 1958. Bream won his first Grammy award at age 30 in 1963 for his album *An Evening of Elizabethan Music*, and would win three others through 1972. In the 1970s, he recorded several highly successful albums of duets with classical guitarist John Williams. In 1979, RCA presented celebrated his sale of over a half-million records in the U. K. by presenting him with a platinum record. For his 60th birthday, the label issued a lavish boxed set in

1993, containing 28 CDs. He has continued to perform, primarily in England, through the early 21st century. Among his many honors, Bream was awarded the OBE in 1964 and two decades later made a Commander of the British Empire.

BRENSTON, JACKIE

(15 AUG 1930–15 DEC 1979)

Born in Clarksdale, Mississippi, he received label credit (for contractual reasons) — as leader of the Delta Cats — for the chart-topping (five weeks) rhythm and blues recording, “Rocket 88” (Chess 1458; 1951), which many experts consider to be the first rock ‘n’ roll hit. Brenston was actually vocalist/saxophonist for Ike Turner’s Delta Rhythm Kings, who cut the track for Sam Phillips’s Memphis Recording Service. The song — a paean to the automobile — was based on the jump blues styles then popular on the West Coast. However, it cut new ground with Turner’s overamplified, fuz-tone-styled guitar figure and wild saxophone solo (by Raymond Hill) over a standard boogie-woogie groove. The highly influential guitar sound was reputedly achieved when Phillips, seeking a temporary sound fix, jammed paper in a speaker cone damaged when Turner’s amplifier fell off the top of the car enroute to the recording session.

FRANK HOFFMANN

BRIDGEPORT DIE AND MACHINE CO.

A firm located in Bridgeport, Connecticut, which produced phonograph records in addition to its manufacturing activity. These were released under various label names: Broadway, Carnival, Hudson, Master Tone, Mitchell Record, National, Pennington, Puretone, Puritan, Resona, Ross, and Triangle. Recording work took place from ca. 1922 to 1925, when the firm went bankrupt.

BRIDGING

The process of connecting two channels in a stereo amplifier to play back a monophonic signal; also called strapping.

BRIGGS, GILBERT A. (1890–11 JAN 1978)

Briggs had an early career that had nothing to do with audio or recording technology at all, being a world-traveling textile agent, operating from his home in Yorkshire, England. However, during the Depression his business went sour and he gravitated toward another interest: building custom-made loudspeaker systems.

BRILLIANT QUARTETTE

Ultimately, this resulted in him founding Warfedale Wireless Works in 1933, and the establishment of a brand name that eventually became known worldwide. Briggs was an excellent writer, as well as speaker designer, and between 1948 and his death he published more than 20 books on topics as varied as pianos and other musical instruments (he was also a fine piano player), amplifiers, loudspeakers, antennas, and audiology. Besides his loudspeaker systems and writings, Briggs, assisted by Raymond Cooke and Peter Walker, may best be known for a series of live-vs.-recorded demonstrations involving his speaker systems, a technique that was also utilized a number of years later by Edgar Villchur.

HOWARD FERSTLER

BRILLIANT QUARTETTE

An early recording group for Columbia, first listed in their September 1891 catalog, and carried through the 1895 catalog. Although they were the first vocal group widely featured by Columbia, the members were never identified. They sang popular numbers of the day, including so-called "coon songs." Another group of the same name, or perhaps the same singers, recorded for Berliner in the late 1890s.

BRILLIANTONE STEEL NEEDLE CO.

SEE BAGSHAW (W.H.) Co.

BRISTOPHONE

The first electrically amplified cartridge, designed and patented in 1924, and marketed in 1926, by the Bristol Co. of Waterbury, Connecticut. It consisted of "a tone arm and reproducer designed to be set inside the phonograph cabinet (next to the old tone arm) and connected to a separate amplifier and speaker system" (Barnes). It operated through the speaker, or both the speaker and amplifier, of a radio. Its price was \$45 in 1926. [Barnes 1975.]

BRITISH BROADCASTING CORP. (BBC)

A firm established in London, in November 1922, as the British Broadcasting Co., with six major companies as founder members: Marconi's Wireless Telegraph Co., Ltd.; Metropolitan Vickers Electrical Co., Ltd.; British Thomson Houston Co., Ltd.; General Electric Co., Ltd.; Western Electric Co., Ltd.; and Radio Communication Co., Ltd. John Reith was the general manager. The BBC began broadcasting on 14

Nov 1922 (following some experimental transmissions in the previous year). Peter P. Eckersley was the first chief engineer. At first the company held a monopoly on sales of radio sets in Britain (1922-1925), and it kept exclusive rights to broadcast on radio and television until 1955. In 1927 the company became a corporation.

Research and development activities were prominent from the early days, and in 1990 were the responsibility of 215 workers. Over the years important research has been done in loudspeaker design, microphones, diaphragms, and studio design. BBC pioneered in magnetic recording, having initiated use of the Blattnerphone in 1930.

One of the world's principal libraries of sound recordings (dating from 1933) has been assembled in Broadcasting House, the BBC's main building since 1932. The archival collection was stored in a coal mine during World War II; other records were moved out of London. There are more than 1 million discs, cylinders, and tapes in the collection.

Christopher Stone was radio's first "disk jockey," playing records on a regularly scheduled series of broadcasts. The BBC Symphony Orchestra was created in 1928, and under conductor Adrian Boult it became one of the leading symphonic ensembles of its time.

BRITISH BRUNSWICK LTD.

A firm established 20 Sep 1926 in London, with W. Sinkler Darby as managing director and Count Anthony Herbert de Bosdari as general manager. The firm made discs and Panatrope players, beginning with pressings from the Brunswick-Balke-Collender Co. (of the U.S.), and issuing their first British-made records in July 1927. A 10-year exclusive contract was arranged to sell American Brunswick records; exchange of matrices and mutual sales agreements continued with Deutsche Grammophon. A series of tone tests was held, using the Panatrope. In April 1928 British Brunswick became affiliated with Duophone through a merger of manufacturing and sales functions, and soon Duophone was in full control of the enterprise.

With the establishment of the Decca Record Co., Ltd., in February 1929, Duophone/Brunswick pressed discs for that firm, and the Brunswick name appeared on record labels. But resources were overextended, and liquidation proceedings began. British Brunswick closed down in September 1929. However, the label name reappeared in December 1930 with the formation of the Brunswick Radio Corp. in America and the establishment of a new British partner company, Warner Brunswick, Ltd. Both 10-inch and 12-inch Brunswick records appeared in Britain until 1949. [Andrews; Andrews 1981; Rust.]

BRITISH COPYRIGHT PROTECTION ASSOCIATION

An organization devoted to the collection of royalties for members, and for members of certain affiliated non-British associations.

BRITISH HOMOPHONE CO., LTD.

A firm incorporated on 3 Aug 1921 in London. It had agreements to use the masters of the Homophon Co. of Berlin, which had been distributing records in Britain on their Homophon label since 1906. The label of the new firm was named Homochord, also the label name of a record sold in Britain by the Berlin firm from 1912 to 1916. After World War I some American pressings were issued on Homochord, via Pathé Frères Phonograph Co., Inc., and Pathé Frères Compagnie of London, Vocalion (and others) through the Aeolian and Vocalion companies in Britain.

On 19 May 1928 the firm became a public limited company, acquiring at that time the assets of the Sterno Manufacturing Co.; in April 1929 a label named Sterno was introduced. Columbia bought all shares of the Berlin Homophon Co. in 1928, creating business difficulties. There was a considerable loss during the first year of operation and cutbacks followed. Sterno also lost money, but British Homophone carried on and entered the radio field as well in 1932. They produced an early long-playing record, the Four-in-One label, in August 1932: with a finer cut spiral it could squeeze two numbers on each side of a 10-inch disc. In the same year the firm trademarked the Kid-Kord and Kindakord labels for children's material. Despite these initiatives, the company could not long survive in the Depression years. No records were advertised after April 1935, although the company continued to press discs for other makers. Crystalate Gramophone Record Manufacturing Co., Ltd., took control of the firm by August 1939; but the name of the company has persisted to this day, with an address on Rollins Street in London. It remains in the recording business, but not for public sales. [Andrews: Andrews 1985/10.]

BRITISH INSTITUTE OF RECORDED SOUND

SEE NATIONAL SOUND ARCHIVE (NSA)

BRITISH INVASION

The British Invasion was, quite simply, one of the watershed developments in American popular music history. The phenomenon involved the virtual domination of AM radio and the record industry in the United

States by British artists, particularly the beat groups who had proved adept at recycling the American rhythm and blues and rockabilly songs of the 1950s.

A fortuitous convergence of historical events provided the appropriate setting for this onslaught. Perhaps of greatest importance, American rock 'n' roll had been undergoing a steady decline in quality since the major record companies — aided and abetted by other media outlets, most notably Top 40 radio and Dick Clark's "American Bandstand" — had harnessed it and begun releasing a tamer product. The pop hegemony enjoyed by teen idols such as Frankie Avalon and Fabian had driven many youth to commercial folk and jazz, while a seemingly endless stream of novelty songs — e.g., Sheb Wooley's "Purple People Eater" (MGM 12651; 1958), David Seville's "Witch Doctor" (Liberty 55132; 1958), Larry Verne's "Mr. Custer" (Era 3024; 1960), and Brian Hyland's "Itsy Bitsy Teeny Weeny Yellow Polka Dot Bikini" (Leador 805; 1960) — and dance crazes proved unsuccessful in cultivating a substantial core following for rock 'n' roll.

In the meantime, the British music scene appeared incapable of producing much more than pale Elvis Presley imitators (e.g., Cliff Richard, Billy Fury, and Marty Wilde), and bland pop along the lines of Mr. Acker Bilk, whose "Stranger on the Shore" (Atco 6217; 1962), was one of the few British imports to make a substantial dent in the stateside charts prior to 1964. However, the pop underground in Great Britain was quietly brewing something far more potent starting in the mid-1950s. The skiffle music craze (a uniquely English form of folk-revival music drawing heavily on American material), led by Lonnie Donegan spurred the baby boomer generation to form their own bands. The most notable of these aggregates — then known by names such as the Quarrymen and the Silver Beatles — would go on to spearhead the British Invasion.

It's hard to imagine the invasion taking place without the Beatles. Many of the bands swept along on the Fab Four's coattails to the top of the American charts possessed no more talent than the bland teen idols they had displaced. The Beatles, however, were another matter. Three of the band's four members — the songwriting team of John Lennon and Paul McCartney, and, to a lesser extent, lead guitarist George Harrison — were capable of producing first-rate material. After a brief period of covering American R&B, pop, and country standards, the group went on to compose a long string of rock classics, many of which are likely to be performed for generations to come. The band members were also all excellent musicians, thanks in large part to years spent performing in small clubs in England and Germany. Lennon and McCartney both were superb vocalists, capable of putting across rave-up rockers and introspective ballads in an equally convincing manner.

Despite the band's ability — so easy to assess in retrospect — success in the U.S. might easily have eluded them had not conditions proved ripe for receptiveness on the part of the American public. The Beatles, under the skilled management of Brian Epstein, had attempted a number of times in 1963 to secure a hit record on the American charts. Songs like "Love Me Do" (Tollie 9008), "From Me to You"/"Please Please Me" (Vee-Jay 581), and "She Loves You" (Swan 4152) — all hits in the U.K. — had gone nowhere when released by various small labels in the states. By late 1963, however, the nation was caught up in communal sense of mourning, brought on by the assassination of popular President John F. Kennedy. The Beatles — with their cheeky wit (as evidenced in countless news interviews punctuating the whirlwind visits to the U.S. during the early months of 1964), and catchy, upbeat pop songs — proved to be the perfect anecdote to America's collective depression. In addition, the mop-top hairstyle exhibited by the band members garnered considerable attention. As had been the case with Elvis Presley's heavily greased DA hairstyle of the mid-1950s, the Beatles look engendered considerable controversy on the part of the adult establishment. It provided instant credibility with America's youth, who were always in search of culture symbols to both collectively identify with and flaunt in the face of authority figures as an act of rebellion.

Within a matter of weeks in January 1964, catapulted by round-the-clock radio play and appearances on the "Ed Sullivan Show," the Beatles went from complete unknowns to household names in the U.S. With "I Want to Hold Your Hand" (Capitol 5112) perched in the number one position on the *Billboard* "Hot 100," record companies owning the distribution rights to earlier Beatles hits rushed them back out into the marketplace. At one point in the spring, the band held down all top five positions on the national singles chart.

These developments made a substantial impression on the British music scene. British artists of every stripe — from beat groups to purveyors of easy listening fare — were hurriedly signed up by American labels and promoted through the mass media with a vengeance. In the weeks immediately following the appearance of the Beatles, countless other U.K. recording acts — some of whom had realized very little success in their own country — enjoyed heavy radio play and print coverage stateside. The first onslaught of British performers to achieve success on the American charts included Dusty Springfield, the Dave Clark Five, the Searchers, Billy J. Kramer, and Peter and Gordon. Perhaps of even greater importance, countless other British youths were inspired to become musicians, resulting in a steady stream of talent that, many would argue, has remain undiminished to the present day.

By early summer, the floodgates had burst open; there seemed to be more British artists than American on the airwaves. Indeed, a considerable number of established U.S. acts — to say nothing of the more marginal recording artists — virtually disappeared from the charts in 1964 (some never to return). Stars suddenly thrust into the periphery of record industry included Dion, Fats Domino, Rick Nelson, Neil Sedaka, Connie Francis, Brenda Lee, Roy Orbison, the Everly Brothers, and Chubby Checker. Even Presley's career was sent into a tailspin. After eight years of uninterrupted success, he enjoyed only one Top 10 hit — "Crying in the Chapel" (RCA 447-0643); which charted in 1965 but was recorded in 1960 — prior to his revival in 1969 with "In the Ghetto" (RCA 47-9741), and "Suspicious Minds" (RCA 47-9764). Only a handful of American artists continued to thrive in 1964 and beyond, most notably the Beach Boys and the Four Seasons. New homegrown talent found it necessary to incorporate elements of the merseybeat sound such as the trademark jangly guitars and seamless three-part vocal harmonies. The garage punk and folk-rock movements were particularly influenced by English rock bands. Some American groups — for example, Beau Brummels and the Sir Douglas Quintet in 1965 — found it expedient to ape the British Invasion look to the extent of carefully covering up their native origins.

Probably the most positive result of the British Invasion was its role in clearing away the musical deadwood that had found a home on the American charts. With many of the long established American acts — as well as countless lesser luminaries — unable to compete with the host of typically lackluster British stars, fresh stateside talent was more readily able to garner the attention of record company executives. Within a year or two of the initial British onslaught, a new wave of American musicians had already laid the groundwork for the creative renaissance in popular music during the latter half of the 1960s. [Miller 1980; Schaffner 1983.]

FRANK HOFFMANN

BRITISH LIBRARY OF WILDLIFE SOUNDS

SEE NATIONAL SOUND ARCHIVE (NSA)

BRITISH OZAPHANE LTD.

A firm established 9 Mar 1936 in London, licensed by two French companies to use a patent for film soundtracks. W.H. Ogden was managing director. Duo-Trac was the name of tis product; it had negligible success,

and the company ceased functioning in 1946. It was officially struck off the register on 10 Oct 1950.

BRITISH PHONOGRAPH INDUSTRIES LTD.

A maker of "electric cylinders," — not electrically recorded — established in March 1904. It had no advertising after 1905, and was ordered to wind up in March 1906.

BRITISH SONOGRAM CO., LTD.

A firm established in 1907 in London. It flourished in 1907, selling 10-inch double-sided discs in the U.K. and U.S. The label name was Sovereign.

BRITISH ZONOPHONE CO.

A firm established 1903 in London as outlet for the British recordings of International Zonophone Co., with Louis Sterling as manager. The firm was actually a somewhat clandestine subsidiary of G&T, intended to sell cheap discs without compromising the parent company's name. Its records were made by Deutsche Grammophon in Hanover, or made at the Berlin plant of International Zonophone, and the labels at first carried the name International Zonophone. Sterling issued a "Catalogue of Zonophone Disc Records: July 1904" (facsimile reprint, London: City of London Phonograph and Gramophone Society, 1977). With the label name changed to Zonophone new recordings were made in several international series, presenting a varied popular repertoire. The firm's playback machine, as advertised in *TMN* 1905, featured a new tone arm. In 1910 the firm incorporated as British Zonophone Co., Ltd.

The company admitted, in a 1920 story in *TMN*, that their records and machines had been made by the Gramophone Co. "for quite a long time," and that henceforth they would use the HMV name on their products. It was, however, the Nipper trademark that was used, not the words "His Master's Voice," and in 1924 that logo was abandoned in favor of the earlier "Zonophone Cross" design. In the summer of 1931 British Zonophone moved into a new home on Oxford Street, shared with HMV.

FRANK ANDREWS

BRITT, ELTON (7 JULY 1917–23 JUNE 1972)

American country singer, born James Britt Baker in Marshall, Arkansas. He was featured on the *Grand Ole*

Opry, *Camel Caravan*, *Elton Britt Show*, and other radio programs, and was one of the leading stars during the 1940s and 1950s. A Victor artist from 1937, he made 672 singles and 56 albums for the label over 22 years. Later he also worked for Decca, ABC-Paramount, and others. His greatest hit record was the 1943 "There's a Star Spangled Banner Waving Somewhere," on the Bluebird label (#9000; 1942), the first country song to sell a million records. Britt died in McConnellsburg, Pennsylvania.

BROADCAST (LABEL)

A Vocalion subsidiary record, first issued in Britain in July 1927. The discs were eight inches in diameter, but with finer than ordinary grooves so that the playing time was that of the standard 10-inch record. Selling at a bargain price of 1s 3d, the new product threatened to upset the market balance of the gramophone industry, and there was an effort to stifle advertising and retailing of it. Vocalion sold the label nevertheless, using chain stores and stationers such as W.H. Smith and Boots. Broadcast was a great success, and the factory was hard put to bring out enough discs to meet demand: around 1.25 million per month.

Beginning in January 1928, the label was sold in Australia; and later that year it was available in China, Italy, and France. But the success faded quickly, and by 1930 Vocalion was losing money on its foreign operations and suffering from domestic competition in Britain. The price of the eight-inch disc was lowered to 1 shilling in March 1931, and the 10-inch Broadcast Twelve was put on the market in July 1928 — said to have the playing time of an ordinary 12-inch disc. Then in September 1931 the original eight-inch disc was increased in size to nine inches. These approaches were not fruitful, and in March 1932 Vocalion was acquired by the Crystalate Gramophone Record Manufacturing Co., Ltd. Crystalate initiated two new labels: Broadcast International (using U.S. masters from the American Record Corp., in which Crystalate was a partner), and Broadcast Four-Tune, both in January 1933; they were 10-inch records selling at 1s 6d. The fine grooving drew five to six minutes of playing time from the Four-Tune (the tunes were dance music numbers). In 1933 and 1934 the name Crystalate began to replace the Broadcast and Vocalion identification on the discs, so the label disappeared finally in March 1934. [Andrews 1982.]

BROADCAST MUSIC INC. (BMI)

A licensing organization established by U.S. broadcasting companies in 1940 as a response to ASCAP (American Society of Composers, Authors, and

BROADSIDE (LABEL)

Publishers). BMI was born over a feud between ASCAP and radio: ASCAP tried to double its fees for the licensing of music by its members. BMI was formed by radio-station executives to offer an alternative source of music. BMI endeavored to enlist artists and composers who were not affiliated with ASCAP, welcoming blues, jazz, country, and other songwriters traditionally ignored by the more staid ASCAP. In 1944 agreements were reached between ASCAP and the radio networks, but by then BMI was well-established among a new generation of pop composers. BMI's payment schedule was also helpful to the less-established songwriters; BMI often advanced money against expected fees to new members, and also accounted for more local airplay than ASCAP, which focused on network broadcast. Local stations tended to play more regional music, such as country and R&B, and thus BMI's members benefitted from this emphasis.

During the 1950s, BMI established a stronghold in country music, an area traditionally ignored by ASCAP. In 1958, former WSM radio secretary Frances Preston opened BMI's first Nashville office; five years later, ground was broken for a large complex on the edge of Music Row, which helped establish this as a center of music-business dealings in the town. Preston's success led her to become president of the entire BMI organization in 1986, a position she still holds as of 2002. Rock 'n' roll and R&B were also important to BMI's growth, again because performers in these genres had not traditionally been courted by ASCAP. (By the 1970s, ASCAP would realize the error of its earlier ways, and begin actively building its own lists in all of these genres.)

As of 2002, BMI represented approximately 350,000 songwriters and 4.5 million songs. Its board of directors is drawn from the broadcasting industry, and so are the stockholders. [Website: www.bmi.com.]

BROADSIDE (LABEL)

Agnes "Sis" Cunningham (1909–), a teacher and musician, married Gordon Friesen (1909–1996), a writer, in 1941 in Oklahoma, and a few months later they moved to New York City. In February 1962 they launched *Broadside*, subtitled "A handful of songs about our times," a slight, mimeographed magazine of topical songs and articles, that included Bob Dylan's "The Talking John Birch Society Blues." *Broadside* continued to appear until 1988, a total of 187 issues, with Sis Cunningham and Gordon Friesen as the publishers except for a few years in the mid-1980s. They included compositions by the major singer-songwriters of the time. Moses Asch of Folkways Records agreed to produce and distribute a series of albums on the Broadside label of mostly composers and songs having appeared

in the magazine. *Broadside Ballads Vol. 1* appeared in 1963, which included the New World Singers performing Bob Dylan's "Blowin' In the Wind," as well as Dylan (under the name "Blind Boy Grunt"), Phil Ochs, and Peter LaFarge. *Broadside 2* (1963) contained only Pete Seeger. *The Time Will Come* (1967) introduced Elaine White, Teatro Campesino, Tom Parrott, and Janis Ian (under the name "Blind Girl Grunt"). Jimmy Collier and Rev. Frederick Douglass Kirkpatrick released *Everybody's Got A Right To Live* in 1968; *Time Is Running Out* (1970), featured Frederick Kirkpatrick, Mike Millius, Wesley Houston, and Anne Romaine. *Broadside Reunion* appeared in 1972, with Len Chandler, Phil Ochs, Bob Dylan, Tom Paxton, Eric Andersen, and Peter LaFarge. Phil Ochs was featured on three albums, including one of interviews. Sis Cunningham, Sammy Walker, and Charlie Brown also had their own albums. Some of the early performances were recorded on Cunningham and Friesen's four-track home tape recorder, but most of the albums were professionally taped. Some of the albums including performers who had no direct connection to *Broadside*, such as Raimon Padilla, *Catalonian Protest Songs* (1971), and Mikis Theodorakis, *People's Music: The Struggles of the Greek People* (1970). Other albums ran into trouble. *Broadside Vol. 12: Bob Dylan vs. A.J. Weberman: The Historic Confrontation* was quickly withdrawn because of Dylan's threatened lawsuit. The rock album *The Village Fugs Sing Ballads of Contemporary Protest, Point of Views, and General Dissatisfaction* (1965), recorded by Harry Smith, was also withdrawn, later to reappear on ESP Disk and finally on Fantasy Records. While most of the Broadside albums were related to *Broadside* magazine, Moe Asch had also decided to use the label for records that seemed too controversial or for whatever reason appeared inappropriate for Folkways, although his decisions are not always clear. For example, *New Jazz Poets* was issued as a Broadside album (1967), but Asch had numerous spoken word records on Folkways. While it lasted, the Broadside label introduced a variety of singer-songwriters to a wider audience, although distribution was not too widespread and many of the performers remained obscure. Others, however, such as Bob Dylan, Phil Ochs, Janis Ian, Eric Andersen, and Peter LaFarge, found a large audience, but only when they appeared on Columbia and other major labels. [Cunningham and Friesen 1999; Goldsmith 1998; Place and Cohen 2000.]

RONALD D. COHEN

BROADWAY (LABEL)

An American bargain label of the 1920s. It used Paramount material at first, then Emerson, Crown, and



Broadway label. Courtesy Kurt Nauck/Nauck's Vintage Records

Banner masters. Pressing was done by the Bridgeport Die and Machine Co. until 1925, then by the New York Recording Laboratories of Port Washington, Wisconsin. Blues, race records, hillbilly, and dance music provided the repertoire. It ceased operating in 1931. [Rust 1978.]

BROADWAY QUARTET

The name used on Vocalion records in 1922 by the Criterion Quartet.

BROCINER, VICTOR (1911–1977)

A graduate of Columbia University, with both bachelor's and master's degrees, and considered to be one of the founders of the modern hi-fi industry, Brociner developed what could be considered the first real hi-fi system in the 1930s. The package included a broadband AM receiver, a low tracking force (for the time) record player, and component-style speaker systems. A version of that system has been displayed in the Smithsonian Institution. In 1937, along with Avery Fisher, he founded the Philharmonic Radio Club. After World War II he founded Brociner Electronics, and in the early 1950s he produced one of the first fully integrated hi-fi amplifiers, the first practical Williamson circuit amplifier, and some of the first high-fidelity components utilizing printed-circuit boards.

The company eventually failed, and for a while Brociner joined University Loudspeakers. Later on, in the 1960s, he signed on with the H.H. Scott Company, which at that time was one of the biggest names in the

hi-fi business. At Scott, he helped to improve the company line of amplifiers, receivers, tuners, and speakers. In 1972, he left Scott and joined the Avid Corporation. While there, he helped to build Avid into one of the industry's most respected speaker-building companies.

Brociner published extensively, and was a member of several professional societies, including the Audio Engineering Society, the Institute of Electrical and Electronics Engineers, and the Acoustical Society of America.

HOWARD FERSTLER

BROCKMAN, JAMES

(8 DEC 1886–22 MAY 1967)

American tenor, dialect comedian, and composer; probably born in Cleveland. He made only five records, all of them two-minute Edison wax cylinders. He began with his own composition, "Marianna," in Italian dialect (#9712; 1907). His final record was a Jewish dialect song, (#10165; 1911). He wrote or collaborated on "I'm Forever Blowing Bubbles" (1918), "Down Among the Sheltering Palms" (1915), and "I'm Like a Ship Without a Sail" (1920). Brockman died in Santa Monica, California. [Walsh 1967/10.]

BROOKS AND DUNN

Filling the vacuum caused by dissolution of the Judds in 1991, Brooks and Dunn became the most popular country music duo of the 1990s. Although solidly within the New Traditionalist movement, their eclectic style — incorporating elements of folk, blues, Cajun, jazz, and pop — is a product of differing musical backgrounds.

Born in Shreveport, Louisiana, Kix Brooks first became interested in a music career as a result of his friendship with the daughter of legendary country-pop singer Johnny Horton. In addition to performing in clubs and other venues throughout high school, he spent considerable time developing his songwriting skills. After school, he worked in a variety of jobs (e.g., the Alaskan pipeline, performing at Maine ski resorts) prior to taking a staff songwriting position with Don Gant's Tree Publishing in Nashville. During the 1980s, artists such as John Conlee, Highway 101, and the Nitty Gritty Dirt Band made the charts with his compositions. When time permitted, he attempted to launch a recording career. A single, "Baby, When Your Heart Breaks Down" (Avion 103; 1983) reached number 73 on the country charts. His debut LP, *Kix Brooks* (1989), failed to make much headway, due in part to lack of promotional support.

Born in Coleman, Texas, Ronnie Dunn was inspired to play music by his father, who played guitar in a

traditional country band. Learning bass, he played in honky-tonk bars while still in high school. After his family moved to Tulsa, he headed the the house band at a local club called Duke's Country. Securing a recording contract with Churchill, he placed a couple of song — "It's Written All Over Your Face" (Churchill 94018; 1983), and "She Put the Sad in All His Songs" (Churchill 52383; 1984) — on the lower rungs of the country charts.

After deciding to move to Nashville, Dunn joined Tree Publishing, meeting Brooks in the process. They were soon writing and performing as a unit. Already familiar with Dunn's demo tapes, Arista's CEO Tim DuBois signed the duo to a contract. Their initial release, "Brand New Man" (Arista; 1990), rose to the top of the country charts. An album of the same name (Arista 18658; 1991) followed; it went triple platinum by 1993, reaching the Top 10 on the pop charts, with the help of three more number one singles, "My Next Broken Heart" (Arista; 1991), and the double-sided hit, "Neon Moon"/"Boot Scootin' Boogie" (Arista 12440; 1992). Other hits followed, including "Brand New Man" and "Hard Workin' Man" from their 1993 second album. The duo became an immediate dominate force at the annual CMA (Country Music Association) awards ceremony, winning "vocal duo of the year" eight times over the coming decade.

Although continuing to be a popular act on the road, Brooks and Dunn saw their record popularity slump in the mid-1990s, perhaps due to the competition of younger (and more marketable) artists. However, the duo proved their enduring popularity with their 2001 release, *Steers and Stripes* (Arista 67003), which produced major hits with "Ain't Nothin' 'Bout You" and "Only in America." Remarkably, their style has changed little over the years, proving the loyalty of the country audience to its most-beloved acts.

FRANK HOFFMANN

BROOKS, GARTH (7 FEB 1963—)

Brooks was born in Luba, Oklahoma. His mother, Coleen, was a small-time country singer who worked sporadically in their native Oklahoma on recordings and radio. Brooks's guitar playing career began in high school and continued in college, where he worked college-area clubs performing a mix of James Taylor folk-pop and country. He made his first trip to Nashville in 1985, without success. Returning to Nashville two years later, Brooks attracted the attention of Capitol Records and producer Allen Reynolds, who signed him to the label's Liberty division.

His first, self-titled album (Liberty 90897) was successful, but the followup, *No Fences* (Liberty 93866),

really began his phenomenal success. It sold 700,000 copies in its first 10 days of release, and stayed on the pop charts for over a year. His third album, *Ropin' the Wind*, entered the pop charts in the number one position, the first country album ever to do so. Brooks's 1992 album, *The Chase* (Liberty 98743), reflected a further nudging toward mainstream pop, but it was less successful than his previous releases (although still selling several million copies). Brooks followed it with 1993's *In Pieces* (Liberty 80857), featuring a safer selection of high-energy honky-tonk numbers.

However, Brooks career sagged in the mid-1990s. He held up the release of his 1997 album, *Sevens* (Capitol 56599), until Capitol changed its country management to appease his lack of faith in their marketing efforts. The album was a major success, returning him to his earlier country sound. Then, in 1999, Brooks released a "fictional" greatest-hits album purporting to be by a 1970s-era pop singer/songwriter named Chris Gaines, as part of a larger movie project (*Chris Gaines: Greatest Hits*, Capitol 20051). The result was a major career fiasco; despite a TV special and heavy promotion, the album was a major flop, and Brooks's fan base was greatly confused. The film never appeared (although during his comeback in fall 2001 rumors were spread that it might be salvaged and eventually released). Brooks withdrew from the public eye in 2000, amid announcements that his long-time storybook marriage was coming to an end.

Never one to give up easily, Brooks came roaring back with his album *Scarecrow* (Capitol 31330) in autumn 2001. Announced as his "last" album, it returned him to the sound and style of his earlier country outings, and the fans responded by making it a major hit. Despite his assurances that this would be his "last" album, Brooks was already hinting in press conferences that an album of outtakes might be forthcoming, and the possibility of new recording certainly exists. For an artist as competitive as Brooks, it is highly unlikely that he will retire quietly.

CARL BENSON

BROOKS MANUFACTURING CO.

An American firm established in 1903 in Saginaw, Michigan. Advertising in *TMW* (1916), shows the firm as the maker of a coin-operated disc player named Brooks.

BROONZY, BIG BILL

(26 JUNE 1893—14 AUG 1958)

American blues singer and guitarist, born William Lee Conley Broonzy in Scott, Mississippi. He taught



"Good Liqueur Gonna Carry Me Down" by "Big Bill" [Broonzy], on Bluebird Records, from the mid-'30s. Courtesy David A. Jasen

himself the fiddle while working as a sharecropper; served in World War I; then went to Chicago in 1920 to work for the Pullman Co. There he took up the guitar and sang blues songs. In the late 1920s he was performing with leading blues artists, and made some unnoticed records. Then he began to record in 1928 for Paramount and in 1930 (under the name of Sammy Sampson) for the American Recording Corp. (ARC). In 1931 ARC recorded him under his own name on its dime store subsidiary labels. For example, "I Wanna See My Baby"/"Hobo Blues," on Romeo #5494, sold for \$.25 in the S.H. Kress stores. He was a major exponent of the urban blues style through the 1930s, making a new disc every few weeks, primarily for Vocalion; he had more than 100 issues by 1942. Broonzy made successful European tours in 1951, 1955, and 1957. He recorded again prolifically in the 1950s, primarily for folk labels like Folkways Records. His style changed to reflect his urban-folk audience, who preferred simpler guitar accompaniments and less-polished performances to his earlier recordings. He died in Chicago.

BROWN, CLIFFORD (30 OCT 1930–26 JUNE 1956)

Born in Wilmington, Delaware, Brown was an outstanding jazz trumpeter whose improvisations exhibited the fire and grace of an old master. He first started studying trumpet at age 13, showed signs of great talent and performed with the school jazz band while at

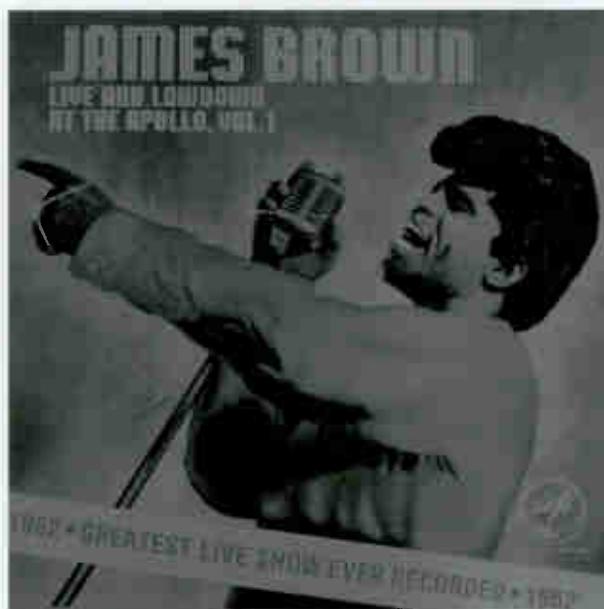
Maryland State College. He quickly developed a style that was distinguishable from Dizzy Gillespie and Miles Davis, two of the leading jazz trumpeters in the 1950s. Like Gillespie, he was a skillful player in the bop style, but his tone was warmer, and he was equally comfortable on slow ballads as he was on up-tempo material.

Brown recorded with the pianist Tadd Dameron on *A Study in Dameronia* (Prestige 159; 1953), and also performed with Lionel Hampton's big band. Brown recorded on his own for Blue Note from 1953–1954, and then signed with Mercury's jazz division, EmArcy. His impeccable technique and wonderfully crafted improvisations can be heard on *Study in Brown* (EmArcy 36037; 1955), and *At Basin Street* (EmArcy 36070; 1956), both of which are collaborations with the jazz drummer Max Roach. Brown also made an outstanding recording with Sonny Rollins, *Sonny Rollins Plus 4* (Prestige 7038; 1956) His extraordinary gifts were extinguished in a fatal automobile accident when he was 26.

GARTH ALPER

BROWN, JAMES (3 MAY 1928–)

American blues, gospel, and soul singer; and dancer; born in Augusta, Georgia. He began professional performance as a singer in a vocal quartet, the Famous Flames, with which he continued to work for 10 years. In 1958, he released a rhythm and blues hit, "Please, Please, Please" (Federal #12258; #6), and another, "Try Me" (Federal #12337), his first number one R&B hit, and the best-selling R&B single of the year. Thereafter, he worked in many styles, bringing together



James Brown album cover. Courtesy Frank Hoffmann

BROWNLEE, JOHN

an acrobatic dance routine with energetic musical idioms drawn from African and Caribbean roots.

In the 1960s Brown developed a new style called “funk,” but he was also identified as the “godfather of soul.” He made about 80 chart singles up the mid-1970s, and around 30 chart albums. His best-selling album was recorded live at a Harlem concert with the Famous Flames: *The Apollo Theatre Presents — In Person! The James Brown Show* (King LP 826; 1963); it was on the charts 33 weeks and sold over a million copies. In 1965, he had major hits with “Papa’s Got a Brand New Bag” (King 5999; #1 R&B, 8 weeks/#8 pop) and “I Got You (I Feel Good)” (King 6015; #1 R&B, 6 weeks/#3 pop). He continued to score big hits through the 1960s, including 1966’s “It’s A Man’s Man’s Man’s World” (King 6035; #1 R&B, 2 weeks/#8 pop), and 1967’s “Cold Sweat” (King 6110; #1 R&B hit, 3 weeks/#7 pop).

In 1971, Brown signed with Polydor Records, who purchased his back catalog from the now-defunct King label as well (Polydor’s catalog eventually became part of the Universal Music Group). Brown’s last hit album was *People* (Polydor PD-1-6212; 1980), and his last hit single “Living in America” (Scotti Brothers 05682), which reached number four in 1986. In the later 1980s, the retrospective *Star Time — 71 songs on four CDs* (Polydor 849108; 1991) — was issued documenting Brown’s long career. Greg Kot, rock critic of the *Chicago Tribune*, declared in his review of *Star Time* that Brown was “the most influential and innovative figure in Black music in the last 30 years, and every bit as important as more widely revered artists such as Elvis Presley and the Beatles in shaping the sound of the rock era.” Brown’s activities were limited through the end of the 20th century, although he occasionally made news because of his personal troubles. Brown has received several awards and honors, including induction into the Rock and Roll Hall of Fame (1986), and lifetime achievement awards from the Grammys (1992), and R&B Foundation (1993).

BROWNLEE, JOHN

(7 JAN 1900–10 JAN 1969)

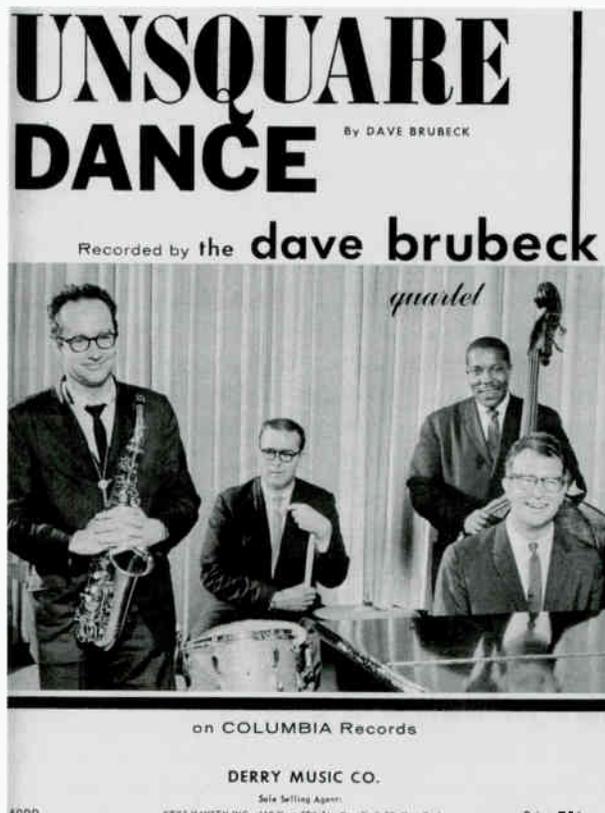
Australian baritone, born in Geelong. After study in Europe he made his debut in Paris in 1926 and at Covent Garden in the same year, then joined the Paris Opéra, where he remained until 1933. He sang first at the Metropolitan Opera as Rigoletto on 17 Feb 1937, and stayed with the company until 1956. Settled in New York, he headed the Manhattan School of Music from 1956 until his death.

Brownlee’s appearances at the Glyndebourne Festivals of 1933–1939 brought him great acclaim, and resulted in his outstanding recording of *Don*

Giovanni with Salvatore Baccaloni, under Fritz Busch (Victor 423/424/425, 23 12-inch discs). With the same company he was in the complete *Così fan tutte* (Victor 812/813/814, 20 12-inch discs).

BRUBECK, DAVE (6 DEC 1920–)

American jazz pianist, composer, and ensemble leader, born David Warren Brubeck in Concord, California, on 6 Dec 1920. After studying classical music he began to play with jazz groups at age 13. He studied composition with Darius Milhaud, then led a military band during World War II. From 1946 to 1951 he formed and performed with various jazz groups. In 1951 he founded the Dave Brubeck Quartet, with alto saxophonist Paul Desmond; in its final form the group included drummer Joe Morello and bassist Eugene Wright. During the 1950s and 1960s the quartet achieved great popularity for their cool and sophisticated improvisations, particularly in unusual time signatures. “Take Five” in 5/4 meter (a Desmond composition, and the first instrumental recording to sell over 1 million copies) and Brubeck’s own “Blue Rondo à la Turk” in 9/8 meter were outstanding examples (in Columbia



Dave Brubeck quartet featuring Paul Desmond (left) on saxophone, c. early 1960s. Courtesy David A. Jasen

album *Time Out* (#CL8192; 1961). Another 1961 hit album was *Time Further Out* (Columbia CS8490).

The famous Desmond-Brubeck quartet broke up in the late 1960s, and Brubeck subsequently formed a more jazz-rock oriented group with his two sons. The band was commercially successful, although many felt it was musically less interesting than his earlier work. During the 1980s, he returned to playing primarily in acoustic settings, often in solo concerts. He also began composing classical pieces for traditional orchestras that have been performed during the 1980s and 1990s.

BRUCKNER (FRANZ) MANUFACTURING CO.

A firm established in New York in 1912. It was listed in the 1916 *TMW* directory as maker of the Metro-Phone disc player, offered in seven models.

BRUEL & KJAER (B&K)

Begun in the early 1940s by two Danish engineers, Per V. Brüel and Viggo Kjær, the company has expanded to become a major producer of computer-based vibration measurement and sound-analyzer tools used by industry in the production of recording hardware. B&K has more than 1,200 employees, with offices in 55 countries and seven accredited calibration centers worldwide, and currently offers in excess of 450 products, including transducers, a full range of hand-held sound level meters, analyzers, calibration systems, and service products. One of the company's primary achievements has been the design and production of measurement microphones that have defined new standards for stability and measurement accuracy. [Website: www.bkhome.com.]

HOWARD FERSTLER

BRUNSWICK (LABEL)

One of the premier labels in North America and Britain, with great international artists in classical and popular music, first issued, in Canada only, by Brunswick-Balke-Collender Co. in 1916. The earliest offerings were vertical-cut, with labels in green. Lateral-cut discs, with violet labels, appeared in the U.S. in January 1920; after 1923 the label color was black, and the price \$.75, except for a special double-sided purple series of opera and classics, selling at \$1 for 10-inch and \$1.50 for 12-inch records. During the acoustic period major dance bands were recorded, such as those of Fletcher Henderson, Ray Miller, and Isham Jones. A hit record by the Mound City Blue Blowers was made in February 1924, "Arkansaw [sic]



Brunswick label, c. 1920s. Courtesy David A. Jasen

Blues"/"Blue Blues" (#2581); it was followed by five more by the Blowers before the group turned to other labels. Operatic celebrities included Mario Chamlee, Sigrid Onegin, Elisabeth Rethberg, Friedrich Schorr, and John Charles Thomas. Access to Polydor matrices was a favorable factor, bringing such artists as Leopold Godowsky, and the Berlin Philharmonic Orchestra under Wilhelm Furtwängler.

The quality of the discs was high, and the parent company also produced excellent playback machines with tapered tone arms. The company pioneered the all-electric phonograph with its Panatrope in 1926, and used the electric Pallatrope recording method for its discs. The combination was strong enough to be used in tone tests. A race record division was established, headed by Jack Kapp. Difficulties appeared around 1927 as radio began to be a serious competitor for the phonograph. (Brunswick itself entered the radio field in 1928.) New artists were constantly added to the catalog, which before the stock market crash of 1929 included Walter Gieseking, the New York Philharmonic, Red Nichols, King Oliver, and Al Jolson (whose "Sonny Boy" required a 24-hour factory to meet buyer demand).

The stock market collapse affected operations in both the U.S. and U.K. Warner Brothers acquired Brunswick-Balke-Collender in April 1930, bringing film stars like Gloria Swanson to the artist list. However, in December 1931 Warner sold the Brunswick interests to the new American Record Corp., which renamed their acquisition the Brunswick Radio Corp. The label flourished in the 1930s, as many popular artists were brought into the fold: Fred

BRUNSWICK-BALKE-COLLENDER CO.

Astaire, Mary Martin, Gene Krupa, Jack Teagarden, Artie Shaw, Harry James, Glenn Miller, Teddy Wilson, and Frank Sinatra (making his record debut). Then in December 1939 the American Record Corp. was bought by Columbia Broadcasting System, and the Brunswick label was discontinued in September 1940. Decca acquired and revived it in 1943 with the 80,000 series. As a rock label from the 1950s to the 1970s, it presented such stars as Buddy Holly and the Crickets, Jackie Wilson, and the Chi-Lites. The label finally disappeared in the U.S. in 1977, following a major fraud scandal. It had not been seen on the British market after 1967. [Andrews; Rust 1978.]

See also **British Brunswick Ltd.**

BRUNSWICK-BALKE-COLLENDER CO.

A firm established in 1845, with varied interests (furniture, carriages, equipment for games), that entered the phonograph business in 1916. It seems that the firm entered into an agreement with Pathé to sell only its discs in the U.S. in exchange for Pathé's undertaking to stay out of the American talking machine market; Brunswick did sell Pathé records in 1916–1920. Brunswick records were sold in Canada from 1916. However this arrangement did not endure beyond 1919, when Brunswick records came to the U.S. and Pathé began to advertise its phonographs in the American national magazines.

The first products were eight models of the Brunswick player. Its Ultona reproducer was adaptable to play vertical-cut Pathé discs as well as standard lateral-cut records. Success was quick to come, and fortunes were greatly enhanced by some favorable court judgments. The tapered tone arm was a contested product at the time, with patents held by Eldridge Johnson (owned by Victor), and John B. Browning (owned by Brunswick). Victor sued Brunswick; but the suit was dismissed in 1922 with Browning's patent found valid. Another litigation — over the enclosed horn with doors — was also decided in Brunswick's favor. In 1924 the firm acquired Vocalion records from Aeolian Co., and a year later announced a technological breakthrough: the Panatrope all-electric phonograph and the Pallotrope system of electrical recording developed with General Electric. The "light ray" recording process used a microphone (called a "palatrope"), a crystal mirror, a light source, and a photoelectric cell.

Despite these advances, and despite the gathering of an international star roster of artists on the Brunswick label, sales peaked in 1926 and dropped \$2 million to \$27 million in 1927. Brunswick joined the radio manufacturers in 1928, then in April 1930 sold out both radio and phonograph interests to Warner Brothers.

The Brunswick Corp, now located in Skokie, Illinois, has more than 20,000 employees, and annual revenue near \$3.4 billion (2001). It manufactures sports equipment, paper, marine engines, and pharmaceutical products.

BRUNSWICK QUARTET (ALSO KNOWN AS THE BRUNSWICK MALE QUARTET)

A group that recorded for Columbia in 1911–1912. Its members were Aubrey A. Hackett, first tenor; Arthur Clough, lead tenor; Harry Wieting, baritone; and A. Duncan Cornwall, bass.

BRUSH DEVELOPMENT CORP.

A firm established by Charles Brush to manufacture his piezoelectric cartridges. In 1937 the company produced the Soundmirror — a commercially available magnetic recorder using endless loop steel tape. During World War II Brush made wire recorders for the government; one type was a cassette wire recorder. The firm's director was Semi Joseph Begun, a one-time researcher with Lorenz in Germany. In its current manifestation, as Brush Magnetic Heads Division of the Forgyflo Corp, Sunbury, Pennsylvania, the company continues to make audio-video components, especially recording heads.

BRYANT, ERIC THOMAS (1914–20 JULY 1990)

British librarian and author, born in London. He had a distinguished career as a public librarian, notably in Widnes, where he established a successful gramophone library. Bryant was an enthusiastic promoter of recordings, giving lecture recitals throughout England. He was a senior lecturer in music librarianship at the Manchester Polytechnic, and was a visiting speaker in library schools in Britain and America. His 1962 book, *Collecting Gramophone Records*, was widely praised for its guidance to librarians and private collectors. He was also author of the standard work, *Music Librarianship* (1959; 2nd ed. 1985), in which the administration of recording collections in libraries was treated with exhaustive detail. He retired in 1979, and died a year later in Devizes, England. Bryant wrote major sections of the articles on Organ Music Recordings and Record Collector Societies in this encyclopedia. Imprint data on his books is in the Bibliography.

BRYANT, LILLIAN

British pianist and conductor; the first female conductor to make records, with the Pathé Symphony

Orchestra and the Pathé Military Band. She was also the first woman to record commercially as a solo pianist, on HMV and Edison Bell, around 1900.

BRYSTON LTD.

A Canadian company that has been designing and manufacturing upscale specialty electronics for both the professional and consumer audio marketplaces since the early 1970s. For professional use, Bryston produces amplifiers for recording studios, radio and television broadcast facilities, and sound reinforcement applications such as stadiums and arenas. In the consumer audio market they manufacture state-of-the-art audio electronics, including amplifiers and pre-amp/processors. The company maintains an extensive research and development division, and is noted for its 20-year, transferable warranty, including parts and labor. [Website: www.bryston.ca.]

HOWARD FERSTLER

BUBBLE BOOKS

Children's books published by Harper & Brothers in 1919, under the name Harper-Columbia Book that Sings, with three single-sided five and one-half-inch phonograph records included; they were apparently the first singing books. The British publisher was Hodder and Stoughton; in Britain the title was Hodder-Columbia Books that Sing. Fourteen titles were issued by 1923, including *Mother Goose*, *A Child's Garden of Verses*, and *Funny Froggy B.B.* Victor acquired the patents in September 1924. [Andrews 1976; Andrews 1988/6.]

BUCHLA, DON (17 APR 1937–)

Buchla is recognized as one of the most progressive and visionary electronic instrument builders. He and Robert Moog worked independently during the 1960's to build the first voltage-controlled analog synthesizers — collections of devices such as oscillators and filters that could be flexibly interconnected by the user with patch cables. Buchla responded to the suggestions of Morton Subotnick and Ramon Sender at the San Francisco Tape Music Center and built the Buchla Modular Electronic Music System, supported by a grant from the Rockefeller Foundation.

Buchla went into business building electronic instruments. The 100 Series (1963) included innovations such as touch-sensitive plates, a random voltage source, and the first sequencer. Morton Subotnick used this system in the composition of "Silver Apples of the Moon" (Nonesuch H71174; 1967), the first work to be

commissioned expressly for the new longplaying record format. CBS/Fender manufactured the instruments for a while. The 200 Series (1970) introduced new techniques for polyphonic signal generation, dynamic spectral and timbral modification, complex pattern generation, quadraphonic control of spatial location, and had digital connections to interface with computers. Its touch plates (the "Kinesthetic Input Port") explored control by the amount of fingertip surface contact. In contrast to Moog systems, Buchla's differentiated between control voltages (accessed with banana plugs) and audio signals (via mini-phone jacks). This made it easy to patch audio in and out of the system at any point at standard line level, so that tape loops, radios, microphones, and other devices could be incorporated. Any number of control inputs could be connected to a single output by merely stacking connectors.

The designs that followed moved increasingly toward greater digital control, as well as the use of digital oscillators. The 300 series was a computer, peripherals, and interfaces, and a patch programming language designed for flexible real-time control of 200 series modules, with function generators and tables taking the place of the earlier sequencer modules. The Buchla 400 was an integrated instrument with digital oscillators and analog filters, which could also be augmented with 200 series modules. Its operational language combined a piano roll style graphic score editor with an instrument definer.

Minicomputers became more affordable, and the 500 Series (1971) became the first digitally controlled analog synthesizer. This was followed by the Music Easel (1972), a portable analog performance instrument that accepted patch cards, small circuit boards that were precursors of digital preset memory. While most of Buchla's instruments are not meant to be played with conventional technique using organ type controllers, the Touché (1978) was designed with David Rosenboom for technically skilled keyboard players. The 400 series (1982) anticipated changes in music technology of the next decade with its three computers, graphics display, storage cards, score editing, frequency modulation, and SMPTE capability. The 700 (1987) had yet another computer, three MIDI ports, and a number of expressive performance controls among its facilities.

In 1990 Buchla and Associates shifted their attention to alternative controllers. First came Thunder (1990), a tactile surface with 36 elements that transmit MIDI messages in response to the touch of human hands, followed by Lightning (1991), which reacts to the position and movement of handheld wands.

In addition to electronic and acoustic instrument design, Buchla has been involved with space biophysics research, multimedia composition, and the performance of avant garde and traditional music. As a

BUDAPEST QUARTET

Guggenheim fellow, he performed research in interactive performance-oriented computer music languages, and as an NEA fellow designed instrumentation and music for a 100-piece electronic orchestra. While the majority of instrument manufacturers have gone in and out business, he survived by producing a smaller number of advanced alternative systems, working out of his home in Berkeley, California.

ROBERT WILLEY

BUDAPEST QUARTET

A string quartet originally drawn from the Budapest Opera Orchestra; it first performed in 1917 in Hungary. The original members were Emil Hauser, Imre Poganyi, István Ipolyi, and Harry Son. Joseph Roisman replaced Poganyi in 1927, then moved to first violin; Alexander Schneider replaced Ipolyi and Mischa Schneider replaced Son in the early 1930s. Boris Kroyt was the violist from 1936. With Roisman as the leader, the quartet achieved international recognition. They settled in the U.S. in 1938, and became quartet in residence at the Library of Congress in 1962. Their final public concert was in 1967.

From 1932 to 1936 the Budapest Quartet made notable recordings for EMI (on the Victor label in the U.S.), establishing their mastery of the Beethoven works and producing an acclaimed rendition of the "Italian Serenade" by Hugo Wolf. LP reissues cover that period (Columbia-Odyssey Y34643, four discs; 1979), and both the previous and subsequent periods (Toshiba-EMI Angel EAC 60055/59, five discs; 1979, and Columbia Odyssey Y34644, four discs; 1979). Odyssey transferred the complete Beethoven quartets to CD as well, and Novello/BMG released a CD of Schubert, Mendelssohn, Tchaikovsky, Borodin, and Dvorak in 1990; it presented recordings made in 1926–1929.

BUDDAH RECORDS

Buddah had its origins in the establishment of the Kama Sutra label in 1965 by entrepreneurs Phil Steinberg and Hy Mizrahi and producer Artie Ripp, the force behind such hits as Doris Troy's "Just One Look" (Atlantic 2188; 1963; #10), Jay and the Americans' "Come A Little Bit Closer" (United Artists 759; 1964; #3), and the Shangri-Las' "Remember (Walkin' in the Sand)" (Red Bird 008; 1964; #5). Created as a subsidiary in 1967, the New York-based imprint quickly attracted a stable of ambitious, talented young writers and producers, including Pete Anders and Vinnie Poncia (who had provided hits for the Ronettes), Bo Gentry and Ritchie Cordell (Tommy James & the Shondells), Levine and Resnick, Elliot Chiprut, and

Bobby Bloom. Other key staff included West Coast A&R chief Bob Krasnow — responsible for signing progressive rockers Captain Beefheart and His Magic Band and Barry Goldberg — and Vice President Neil Bogart, who steered the label in the direction of bubblegum singles. His successes would include the 1910 Fruitgum Co. with "Simon Says" (Buddah 24; 1968; #4), and the Ohio Express, whose biggest hit was "Yummy Yummy Yummy" (Buddah 38; 1968; #4).

On the strength of such prepubescent fare, Buddah was the seventh-ranked label in singles sales by the time it celebrated its first anniversary in September 1968. Although later enjoying success in the pop-rock (Brooklyn Bridge, Lou Christie, Motherlode, etc.) and soul (the Impression via their Curtom subsidiary, the Isley Brothers on T-Neck) fields, the label remained saddled with the bubblegum image. The Lemon Piper's best exemplified this dilemma; fed a string of sugary material — "Green Tambourine" (Buddah 23; 1967; #1), "Rice Is Nice" (Buddah 31; 1968; #46), and "Jelly Jungle" (Buddah 41; 1968; #51) — the band attempted, unsuccessfully it turned out, to assert their hard rock side via largely ignored album releases.

Buddah's assembly-line techniques — many of its acts were studio-only concoctions like Lt. Garcia's Magic Music Box and the Rock and Roll Double Bubble Trading Card Company of Philadelphia 19141 — led to an inevitable decline when its bubblegum artists fell out of favor with the public. The defection of Ripp — Billy Joel's early mentor — and Bogart, who founded Casablanca in 1973, also hurt the label. By 1983, when the company finally shut down operations, hit records had become a rare occurrence. BMG would reactivate "Buddha" as an archival label in 1999; much of the old Buddah catalog has been reissued, including material by Melanie, the Flamin' Groovies, the 1910 Fruitgum Co., and Ohio Express.

FRANK HOFFMANN

BUDDY (LABEL)

Six American aluminum manufacturers joined forces to make this record, sold from 1923 to 1926. The discs were intended to boost sales of the Buddy portable phonograph, which was made of aluminum; all the aluminum firms are named on the record label. There is no list of the output, and survivors are rare. Gennett masters were used. [Rust 1978.]

BUEHN, LOUIS

American phonograph dealer, active at national level in the trade. His posts included treasurer, Eastern Talking Machine Jobbers Association (1907), and its

successor, the Talking Machine Jobbers National Association. With the National Association of Talking Machine Jobbers (NATMJ), he was treasurer in 1909 and 1910, secretary in 1912, vice president in 1920, and president in 1921. His own business was incorporated October 1912 as the Buehn Phonograph Co. in Pittsburgh, Pennsylvania. In 1915 he opened Louis Buehn, Inc., in Philadelphia, handling Victor products exclusively. Edison acquired the company in 1926.

BUFFALO SPRINGFIELD

Buffalo Springfield's recorded output consists of three promising studio albums released in the late 1960s. However, the group's legacy owes much to respective careers of the group members following the breakup in the spring of 1968.

Buffalo Springfield, named for steamroller manufactured in the American Midwest, was formed out of a chance meeting in March 1966 between Stephen Stills (accompanied in his car by Richie Furay) and Neil Young during a Los Angeles traffic jam. The interplay between these three singer-guitarists (both on and offstage) would supply much of the creative spark behind the band's music, best described as U.S. roots-styled offshoot of Beatles pop-rock. Young's fellow Canadian, bassist Bruce Palmer, and drummer Dewey Martin were recruited to complete the group lineup.

Following a couple of critically acclaimed, albeit commercially unsuccessful, folk-rock singles, the band burst into the national consciousness with the release of the Stills-penned "For What It's Worth" (Atco 6459; 1967; #7), a protest anthem documenting the L.A. police crackdown on youthful protesters opposing plans to build a business district at the expense of Sunset Strip nightlife in summer 1966. The debut album — *Buffalo Springfield* (Atco 33-200; 1966) — was hastily reissued in February 1967 with the substitution of the group's best-selling single for the track "Don't Scold Me." Group infighting, however, undercut efforts to record a follow-up LP. One projected work, *Stampede*, was never completed, although portions would later surface both in bootleg form and on the retrospective anthology, *Buffalo Springfield Box Set* (Rhino 74324; 2001). A reassembled lineup consisting of Stills, Furay, Martin, Young (who returned after having departed in January 1967), and bassist Jim Messina would eventually complete *Buffalo Springfield Again* (Atco 33-226; 1967; #44), an ambitious album featuring extensive multitracking and other special effects reflecting the influence of the Beatles's *Sgt. Pepper*. The inability of the band to expand beyond a cult audience led to a final split; a third LP, *Last Time Around* (Atco 33-256; 1968; #42), which featured a group photo with a crack running down the middle, was issued several months later. Many of the song selections

— including Young's folk-like "I Am A Child"; Stills's "Special Care," "Questions," and "Uno Mundo"; and Furay's country-inflected "Kind Woman" — come across as rehearsals for the individual members' subsequent musical activities.

By the end of the 1960s, all key members were well of their way to becoming superstars. Young embarked on an uneven, but distinctive, solo career; he would also have an on-and-off relationship with soft-rock trailblazers, Crosby, Stills, and Nash. Furay and Messina formed one of the early country-rock acts of note, Poco. Always in demand as a record producer, Messina moved on to form a duo with Kenny Loggins in the early 1970s.

FRANK HOFFMANN

BUFFETT, JIMMY (25 DEC 1946–)

Hero to "Parrot Heads" everywhere, Buffett has parlayed the success of one song — "(Wasting Away Again in) Margaritaville" — into a career spanning concerts, recordings, leisure wear, and even novels. Buffett was born in Pascagoula, Mississippi, where he began to play the guitar. After attending college, he went to Nashville in the late 1960s, hoping to make it as a country songwriter. He was signed to the small Barnaby label, which issued one album that was said to initially sell only 324 copies. By 1972, a discouraged Buffett relocated to Key West, Florida, where a year later he signed to ABC/Dunhill. On a series of albums, he developed a laidback, beachbum/hippie persona, culminating in his one major hit, the number eight "Margaritaville" (ABC 12254), in 1977. A year later, he scored a minor hit with the humorous "Cheeseburger in Paradise" (1978; #32, ABC 12358). He continued to produce strong-selling albums through the mid-1980s, by which time his Margaritaville label and chain of boutiques were pumping out the cash. His debut collection of short stories played on this success, aptly titled *Tales from Margaritaville* (1990); novels and memoirs followed through the 1990s. By 1993, Forbes estimated that Buffett's annual income was in the \$20 million range, despite the lack of any top-selling hits, earning him a spot on their Top 40 list of the richest entertainers. He has continued to record and tour through the early 21st century.

CARL BENSON

BULK ERASER

A device used to erase the signal from a recorded magnetic tape (cassette or reel-to-reel). It operates by producing a strong magnetic field; when it is passed over the tape in a circular motion it cancels the extant signal. Metal tapes are difficult to erase in this manner.

BULLET RECORDS

BULLET RECORDS

The first independent label of any consequence in Nashville, Bullet is chiefly remembered for issuing the first records by Chet Atkins, B.B. King, Ray Price, Minnie Pearl, and Pee Wee King. A partnership between radio announcer Jim Bulleit, banker Orville Zickler, and record distributor C.V. Hitchcock, Bullet was launched in April 1946. In addition to country music, Bullet had a gospel series and an R&B series that included Wynonie Harris, Cecil Gant, Roosevelt Sykes, St. Louis Jimmy, Willie Dixon's Big Three Trio, and Red Miller (who scored a number one R&B hit with "Bewildered" on Bullet in 1948). The biggest hit on Bullet, though, came with pop bandleader Francis Craig's recording of "Near You," which was not only the best-selling record of 1947 but spent longer atop the pop charts than any other record before or after. Bulleit built Nashville's first pressing plant, Bullet Plastics, but left the partnership in 1948 to be replaced by former Capitol salesman Overton Ganong. In 1951, Bullet scored another major hit with Johnnie Lee Wills's "Rag Mop," but the label folded in 1952. It was revived briefly in the 1960s, but the ownership is currently in dispute.

COLIN ESCOTT

BUMP

"To bump" on a tape means to reduce the number of tracks (e.g., four to two) to make space for new material. Also known as "jump."

BUREAU INTERNATIONAL DE L'DITION MCANIQUE (BIEM)

The international association of national organizations and agencies concerned with the rights of artists with respect to sound recordings.

BURKE AND ROUS PHONOGRAPH RECORDS

A Brooklyn firm active in 1905. It produced records for use in phonograph parlors. [Andrews.]

BURNETT, T BONE (18 JAN 1945 [SOME SOURCES GIVE 1948]—)

Born John Henry Burnett in St. Louis, Missouri, but raised in Fort Worth, Texas, Burnett was a folk-rock performer in the 1970s and 1980s then graduated to become a producer, scoring big as the producer for the soundtrack to the film, *O Brother Where Art Thou?*, in 2000, a surprise major country hit. Burnett's own recording career was spotty at best, although he did gain

a cult audience and toured in the 1970s, most famously as part of Bob Dylan's Rolling Thunder tours in mid-decade. From the 1980s, he specialized in producing left-of-center rock acts, including Elvis Costello (*King of America* [1986], and *Spike* [1989]), Los Lobos (*By the Light of the Moon* [1987]), his wife Sam Phillips, the Wallflowers, and Gillian Welch. His success producing the *O Brother* soundtrack recording led to his forming a label with the Coen Brothers (distributed by Sony/Columbia) to record traditional music.

CARL BENSON

BURNETTE, DORSEY (28 DEC 1932—19 AUG 1979) AND JOHNNY (25 MAR 1934—1 AUG 1964)

The Burnette brothers, Dorsey and Johnny, are best remembered for their seminal rockabilly recordings as the Rock and Roll Trio for Coral in the mid-1950s. Although sales fell far short of the standard set by their friend, Elvis Presley, the sheer verve and energy communicated by the brother's records influenced the aesthetics of British and American rock stars in the 1960s and 1970s. Aerosmith, Foghat, and the Yardbirds are just a few of the acts that have recorded the trio's songs.

Born in Memphis, Dorsey and Johnny Burnette grew up listening to country music, particularly on the Grand Ole Opry radio broadcasts. Learning to play string instruments at an early age, they began performing at local functions while still in school. By the early 1950s their country band was a popular draw at dances and clubs throughout the Mississippi delta region. Initially, the brothers were not sure that music represented a viable career option; Dorsey, for one, tried professional boxing and spent six years studying for an electrician's license. They began to reconsider after winning the "Ted Mack Amateur Hour" competition four straight times; they then toured with the show, playing such venues as Madison Square Garden and the White House.

While working at the Crown Electric Company in Memphis during 1954, Dorsey and Johnny decided to form a rockabilly trio with fellow employee, guitarist Paul Burlison, who played lead to Johnny's rhythm work and Dorsey's acoustic bass. Word about their dynamic live act led to a contract with Coral Records. Although some of the Johnny Burnette Trio's early releases went on to become rock 'n' roll classics — most notably, "Honey Hush"/"Train Kept A-Rollin'" (Coral 61759; 1956) and "Tear It Up" (Coral 61852; 1956) — none entered the national charts.

Feeling constricted on their home turf, the Burnettes relocated to the Los Angeles area. Concentrating on their songwriting skills, they were soon supplying teen idol Ricky Nelson with a steady stream of hits: "Waitin'

in School" (Imperial 5483; 1957; #18), "Believe What You Say" (Imperial 5503; 1958; #4), "It's Late" (Imperial 5565; 1959; #9), and "Just a Little Too Much" (Imperial 5595; 1959; #9). Encouraged, the brothers decided to return to performing, but as solo acts. Dorsey was the first to have a hit record with "Tall Oak Tree" (Era 3012; 1960; #23), followed by "Hey Little One" (Era 3019; 1960; #48). The darkly handsome Johnny was groomed as a teen idol, scoring soon thereafter with the lushly romantic confections, "Dreamin' (Liberty 55258; 1960; #11), "You're Sixteen" (Liberty 55285; 1960; #8), "Little Boy Sad" (Liberty 55298; 1961; #17), and "God, Country and My Baby" (Liberty 55379; 1961; #18). The younger brother's career was prematurely ended, however, by a boating accident.

After failing to achieve any more pop hits through the mid-1960s, Dorsey turned to country material. He found success on the country charts in the 1970s with self-penned songs such as "In the Spring (The Roses Always Turn Red)" (Capitol 3307; 1972; #21), "I Just Couldn't Let Her Walk Away" (Capitol 3404; 1972; #40), "Darlin'" (Capitol 3678; 1973; #26), "Molly (I Ain't Getting' Any Younger)" (Melodyland 6007; 1975; #28), and "Thing I Treasure" (Calliope 8004; 1977; #31). In addition, his gospel compositions — most notably, "The Magnificent Sanctuary Band" — were widely recorded by other artists. Newly signed with Elektra/Asylum Records, his career was still in high gear when he died of a heart attack at his Woodland Hills, California, home.

The Burnette's legacy has remained prominent with the re-release of both their trio work and solo pop recordings. Furthermore, their sons also went on to enjoy hit recordings; Dorsey's son, Billy, scored with "Don't Say No" (Columbia 11380; 1980; #68), as well as creasing the country charts with several songs, and Johnny's son, Rocky, with "Tired of Toein' the Line" (EMI America 8043; 1980; #8).

FRANK HOFFMANN

BURNISHING FACET

SEE *STYLUS*

BURR, HENRY (15 JAN 1882–6 APR 1941)

Canadian tenor and ballad singer, born Harry McClaskey in St. Stephen, New Brunswick. He started singing at age 13 with a military band; then he was heard by Giuseppe Campanari and urged to go to New York for study. One of his teachers there was Ellen Burr, whose name he took for a pseudonym later.

One of the most prolific of the early recording musicians, he made cylinders and discs from 1902 to

1929, and is said to have made more records than any other singer. (Walsh estimates more than 12,000 items before 1920.) Burr was the pseudonym most used by McClaskey, who was also known as Irving Gillette (on Edison records and some Columbias), and Harry Haley; on Pathé he was identified as Alfred L. Alexander or Robert Bruce. He began to record in 1902 for Columbia, and made the hit "All Through the Night" in 1907 (#3498). His best seller was probably "Good Night, Little Girl, Good Night" for Columbia, said to have sold more than 3 million copies, "partly perhaps because it was issued as one side of a sample record distributed for a quarter instead of the usual 65-cent price" (Walsh). In addition to solo work, Burr sang duets and in many ensembles. Popular duet discs made for Columbia included "I'm Forever Blowing Bubbles" (#78263; 1920), and "Let the Rest of the World Go By" (#78752; 1920), both with Albert Campbell. Among his other duet partners were John Meyer, Frank Croxton, and Helen Clark.

His earliest Victor disc was "Daddy" in 1904. His Victor recording of "Just a Baby's Prayer at Twilight" (1918) was especially popular. After 17 years of freelancing, Burr signed an exclusive Victor contract in 1920. He was an original member, then manager, of the Eight Famous Victor Artists. He sang with the Peerless Quartet from 1906 or 1907, and became their manager in 1910. After 1928, when he disbanded the Eight, he made only a few records for various labels, then gave up performing and became program director for the Columbia Broadcasting Co. He did return to singing, on Chicago radio with the *National Barn Dance*, and remained with that show until he died in Chicago. [Moogk 1975 has a 20-page discography; Walsh 1943/4–6, with corrections in May 1952.]

BURROWS AND CO.

A British firm, located in Manchester in 1903. It were exclusive wholesaler for Edison's National Phonograph Co., claiming in one advertisement to have 500 phonographs and 20,000 gold molded cylinders in stock.

BURT, GEORGE HENRY

British record company executive, one of the founders of Crystalate Gramophone Record Manufacturing Co. (1901). American born, he had a firm (George Burt Co., of Milburn, New Jersey) that made discs for Berliner and Zonophone. Burt set up the Globe Record Co. in 1901. He had supplied Berliner with "a mix for his records" in both the U.S. and at Deutsche Grammophon. In 1903 he was a director of Nicole Record Co., Ltd.

BURTON, GARY (23 JAN 1943–)

Noted vibraphone player and teacher, Burton has had a long career, with his height of influence as a performer coming from the late 1960s through the early 1980s. Born in Anderson, Indiana, Burton was self-taught on vibes, and made his recording debut accompanying country-jazz guitarist Hank Garland. In 1961 he signed with RCA, remaining with the label for seven years. His first album was in a contemporary bop style, but he soon fell under the influence of contemporary rock music. From 1964–1966, he worked as a member of Stan Getz's group, while continuing to record as a solo artist.

Burton's most creative period began in 1967 and continued through the mid-1970s. Burton's 1967 album *Duster* (RCA 3835), featuring his then-quartet of guitarist Larry Coryell, bassist Steve Swallow, and drummer Roy Haynes, is considered an early experiment in jazz-rock fusion. He followed it in 1968 with the eclectic *Country Roads and Other Places* (RCA 7854), with guitarist Jerry Hahn replacing Coryell, which included interpretations of classical, straight jazz, pop, and country music. In 1968, Burton moved to Atlantic, issuing *Throb* (Atlantic 1531) in 1969, continuing his jazz-rock-country experimentations. That same year, a session with French swing violinist Stephane Grappelli was issued as *Paris Encounter* (Atlantic 1597), which helped introduce Grappelli to a new, younger audience. And, in 1971, his last year with the label, Burton issued his first duet album with pianist Keith Jarrett (Atlantic 1577), consisting primarily of Jarrett's compositions in a contemporary fusion style.

In 1972, Burton moved to the progressive ECM label. He issued a wide range of material for the label, including his first celebrated duo album with Chick Corea, the meditative album *Crystal Silence* (1973; ECM 1024), 1974's *Matchbook* (ECM 1056) with guitarist Ralph Towner (of the fusion group, Oregon), and *Dreams So Real* (1975; ECM 1072), recorded while guitarist Pat Metheny was a member of Burton's working band. In 1988, Burton moved to the GRP label, and then in 1996 to Concord Jazz.

Besides his work as a performer, Burton has been a long-time instructor at the famed Berklee College of Music in Boston, joining its staff in 1971 and eventually being appointed executive vice president of the school in 1996.

CARL BENSON

BUSCH, ADOLF

(8 AUG 1891–9 JUNE 1952)

German violinist, conductor, and composer, born in Siegen; brother of Fritz Busch. In 1912 he was

conductor of the Konzertverein Orchester in Vienna; he also taught violin at the Berlin Hochschule für Musik. He established the Wiener-Konzertvereins Quartett in 1913, and reorganized it in 1919 as the Busch Quartet. Aside from his performances with that group, he made an important recording of the Brahms Horn Trio with Aubrey Brain and Rudolf Serkin (Victor 7965/8, album VM 199). He also recorded with his Busch Chamber Players, helping to bring wide attention to the Baroque masters. The 12 Handel Concerti Grossi (opus 6) were recorded for Columbia (album SL 158), and five of the Bach Brandenburg Concerti were recorded for Angel (album COLC 13). Yehudi Menuhin was one of his pupils. Busch died in Guildford, Vermont. [Potter 1985 is a discography.]

BUSCH, FRITZ

(13 MAR 1890–14 SEP 1951)

German conductor and pianist, born in Siegen; brother of Adolf Busch. He conducted the Deutsches Theater in Riga, and gave two-piano recitals with Max Reger. In 1912 he was music director in Aachen, and then he went to the Stuttgart Opera. From 1922 to 1933 he directed the Dresden Staatsoper. He was invited to Glyndebourne in 1934, and for five years conducted outstanding performances and made classic recordings of the Mozart operas for HMV/Victor (*Così fan tutte*, VM 812/813/814, 20 discs; *Don Giovanni*, VM423/424/425, 23 discs; *Nozze di Figaro*, VM 313/314/315, 17 discs). Then he toured South America in 1940–1945, and had four seasons conducting at the Metropolitan Opera, 1945–1949. Busch died in London. [Delalande 1984 is a discography.]

BUSCH QUARTET

A string quartet established in 1919 by Adolf Busch, as a continuation of his Wiener-Konzertvereins Quartett. The original members with Busch were Karl Reitz, (replaced by Gîsta Andreasson in 1921), Emil Bohnke (replaced by Karl Doktor in 1921), and Paul GrÄmmer (replaced by Hermann Busch in 1930). The group soon achieved international acclaim; it made world tours and came to the U.S. in 1939. The quartet was active until 1952; there were further member changes in 1948. Recording for HMV/Victor, the group made significant discs of the Beethoven and Schubert quartets.

BUSH & LANE PIANO CO.

An American piano manufacturing firm established in 1901 in Chicago, moving after a few years to Holland, Michigan. In addition to its Bush & Lane and its Victor

pianos, it offered the Cecilian player piano; plus the Bush & Lane and Duo-Vox phonographs. It was active as late as 1926, at which time the president was Walter Lane.

BUSONI, FERRUCCIO
(1 APR 1866–27 JULY 1924)

Italian pianist and composer, born Dante Michelangelo Benvenuto Busoni in Empoli. He was an acclaimed prodigy, and by 1889 was professor of piano in Helsinki (Sibelius was among his pupils); and he taught also in Moscow and at the New England Conservatory of Music. In concert he specialized in the works of Bach and Liszt. Pianists who studied with him included Alexander Brailovsky, Rudolph Ganz, Percy Grainger, and Egon Petri.

In 1905 Busoni made some piano rolls for Welte-Mignon; the recordings have been released on CD by the Recorded Treasures label (#CD-1; 1989). The pieces put on the roll were by Liszt, including the paraphrases of *Don Juan* and *Rigoletto*.

Busoni made only four double-sided discs, short numbers for Columbia released in 1919 and 1922. His playing is curious in terms of tempo, added measures, and in the linking of two Chopin works with an improvised bridge. He died in Berlin.

See also Piano Recordings (Historic)

BUSSE, HENRY
(19 MAY 1894–23 AUG 1955)

German-born trumpeter and big band leader, and composer of "Wang Wang Blues," which he recorded with Paul Whiteman for Victor in 1920 (#18694). He was also co-composer of "Hot Lips," which Whiteman recorded in 1922 (Victor 18920). These two numbers having sold extremely well, Busse recorded them with his own band on one disc in 1935 for Decca (#198). "Hot Lips" became his own theme song. In "When Day is Done," recorded with the Whiteman band (12-inch Victor 35828; 1927), Busse played the pioneer example of what became known as sweet jazz. He was the first to use a trumpet mute. Busse was heard for many years on Chicago radio as his band settled in at the Chez Paree nightclub. He continued performing until he died in Memphis, Tennessee, just before going on stage.

BUSY BEE (LABEL)

Cylinders and discs made by Columbia for the O'Neill-James Co. of Chicago, from ca. 1904 to ca. 1909. The discs were notable for their extra hole at the edge of the label, notched to fit a nub on the turntable



Busy Bee label. Courtesy Kurt Nauck/Nauck's Vintage Records

sold by the same company. (This special turntable was not required to play the discs, but only the Busy Bee discs could be played on the special turntable.) Busy Bee cylinders had a large bore diameter; the oversized mandrel on the Busy Bee phonographs would not accept Edison or Columbia cylinders.

The label name seems to have derived from the name of Sherwin Bisbee, one of the partners in the firm. Masters from various companies were used: American (Odeon), Columbia, Star, Leeds & Catlin, and Zonophone. Disc sizes offered were seven-inch, 10-inch, 10 3/4 inch, and probably 12-inch. Sales did not match expectations, and when Victor sued successfully on patent infringement charges in 1909, the company phased out of the disc business. Its most famous record was one of William Jennings Bryan addressing a crowd. [Fabrizio 1973; Petty 1988.]

BUTT, CLARA, DAME
(1 FEB 1872–13 JULY 1936)

English contralto, born in Southwick. Her debut was in Arthur Sullivan's *Golden Legend*, in London on 7 Dec 1892, but most of her appearances thereafter were on the concert stage. She made successful world tours, including the U.S., and was designated a Dame of the British Empire in 1920. Her repertoire emphasized religious song and oratorio; but she recorded Stephen Foster, and was identified with Elgar's work (a famous recording was HMV 03239, 03570, "Land of Hope and Glory"). She had four items in the Victor

BUTTERFIELD, PAUL

1917 catalog, but none in 1927. She died in North Stoke, Oxfordshire, England.

BUTTERFIELD, PAUL (17 DEC 1942–4 MAY 1987)

Paul Butterfield was a leading force in the American blues revival of the late 1960s. Although not a particularly notable vocalist, he had few peers on the harmonica, deriving his style from the likes Little Walter Jacobs, Sonny Boy Williamson, and Big Walter Horton. He was most influential, however, as a bandleader, nurturing a new generation of blues players while providing them access to the broad-based rock market.

Butterfield was born in Chicago, where the burgeoning urban blues movement drew him in as a youth. After an apprenticeship period with Jacobs, Muddy Waters, and others, he formed the biracial Paul Butterfield Blues Band in 1963; members included guitarist Elvin Bishop and the former Howlin' Wolf rhythm section, drummer Sam Lay and bassist Jerome Arnold. In 1965, shortly after Michael Bloomfield — a guitar virtuoso on a level with the era's other first magnitude guitar heroes such as Eric Clapton and Jimi Hendrix — came aboard, the group backed Bob Dylan's electric set at the infamous 1965 Newport Folk Festival. This notoriety, combined with word-of-mouth reports of their live performances, led to a recording contract with Elektra.

The debut album, *The Paul Butterfield Blues Band* (Elektra 7294; 1966), offered competent covers of classic blues material like Waters's "Got My Mojo Working," Elmore James's "Shake Your Money-Maker," and Little Walter's "Blues With A Feeling" and "Last Train." The follow-up release, *East-West* (Elektra 7315; 1966; #65), is widely considered one of the classics of the genre. Augmented by the addition of organist Mark Naftalin, the LP expanded blues music boundaries through the extended improvisation of the title track and the incorporation of rhythm and blues (Allen Toussaint), pop-rock (the Monkees' Michael Nesmith), and jazz (Cannonball Adderley) material.

Bloomfield's departure to form the Electric Flag, in 1967, set in motion the band's decline. Ensuing releases — *The Resurrection of Pigboy Crabshaw* (Elektra 74015; 1968; #52), *In My Own Dream* (Elektra 74025; 1968; #79), and *Keep On Moving* (Elektra 74053; 1969) — tilted increasingly in the direction of soul music, featuring a lower profile on part of Butterfield and the heavy-handed use of a brass choir. Although he broke up the group in 1971, numerous live recordings and anthologies of both the classic tracks and previously unreleased materials continue to be issued to the present day. Butterfield went on to form the soul-

funk outfit Better Days, which produced two mediocre albums for Bearsville in 1973–1974. Due to a series of health problems, his solo output was limited to three dispirited LPs.

FRANK HOFFMANN

BUTTERFLY HEAD

In a tape recorder, a multitrack head with a flared guard band; it provides protection against crosstalk.

BUTTERFLY RECORDS

A British label, proprietor unknown, pressed from Gramavox masters of the Sound Recording Co., Ltd., or overlabeled.

BYRDS, THE

The Byrds were the first recording act to popularize folk rock, a blend of British Invasion-influenced rock — with its chiming guitars and seamless harmonies — and the sociopolitical poetry typifying the best folk music song lyrics. Not content to be known as a Bob Dylan cover band, they pioneered studio electronic effects and are generally credited with producing the first true country rock album, *Sweetheart of the Rodeo*.

The group's original members — lead guitarist/vocalist Roger McGuinn, guitarist/vocalist Gene Clark, rhythm guitarist/vocal David Crosby, bassist Chris Hillman, and drummer Michael Clarke — were all folk and bluegrass performers based in the Los Angeles area who'd become fascinated by the songcraft and fashion sense exhibited by the Beatles. Manager Jim Dickson helped secure a recording contract with Columbia, and the band's first release, the Dylan-penned "Mr. Tambourine Man" (Columbia 43271; 1965) topped the charts, driven by McGuinn's trademark 12-string guitar and tight three-part harmonies reminiscent of the Everly Brothers as filtered through the Beatles. Like many other pop recordings of the day, the track featured the group's vocals, but only McGuinn actually played on it; studio musicians provided the balance of the backup track. The Byrds's first three albums — *Mr. Tambourine Man* (Columbia 9172; 1965), *Turn! Turn! Turn!* (Columbia 9254; 1965), and *Fifth Dimension* (Columbia 9349; 1966) — further refined the formula, which became the template for a host of imitators, including the Turtles, Simon and Garfunkel, Barry McGuire, We Five, and soft rock pioneers the Mamas and the Papas. They enjoyed one further number one pop hit, a cover of Pete Seeger's "Turn! Turn! Turn! (To Everything There Is A Season)" (Columbia 43424; 1965).

By the 1966, rock's superstars — the Beatles (particularly on *Revolver*, Capitol 2576), the Rolling Stones, and the Beach Boys, among others — were pushing the boundaries of sonic possibilities in the recording studio, integrating hitherto exotic instruments such as sitars and harpsichords, electronics (e.g., feedback, phasing), and multitracking into the framework of the pop song. The Byrds remained on the cutting edge with two adventurous LPs, *Younger than Yesterday* (Columbia 9442; 1967), and *The Notorious Byrd Brothers* (Columbia 9575; 1968), but the lack of major hit singles limited commercial success. Among their sonic experiments were the singles "Eight Miles High" (Columbia 43578; 1966; #14), which featured phase-shifted guitar and vocals (and oblique references to drug use, although the band claimed the song described an actual airplane trip), and "So You Want to Be A Rock 'n' Roll Star" (Columbia 43987; 1967; #29), which satirized the marketing of rock acts to teenage consumers (and featured audio effects such as audience cheering).

Internal differences led to fragmentation of the group; Crosby helped found Crosby, Stills, and Nash, and Gene Clark pursued a solo career (as well as collaborating with the Gosdin Brothers). With McGuinn now in charge — augmented by the only remaining charter member, bluegrass veteran Hillman — they released the landmark country rock LP, *Sweetheart of the Rodeo* (Columbia 9670; 1968), featuring the material and lead vocals of Gram Parsons. Although Hillman and Parsons left soon after to form the Flying

Burrito Brothers, McGuinn continued to explore a country-inflected rock style in later album releases: *Dr. Byrds & Mr. Hyde* (Columbia 9755; 1969), *Ballad of Easy Rider* (Columbia 9942; 1969), *The Byrds [Untitled]* (Columbia 30127; 1970), *Byrdmaniax* (Columbia 30640; 1971), and *Farther Along* (Columbia 31050; 1971).

McGuinn elected to pursue a solo career in the early-to-mid-1970s; his recorded work was stylistically similar to the 1970s Byrds LPs. Short-term reunions of various group members have occurred over the years, resulting in the following releases: *Byrds* (Asylum 5058; 1973), *McGuinn, Clark, and Hillman* (Capitol 11910; 1979), McGuinn, Clark, and Hillman's *City* (Capitol 12043; 1980), *McGuinn and Hillman* (Capitol 12108; 1980), and *The Byrds* (Columbia 46773; 1990; a retrospective box set including two tracks from a 1990 Roy Orbison tribute and four new compositions recorded by Crosby, Hillman, and McGuinn). The band was inducted into the Rock and Roll Hall of Fame in 1991.

FRANK HOFFMANN

BYTE (DIGITAL)

The number of digital bits necessary to encode on character of information in any given computer system, including digital audio and digital video systems.

HOWARD FERSTLER



C

C/S

Cycles per second. It is usually expressed as Hertz (Hz)

CADENCE (LABEL)

SEE BLEYER, ARCHIE

CADET (LABEL)

SEE CHESS (LABEL)

CADILLAC (LABEL)

A "very obscure vertical-cut record of the Edison type" (Rust), made in eight-inch size by the Clements Manufacturing Co. of Chicago. [Rust 1978.]

CAEDMON (LABEL)

A firm established in New York by Barbara Holdridge and Marianne Mantell in 1952, with the purpose of recording great literature; it was the first company to operate with that intention. Dylan Thomas, Thomas Mann, W.B. Yeats, T.S. Eliot, e.e. cummings, Robert Frost, W.H. Auden, Archibald MacLeish, Marianne Moore, Eudora Welty, Katherine Anne Porter, Colette, Albert Camus, Tennessee Williams, and William Faulkner were in the earliest group to read their own works. "A Child's Christmas in Wales" (#TC 1002; 1952), read by Thomas, along with his readings of "Fern Hill" and "Do Not Go Gentle into that Good Night," has been an enduring success.

Major anthologies of English poetry and drama appeared, and a complete Shakespeare with great actors such as John Gielgud, Claire Bloom, and Richard Burton. More than 900 titles were in the catalog in the late 1980s. In 1987 Harper & Row (now HarperCollins) acquired the firm. Since 1989 the Caedmon material has been issued on audiotapes and CDs. [Roach 1988.]

See also Literary Recordings

CAGE, JOHN (5 SEP 1912–12 AUG 1992)

Experimental composer and one of the 20th century's most important musical "inventors." Born in Los Angeles in 1912, Cage spent a childhood fascinated by both early radio and Grieg and 19th-century piano music. He is best known for "4'33", a piece that was first performed in 1952. In this Cage took music to its most challenging, most questioning conclusion by instructing the performer to sit at the piano for four and a half minutes of nothingness. But this was not a performance of complete silence, as is the general conception of this composition. Instead it was supposed to inspire the notion in the audience that music was the random ambient sound around them, that the piece was made up of every noise they registered during that predetermined timespan. Aside from unquestionably challenging and provoking discussion on the very notion of music itself, the roots of latter-day ambient, electronic, and DJ/collage music can be traced back to Cage and his visions.

Cage began working with phonographs in the late 1930s, using them as musical instruments (i.e., playing

CAILLE BROTHERS

brief passages as part of a composition, anticipating modern turntablism). He employed this technique in his score *Imaginary Landscape No. 1* (1939). Cage worked most actively with recorded sound in the 1950s when he created several pieces by assembling short fragments of recording tape in the style of *musique concrète*. The best-known of these works was *Williams Mix* (1953), which was created by assembling bits of more than eight reels of tapes consisting of somewhere between 500–600 individual sounds, according to Cage. Another, inventive work was *Indeterminacy*, an experiment in which Cage read 90 stories live in the studio while (beyond Cage's hearing) David Tudor played short pieces on the piano as well as short selections from another Cage tape composition, *Fontana Mix* (1958). Each reading and selection was randomly selected and performed for the same amount of time; Cage had to either read faster or slower (depending on the length of the selection) in order to meet the time limitations. The result was issued on Folkways Records in 1958, and became a landmark recording for avant-garde musicians (it has been reissued on CD as Smithsonian/Folkways 40804). Also in 1958, a 25-year retrospective concert was held at Town Hall in New York City, and subsequently a recording was issued on LP; this helped spread Cage's music in the early 1960s among younger composers (it has been reissued on Wergo CD #6247–2).

Cage turned his attention to live performance from the 1960s forward, although he continued to use various electronic devices — including sound generators of various types — throughout most of his career. Numerous recordings of Cage's music have been issued, although Cage himself did not own a phonograph and did not like the idea of a “fixed” or “permanent” version of his work existing apart from its performance.

IAN PEEL/CARL BENSON

CAILLE BROTHERS

A Detroit firm, manufacturers of picturized phonographs sold under the names Cailophone and Scopephone. In 1907 it offered a coin-op, the Cailoscope, that showed pictures but had no audio component. There was also a coin-op phonograph.

CALIFORNIA RAMBLERS

The “most prolifically recorded dance orchestra” (Rust), active on discs from 1921 to 1937. Arthur Hand was leader of the group, which included such great artists as Adrian Rollini, Tommy Dorsey, Jimmy

Dorsey, Stan King, and Ed Kirkeby. About 600 records are listed in Rust 1982 (jazz numbers), and about 700 more in Rust 1975 (dance numbers). “The Sheik” (Vocalion 14275; 1921) was their first disc and first hit. In 1924 they had another top record with “California Here I Come (Columbia 67-D). The orchestra had a variety of pseudonyms, including the Golden Gate Orchestra, and the Palm Beach Players. There were also smaller units drawn from the band that had separate names and recordings. The Ramblers appeared on numerous labels, from Edison Blue Amberol cylinders to Edison Diamond Discs and Bluebird. [Brooks; Rust 1975; Rust 1982.]

CALLAS, MARIA

(3 DEC 1923–16 SEP 1977)

American soprano, born Maria Anna Sofia Cecilia Kologeropoulos to Greek immigrant parents in New York City. When the family returned to Greece in 1937, she studied voice and made a debut in Athens (in a minor role) three years later. Her major debut was as Tosca in July 1942. She appeared in Verona as Gioconda on 3 Aug 1947, and joined La Scala in 1950, singing Aida. She was an immediate success in Cherubini's *Medea*, a role that was identified with her throughout her career. Another acclaimed role was Norma, which she sang at Covent Garden on 8 Nov 1952 and in her American debut, in Chicago, on 1 Nov 1954. For her Metropolitan Opera debut on 29 Oct 1956 she was Norma once more. Callas enjoyed great international success as one of the great operatic stars of her time. Unfortunately, she was involved in numerous disputes with managers, causing interruptions to her career; she did sing in New York until 1965, then gave up the stage after a final appearance at Covent Garden. She died in Paris.

The recordings of Callas reveal the great versatility of her art; she made outstanding discs of the Verdi/Puccini repertoire, and also of the earlier Italian masters (Bellini, Donizetti); and she sang Isolde, Carmen, Orfeo, and Marguerite, and Rosina. Her first discs were for Cetra in 1950, after which Walter Legge took her to EMI. EMI issued CDs of her major repertoire in 1990 on six discs. [Ardoin 1991; Korenhof 1977.]

CALLOWAY, CAB

(25 DEC 1907–18 NOV 1994)

American big band leader, jazz singer, and pianist, born Cabell Calloway on Christmas day 1907, in Rochester, New York. He began working in Chicago clubs, then toured the country. He established a group

called the Alabamians which was successful in Chicago and at the Savoy in Harlem. The first Calloway recording was "Market Street Stomp" (Victor 38067; 1929). Several hit records followed: "Minnie the Moocher (Ho De Ho)" (Brunswick 6074; 1931); "St. James Infirmary" (Brunswick 6105; 1930); "Kickin' the Gong Around" (Brunswick 6209; 1931); and "Eadie Was a Lady" (Banner 32647; 1932); these appeared on other labels as well. Calloway's big band was a sensation in 1931–1932, especially at the Cotton Club; during the 1940s, it included such great artists as Cozy Cole (drums), Dizzy Gillespie (trumpet), Milt Hinton (bass), and Jonah Jones (trumpet). George Gershwin modeled the character Sportin' Life (in *Porgy and Bess*) on Calloway, who took the role in 1952–1954 in the U.S. and overseas. He continued to perform on occasion, last appearing in the movie *The Blues Brothers* in 1980. He died of a stroke in Greenburgh, New York. The Classics label has reissued all of Calloway's recordings from 1931 to 1955 on a series of 13 CDs (as of 2003), including V-Discs and other noncommercial recordings. These are considered to be the best reissues of this material in terms of documentation and sonic restoration. There are many other domestic and foreign reissues of various recordings made by Calloway. [Popa 1987.]

CALORIC SALES CO.

A Chicago firm, established in 1916. It made the Phonola disc player.

CALREC AUDIO

Founded as a recording studio in 1956 in Hebden Bridge, West Yorkshire, England, Calrec Audio Ltd. has evolved into a company that manufactures high quality broadcast and audio mixing consoles and microphones. Still based in Hebden Bridge, it is a major supplier of these products to the U.K. broadcast sector and a major exporter to markets in North America, Europe, and the Pacific Rim. [Website: www.calrec.com.]

See also **Gerzon, Michael**

HOWARD FERSTLER

CALVÉ, EMMA

(15 AUG 1858–6 JAN 1942)

French soprano and mezzo-soprano, born Emma Calvé de Roquer in Décazeville. Her debut was in Brussels on 23 Sep 1881, as Marguerite; she appeared at La Scala in 1887, Covent Garden in 1892 (creating



Emma Calvé in a 1917 Victor catalog. Courtesy Jerald Kalstein

a sensation as Santuzza, and singing command performances for the queen), and at the Metropolitan Opera on 29 Nov 1893, also as Santuzza. In *Carmen* she sang with Jean de Reszke, Nellie Melba, and Pol Plançon. Calvé stayed with the Metropolitan 13 seasons, until 1904, then made world tours. After 1910 she mainly devoted herself to the concert stage. Calvé's most acclaimed role was *Carmen*, and her recording of "Habanera" is regarded as the finest made of that aria (G&T 3281 and Victor 5000; 1902). She also recorded the "Seguidilla" (G&T 3285 and Victor 5002; 1902), less successfully — with a screech and an "Oh Dieu!" at the end. But earlier, in the 1890s, she had made a group of home cylinders for Jules Massenet, who sent her the numbers from his opera *Sappho* as he composed them; she sang them and sent him the cylinders. Those records have not survived, nor have the commercial records she made for Bettini. Mapleson recorded her live at the Metropolitan in 1902–1903, singing in *Cavalleria* and *Faust*.

Zonophone was the first to record Calvé on disc: "Voi lo sapete" in 1902, made in Paris. Then there were six G&Ts — including the *Carmen* arias cited above — and seven arias for Victor in 1907–1910. One of the finest in that group is "Charmant oiseau" from *Perle du Brésil* (Victor 88087). Her final discs were

CALYPSO (LABEL)

made after World War I for Pathé in Paris. She died in Millau, Aveyron. Her complete recordings have been reissued on a two-CD set from Pearl (9482). [Moran 1977/1.]

CALYPSO (LABEL)

A Decca series of the early 1940s, consisting of music from Trinidad. Wilmoth Houdini was the principal artist and composer of many of the songs. One of his numbers was a musical tribute to Bing Crosby, with such lines as "His millions of listeners never fail to rejoice/About his golden voice" (Decca #18142). Other performers in the series included The Lion, Mighty Destroyer, Attila the Hun (Raymond Quevedo), King Radio, and The Growler.

CAMBRIDGE SOUNDWORKS

Founded in 1988 by Henry Kloss and Tom DeVesto, in Cambridge, Massachusetts, with much of the money put up by venture capitalist Henry Morgan, the company specializes in the building, marketing, and mail-order sales of high-performance, reasonably priced products (including conventional and powered speaker systems) for use in home stereo, home theater, and multimedia systems. Many of the company's products were designed by Kloss, working with other members of the CSW design team. Kloss, who was the company's guiding spirit, had cofounded Acoustic Research with Edgar Villchur in 1952 and was responsible for the production design of the AR-1, the first acoustic suspension loudspeaker design, and was also one of the founders of KLH and Advent. In 1997, Kloss sold his share of CSW to Creative Labs, which continued the company's design, marketing, and sales tradition. These days, the products offered by CSW are not only sold via ads in consumer magazines, but are also offered direct to the consumer through more than two dozen retail locations in New England and the San Francisco Bay area, as well as through Internet websites. As of 2001, the company was the country's largest factory-direct, audio-products company. [Website: www.cambridgesoundworks.com.]

HOWARD FERSTLER

CAMDEN (LABEL)

An RCA Victor low-priced LP label, issued from 1954, featuring material from Victor matrices; often the artists were not identified. Decca was the first British distributor, then Pickwick International.

CAMEO RECORD CORP.

A New York producer of inexpensive discs, established in 1921 in New York, with C.F. Siemon as president (he was also president of the Siemon Hard Rubber Co., Bridgeport, Connecticut, the parent firm of Cameo). Henry Waterson was vice president, then became president sometime before 1925. Recording was done in the laboratories of Earle W. Jones, an ex-member of the Columbia Graphophone Co. recording staff. Pressing was done at the Siemon plant in Bridgeport, which could turn out 50,000 discs per day. In February 1922 the first discs were released, offering a repertoire of dance music and other popular items. In a brief effort to bring in classical material as well, Eugene Ormandy — beginning his American career as concertmaster of the Capitol Theater Orchestra in New York City — was signed for several violin solo discs. Special records were made for individuals, with client labels if desired. Macy's department store was the principal outlet for Cameo records, which sold for \$0.50 each.

In March 1922 Cameo announced that it had secured a second pressing plant, in Framingham, Massachusetts, to supplement the output of its Bridgeport plant. The new facility had a capacity output of 20,000 discs per day.

A subsidiary label, Lincoln, was launched in January 1924, and another one, Romeo, appeared in July 1926. A line of children's records, Cameo-Kid, was announced in January 1925, with a selling price of only \$0.15. At that time the Cameo Record Corp. was consolidated with David Grimes, Inc., to form the David



Cameo label. Courtesy David A. Jasen

Grimes Radio and Cameo Record Corp. Henry Waterson was president. Another 1925 series from Cameo was the Official Boy Scout Records, featuring Jackie Coogan on the label; these records sold for \$0.20 each. In 1926 electrically recorded discs were released on the Cameo and Lincoln labels. Waterson was bankrupt in 1927, and sold Cameo to James E. MacPherson, who controlled the Pathé Phonograph and Record Corp. In the following year Cameo was merged with Pathé. During the Depression Cameo was one of several labels absorbed by the American Record Corp., which discontinued the use of the Cameo name.

In Britain the Dominion Gramophone Record Co., Ltd., was licensed to market Cameos, but not until 1928, when the American firm was approaching its final days. [Andrews; Rust 1978; label lists in *RR* #92 (1968) and earlier issues.]

CAMEO-PARKWAY (LABEL)

The company, founded in the late 1950s in Philadelphia, featured the Cameo (beginning in 1957) and Parkway (beginning in 1958) imprints. It was founded by a local songwriter, Bernie Lowe, who had ties with local promoter Dick Clark, host of the popular *American Bandstand*. Its chief artists — including Bobby Rydell, Chubby Checker, Dee Dee Sharp, the Orlons, and the Dovells (featuring Len Barry) — appeared regularly on that television program. Although the label continued to chart on occasion in the latter half of the 1960s, most notably with Question Mark and the Mysterians and Senator Bobby, it was unable to adapt to the changing trends of the progressive rock era. Its vintage recordings (e.g., the Orlons's "Wah-Watusi" and "South Street," the Dovells's "Bristol Stomp" and "You Can't Sit Down"), however, remain highly valued collectors items due to the absence of mainstream CD reissues. In 1968, its catalog was sold to Alan Klein.

CAMERAPHONE

A small, portable disc player manufactured by Lee & Pollack and marketed in Britain by Thorens in 1926; it was also sold in the U.S. The machine looked like a folding box camera. It had a turntable composed of three metal spokes and an odd, egg-shaped loudspeaker.

FRANK ANDREWS

CAMPBELL, ALBERT (17 AUG 1872–25 JAN 1947)

American lyric tenor, born in Brooklyn; he was among the first to make a career of recording. During the

1880s and 1890s he was on stage in operettas, then he began recording with a group named the Diamond Comedy Four. By 1896 he was doing solo discs for Berliner, and he made what were "probably the first recorded advertisements" (Walsh) for Quaker Oats, on Jumbo cylinders issued by the Talking Machine Co. of Chicago in 1899. He was an Edison mainstay by 1899, making notable cylinders of "For All Eternity" (7296; 1899), and "Mandy Lee" (7297; 1899). For Columbia he made several popular items, including "School Days" (3745; 1908)

Campbell began ensemble work with the Columbia Quartet; then went to the Peerless Quartet, and from 1908 on he recorded almost entirely in groups. He belonged to the Sterling Trio from 1916. After 1928, when Peerless disbanded, he did duets with Jack Kaufman for two or three years, and then operated a booking agency in New York. Campbell died in Flushing, New York. [Walsh 1942/9–10; corrections in May 1952.]

CAMPBELL G.A.

SEE LOUDSPEAKER

CAMPBELL, GLEN (10 APR 1938–)

American pop and country singer and guitarist, born in Delight, Arkansas. At age six he was playing the guitar, and soon had a regional reputation through radio appearances. In the 1950s he toured the Southwest, then became a sideman for various recording artists. His first hit record was "Turn Around, Look at Me" (Crest 1087; 1961). Under contract with Capitol, he made another hit, "Too Late to Worry" (Capitol 4783; 1962). The year 1967 brought two more chart songs, both Grammy winners: "Gentle on My Mind" (Capitol 5939), and "By the Time I Get to Phoenix" (Capitol 2015). Campbell earned another Grammy for his 1968 album, *By the Time I Get to Phoenix* (Capitol T-2851); it was on the charts for 62 weeks. He appeared on television (including his own variety show), and made national tours. "Wichita Lineman" (Capitol 2302; 1968), and "Galveston" (Capitol 2428; 1969) were both gold records. There have been 20 chart albums, the last in 1977.

CAMRAS, MARVIN (1 JAN 1916–23 JUNE 1995)

American electronics engineer, born in Chicago. He is noted for research in magnetic recording. He was with the Armour Research Foundation from 1940 through the 1980s. Among his 500 patents are one for

CAN

AC bias (1941), and U.S. #2,351,007 (filed 1942) for a recording head. He designed a wire recorder that played 30 minutes, at five feet per second, or 60 minutes at 2.5 feet per second, on 0.004 diameter stainless steel wire. General Electric manufactured it for use by the American and British military during World War II. Camras continued his influential research in video recording technology through the 1980s.

CAN

The experimental rock outfit Can played a major role in the German "Krautrock" scene (also considered part of the larger Euro-rock movement) of the early 1970s. The band's core members were accomplished musicians and composers who had studied with Stockhausen and Ligeti, performed with major figures in the European modern jazz movement, and conducted world-class symphony orchestras. In Can they combined elements of electronic music, improvisation, minimalism, and 20th-century avant-garde composition with blues-based rock to create a style that has been enormously influential in the rock and electronic music worlds.

DAVE MANDL

CANADA

The recording industry in Canada has always been closely allied to the major American and European recording companies and, indeed, even today most recordings distributed and purchased in Canada are pressed from foreign matrices. There have been, however, many notable, even unique, contributions made by Canada and Canadians to the field that has concerned itself with the preservation of sound.

The first recordings made in Canada were those produced at Rideau Hall in Ottawa by the governor-general, Lord Dufferin, and his guests who gathered on 17 May 1878 to witness a demonstration of Thomas Edison's tinfoil talking machine. Several months later, on 19 Oct 1878, Edison was granted Canadian patent #9282 for "improvements in means for recording Sounds and in reproducing such Sounds from such Record." This patent, as well as the demonstration, involved a disc recording device, a system Edison would not further develop for another 35 years. At about this time Alexander Graham Bell, then a resident of Brantford, Ontario, together with his cousin, Chichester Bell, and British-born scientist Charles Sumner Tainter, were working on various improvements to Edison's concept, including the use of wax-coated cylinders. The Bell-Tainter group was granted

Canadian patent #26703 on 20 Apr 1885 embodying these improvements.

Emile Berliner divested himself of his U.S. patents in 1897 (they were taken over by Eldridge Johnson, who later founded the Victor Talking Machine Company). On 25 Nov 1895 Berliner had been granted Canadian patent #55079 and in 1899 he moved to Montreal where he set up the first Canadian recording and distribution business at 2315–2316 Catherine Street under the name E. Berliner, Montreal. He rented space from the Bell Telephone Company at 367–71 Aqueduct Street (he had previously worked as a consultant to this firm), and installed four record presses. Here he also assembled cabinets for his gramophone, the inner workings of which were imported from Eldridge Johnson in the United States.

On 8 Apr 1904 the Berliner Gramophone Company of Canada, Ltd., was incorporated to "manufacture and deal in gramophones, gramophone records, and accessories, devices and appliances pertaining to or in any way connected with gramophones or talking machines generally...." The new company also became the presser and distributor in Canada of recordings from the Victor Talking Machine Company and other Berliner affiliates throughout the world. Herbert Samuel Berliner (1882–1966), Emile Berliner's oldest son, was a prominent stockholder of this company and was later named vice president and general manager, which put him in a position to have a profound effect upon the Canadian recording industry.

Early in this century, sensing Berliner's attempt to corner the Canadian record market, Edison and Columbia, Berliner-Victor's major competitors, set up distribution companies in Toronto. Berliner, however, appears to have been the only company to have done any mastering there during the first decade of the 20th century. Edison's American-made cylinders (and, from 1913, discs) were simply distributed in Canada and Columbia did not begin pressing records in Canada until 1912. Berliner was taken over entirely by the Victor Talking Machine Company (U.S.) in 1924. Columbia was active under various names (1954–1976 as Columbia Records, now CBS Records Canada, Ltd.) from 1904 with production coming under the control of Sparton of Canada (a subsidiary of Sparks-Worthington of the U.S.) in 1939. Thomas Edison ceased all Canadian activity in 1926.

The first entirely Canadian-made recordings were issued by Berliner in 1900. They were 18 centimeter (seven-inch) discs, followed in 1901 by 25.5 centimeter (10-inch) and in 1903 by his De Luxe 30 centimeter (12-inch) discs. Double-sided discs were first issued in Canada in 1908. These initial recordings were pressed from matrices belonging to affiliated Berliner companies in Britain, Germany, France, and

the U.S. The first commercial recording by a Canadian artist was a performance of "La marseillaise" by Joseph Saucier (1869–1941), which was recorded in Montreal. It is not known exactly when this master was made, as it replaced Ferruccio Giannini's earlier release of the same work (Berliner #9).

In addition to Berliner (Victor), Edison, and Columbia, other early Canadian recording and distribution companies included Canadian Vitaphone (Toronto 1913–1916), which pressed imported masters; Pathé Frères (Montreal 1915–ca. 1921), distributor of recordings pressed in France; Brunswick-Balke-Collender (Toronto 1917–1934), a subsidiary of the U.S. firm with processing taken over by the Compo Co., Ltd., in 1932; and Phonola (Pollock Manufacturing Co., Kitchener, Ontario, 1918–ca. 1925), distributor of imported labels and manufacturer of Phonola equipment from 1914.

Despite this early activity Canada depended largely upon recordings imported from the U.S. and other countries in the early decades of the century, although discs were often pressed in Canada from imported masters. Similarly, Canadian artists usually had to travel elsewhere to prepare masters for pressing by local production companies. Canadian artists who made significant contributions to record catalogs at this time included Emma Albani, Henry Burr, Pauline Donalda, Harry Macdonough, and cornetist-conductor Herbert L. Clarke (U.S. born, but raised in Canada). The first ensemble recordings produced in Canada were those made in July 1902 by the Gordon Highlanders Regimental Band (the Kilties Band) of Belleville, Ontario, directed by William F. Robinson (Berliner 802–810).

In the first half of the century the demands of the large French-speaking population of Canada created a ready market for recordings indigenous to their unique culture. Thus a large number of early recordings were produced for a market that had no foreign source. French-Canadian artists who recorded in this genre included Joseph Allard (fiddler), La Bolduc (pseudonym of Marie or Mary-Rose-Anne Travers, singer), Conrad Gauthier (folksinger), Henri Lacroix (harmonicist), and Charles Marchand (singer) both as an individual and with his Bytown Troubadours. Canadian artists who developed an international recording career at this time included Guy Lombardo and his Royal Canadians, Wilf Carter, Percy Faith, and Hank Snow.

The advent of radio broadcasting in the mid-1920s seriously affected record sales in Canada, and the ensuing economic Depression caused all but the most stable firms (most, significantly, tied to U.S. or European concerns) to cease operations — even Columbia folded temporarily. The surviving firms

included RCA Victor, Starr Co. of Canada (formerly Canadian Phonograph Supply Co.), and Compo Co., Ltd., all of which featured Canadian performers. Starr (active 1918–ca. 1955) was based in London (Ontario); it distributed the Starr-Gennett label (U.S.) with records pressed at the Compo plant. Compo (active 1918–1964) was founded by Herbert S. Berliner in Lachine, Quebec, fundamentally as a pressing plant for several labels including Decca, Phonola, Sun, and Apex, as well as Starr-Gennett. It had several labels of its own (including Compo) that featured Canadian performers. Compo was acquired by the Music Corporation of America (MCA) in 1964.

Sparton of Canada, Ltd. (London, Ontario), established in 1930, was the pressing plant for Columbia from 1939 until 1954, after which date it became independent. Sparton was the first Canadian company to press stereo records. A small company active at this time was Celtic (Antigonish, Nova Scotia), which began operations in 1933 but was taken over by Rodeo of Montreal in 1960. This company specialized in traditional music of the Maritime region.

Just as in the U.S. and Europe, performing rights issues arose in Canada due to the public performance of copyright music. The English-based Performing Rights Society (PRS) founded the Canadiana Performing Rights Society (CPRS) in 1925 to address this issue; the organization was soon wed with the American-based ASCAP. After World War II, it broke away from its British and American parents, and was renamed the Composers, Authors, and Publishers Association of Canada (CAPAC), primarily to address issues of radio and television broadcast of music. In 1947, BMI formed a rival organization, BMI Canada, to represent composers. In 1976, the organization was changed to a nonprofit entity, and then renamed PRO-CAN a year later. In 1990, CAPAC and PROCAN merged and became the Society of Composers, Authors, and Music Publishers of Canada (SOCAN). [Website: www.socan.ca]

A new era in Canadian recording began in 1945 when the Canadian Broadcasting Corporation (CBC) began to record works by Canadian composers and artists. These recordings were, at first, not available commercially, but were distributed to affiliated radio stations in an attempt to increase Canadian content in broadcasting. In a related development the Radio Canada International (RCI) transcription service was established in 1947 to provide recordings of Canadian performances to foreign audiences. In 1966, as demand grew for distinctly Canadian performances, the CBC recordings began to be issued commercially.

A plethora of Canadian recording companies sprang up across the country in mid-century, urged on by a growing demand, both from the broadcasting industry

CANADA

and the public, for recordings with Canadian content. Capitol Records of Canada, Ltd. (from 1955 Capitol-EMI), was established in 1954, although Capitol records had been pressed in Canada by Regal Records under license to Musicana (U.S.) since 1946. Tip Top Records of Newmarket, Ontario, was established in 1948 by Max Boag (pseudonym of Harry Glenn) and specialized in commercial and custom recording. Other companies active in this era included: Aragon (Vancouver, 1945); Rodeo (Montreal, 1949); Beaver (Toronto, 1950); Canadian Music Sales operating under the Dominion label (Toronto, 1950); Quality (Toronto, 1950); Allied (Montreal ca. 1950); Ed Archambault's Alouette label (Montreal, 1952), and Select label (1959); Hallmark (Toronto, 1952); Gordon V. Thompson's Gavotte label (Toronto, 1952); Orfeo (Montreal, 1954); Ross, Court, and Co.'s Rococo label (Toronto, 1955); and Arc (Toronto, 1958).

Despite the large number of Canadian record producers active by 1960, the broadcasting industry could not meet the growing demand for material with Canadian content. Thus in 1962 the Canadian Talent Library (CTL), a nonprofit trust, was formed to produce recordings by Canadian artists and composers. Initially these discs were provided only to affiliated private radio stations across Canada, but in 1966, by which time 80 albums had been produced, CTL masters began to be leased to RCA, Columbia (CBS), Capitol, and other major record producers so that they might be released for public sale. By 1977 a total of 211 albums had been recorded by the trust. A similar project was begun in 1963 by the Composers, Authors, and Publishers Association of Canada (CAPAC), in cooperation with the Canadian Association of Broadcasters (CAB), which subsidized Canadian recordings issued commercially by Capitol, Columbia, RCA, Decca, and others. In a related development, Toronto radio station CHUM established the Maple Leaf System in 1969 to promote the broadcasting of Canadian recordings.

In 1964, the Canadian Recording Industry Association (CRIA) was formed to represent the interests of companies that create, manufacture, and market sound recordings. The association addresses similar issues as does the U.S. based RIAA, including anti-piracy, marketing, retailer liaison, and copyright issues. [Website: www.cria.ca]

Several new recording companies emerged in the 1960s, including Baroque (Montreal, 1962); Gamma (Montreal, 1965); Cantilena (Toronto, 1966); Polydor (Montreal, 1966) which became Polygram in 1978; London, a subsidiary of Decca of London (Montreal, 1967); Aquarius (Montreal, 1968); Sackville (Toronto, 1968); and General Recorded Tape (GRT), a subsidiary of the American Firm that originated in

London (Ontario) in 1969 and moved in the same year to Toronto.

The Canadian Radio and Television Commission (CRTC) established new regulations in 1970 increasing to 30 percent the amount of Canadian content that would be required of Canadian radio broadcasters, greatly increasing the market for the many new record companies that emerged in this decade. These included: A & M (Toronto, 1970); True North (Toronto, 1970); Boot (Toronto, 1979); Astra (Montreal, 1972), a label of the Canadian Association of Broadcasters; Goldfish (Richmond, British Columbia, 1973); Melbourne (Peterborough, Ontario, 1973); Onari (Toronto, 1973); Attic (Toronto, 1975); Kébec-Disk (Montreal, 1974); Masters of the Bow (Toronto, 1974), which reissued historical discs; Aquitaine (Toronto, 1974); Bernadol (Toronto, 1975); Music Gallery (Toronto, 1976), devoted to experimental and native music; Umbrella (Toronto, 1976), a direct-to-disc label introduced by Nimbus 9 and acquired in 1979 by Sine Qua Non of Toronto; Tapestry (Ottawa, 1978); and Magnum (Toronto, 1979), the Canadian label of GRT (see above). The Canadian Independent Record Producers Association (CIRPA) was established in 1974 to coordinate the activities of the many production companies then operating. [As of 2002, the group's website, www.cirpa.ca, was not accessible, although they continued to be listed on related sites as an active organization.]

By 1970 the largest percentage of recordings sold in Canada were being pressed there, but prior to that time the studio production of recordings by Canadian artists still largely took place elsewhere, principally in the U.S. Before 1970 only six recording studios of international caliber existed in Toronto (RCA, Hallmark, Sound Canada, Bay Music, Eastern Sound, and Toronto Sound), while by 1981 almost 150 recording studios capable of producing quality multitrack master tapes were active across the country. While many of these operations lacked any permanence, some of the most successful and long-lived included: Solar Audio and Recording (Dartmouth, Nova Scotia); Bobinason Sound, Studio Tempo (Montreal); P.S.M. Studio (Quebec City); Le Studio (Morin Heights, Quebec); Marc Studios (Ottawa); Comfort Sound, Eastern Sound, Kinck Sound, Manta Sound, Sound Kitchen, Sounds Interchange, Nimbus 9/Soundstage, Zaza Sound Productions (Toronto); The Waxworks (St. Jacobs, Ontario); Century 21, Wayne Finucan Productions (Winnipeg); Damon Sound (Edmonton); Andromeda Sound, Bullfrog Studios, Little Mountain Studio, Mushroom Studios, Ocean Sound, and Pinewood Productions (Vancouver). By 1971 several of these studios possessed equipment sophisticated enough to attract international recording artists.

The RPM Gold Leaf awards, established in 1964 by the periodical *RPM* (see references, below), and commonly known after 1970 as the Juno awards, are presented annually to the most outstanding Canadian recordings artists, based upon record sales tabulated over a 14-month period. Categories and means of selection have varied over the years, but since 1975 the Canadian Academy of Recording Arts and Sciences (CARAS) has administered the awards. In 1974 the Juno awards were supplemented by the Canadian Music Hall of Fame and the Big Country awards, and in 1976 categories for classical and jazz recordings were included for the first time. In the same year the Canadian Music Industry awards were instituted. From 1965 until 1960 awards were presented to French-Canadian artists during a week-long exhibition in Montreal known as Festival du Disque and in 1979 the Association du Disque et de l'Industrie du Spectacle Québécois (ADISQ) established similar awards in Quebec. [Websites: www.juno-awards.ca for CARAS; www.adisq.com for ADISQ]

The problem of disseminating information to record dealers and the broadcasting industry with respect to the availability of Canadian recordings was becoming increasingly difficult by 1982, due to the large amount of material then available. Thus the CIRPA/ADISQ foundation was established for the specific purpose of making available catalog listings of recordings by Canadian artists. Known as the Canadian Record Catalog, the data were entirely computerized from the inception of the project and were initially available in hard-copy versions of about 1,000 pages including 43,000 data records indexed on 80 fields and updated about every three months. By 1984 the data were so extensive that the catalog was available only in an online version accessible directly from the main computer database in Toronto. An early experiment in web distribution, the database is no longer accessible via the web.

A consortium of broadcasters, record producers, and publishers banded together in 1982 to form the Foundation to Assist Canadian Talent on Records (FACTOR) to promote the production and marketing of Canadian records. Principals among the participants in this venture included the Canadian Independent Record Production Association (CIRPA), and the Canadian Music Publishers Association (CMPA). In 1983 the foundation administered almost \$400,000 for the promotion of Canadian talent, and in 1985 the CTL (see above), then operated by Standard Broadcasting of Toronto, joined forces with FACTOR, creating FACTOR/CTL with a budget of more than \$1 million, which grew to more than \$7 million by 2000. As a private, nonprofit organization, FACTOR administers contributions from 16 sponsoring broadcasters along

with three out of six components of the Department of Canadian Heritage's Sound Record Development Program. The funds are administered through 15 different programs to help get recordings produced, underwrite tours and videos, and support record labels, distributors, producers, and engineers. [Website: www.factor.ca]

According to Statistics Canada, during the period 1995–1996 (the last period for which figures are available), recordings by Canadian artists accounted for about 12.4 percent of the total new releases in Canada, and generated about 14.5 percent of the total \$1,137.9 million revenue for the industry. Of the 254 labels operating in Canada, only 15 were under foreign control, according to these same statistics.

CANADIAN BROADCASTING CORP. (CBC)

A crown corporation responsible to Parliament but independent of the government, established by Act of Parliament on 2 Nov 1936; successor to the Canadian Radio Broadcasting Commission (CRBC), a government agency established by Parliament in 1932. The CRBC was intended to broadcast Canadian programs across the country; in carrying out this function the agency also made a number of acetate disc recordings of historic interest (speeches, ceremonies, etc.). A Blattnerphone was acquired and utilized to record overseas transmissions. Unfortunately, there was no practice of preserving the ordinary broadcasts of music and entertainment, so most of popular culture of the 1930s was lost. With the arrival of the new CBC the opposite condition prevailed, as vast quantities of program material were recorded — although not carefully indexed or cared for. Much of the potential archive was disposed of in a “willy-nilly policy” of weeding (Woods). Nevertheless, a substantial record collection did emerge, enhanced by wartime documentary material and stimulated by the development of tape recording. In 1959 a program archives department was inaugurated under the supervision of Robin Woods. Cataloging and preservation developed systematically from that point.

By the year 2000, the archives had grown into a large collection of programs, recordings, books, and even early radio equipment. It holds nearly 250,000 hours of radio programming, stored on CD-ROM, and available to all Canadian radio stations via the intranet. A separate music archive houses 150,000 LPs and 150,000 CDs, including the Clyde Gilmour collection, donated by the broadcaster of the popular “Gilmour's Albums” series that ran from 1956 to 1997 on the CBC. In 1998, The Archives Project was launched to preserve, restore, and catalog the CBC's vast holdings

CANBY, EDWARD TATNALL

of radio and television programming. [Woods 1970; Website: www.cbc.ca.]

CANBY, EDWARD TATNALL (28 FEB 1913–21 FEB 1998)

One of the founders of the Audio Engineering Society, Canby, who had a music degree from Harvard, was a choral director, teacher, and writer whose conducting specialty was Renaissance and Baroque music, but whose wide interests led him to work as a writer, folklorist, and as an advocate of electronic music. As a director and singer, he also founded the Canby Singers, in New York, and before teaching at Finch College, in the 1950s, he taught music at Princeton University. In the 1940s he became fascinated by the relationship between music and audio equipment, and wrote about it in a book, *The Saturday Review Home Book of Recorded Music and Sound Reproduction*, published in 1952. He provided annotations for dozens of recordings on the Nonesuch label, wrote a column for *Audio* magazine for nearly 50 years, reviewed recordings for *Harper's* and *Saturday Review*, and for 20 years hosted a weekly classical-music program on WNYC.

HOWARD FERSTLER

CANS

Another term for headphones.

CANTILEVER

In a phonograph cartridge, the vertically compliant link between the stylus and armature. It must be sturdy, stiff, and well damped to limit resonances. It is usually made of magnesium, boron, or titanium.

HOWARD FERSTLER

CANTOR, EDDIE

(31 JAN 1892–10 OCT 1964)

Born Isidore Itzkowitz on the Lower East Side of New York City, Eddie Cantor was one of the giants of vaudeville and Broadway musical comedy. A very successful recording artist during the 1920s, spanning both the acoustic and electronic eras, he would remain a celebrity of the first magnitude — moving on to radio, the cinema, and television — into the early 1950s.

Cantor graduated from street performing to stardom in the *Ziegfeld Follies of 1917*. That show spawned his first hit recording, “That’s the Kind of a Baby for Me”

(Victor 18342; 1917). He continued produce best-selling discs into the early 1930s for various labels, including Pathé, Emerson, Columbia, and Melotone. His most popular records — “You’d Be Surprised” (Emerson 10102; 1920), “Margie” (Emerson 10301; 1921), “No, No, Nora”/“I’ve Got the Yes! We Have No Bananas Blues” (Columbia 3964; 1923), “Charley, My Boy” (Columbia 182; 1924), “If You Knew Susie” (Columbia 364; 1925), and “Makin’ Whoopee” (Victor 21831; 1929) — were typically culled from musicals and films in which he had a starring role. Occasionally self-penned, Cantor’s recorded output always featured his trademark energetic verve, charm, and humor, which ranged widely from nonsense to satire.

FRANK HOFFMANN

CAPACITANCE

The measure, in farads or microfarads, of the energy-storage capability of a capacitor.

CAPACITOR

An electrical device — often two metal plates separated by an insulator — that can store an electrical charge and will block current flow in a DC circuit. In AC circuits capacitors provide frequency-dependent impedance, useful in filtering and tuning applications.

See also Capacitance

CAPEHART, HOMER EARL

(6 JUNE 1897–3 SEP 1979)

American industrialist and statesman, born in Algiers, Indiana. He worked on his father’s farm until World War I, then enlisted and served until April 1919. After holding various sales posts — one was general sales manager for Holcomb and Hoke, an early maker of coin-op vending machines — he founded the Capehart Co. in 1927. His intention was to manufacture jukeboxes that could play either side of a record; he engaged the inventor of the disc-turning device, a man named Small, to join him in the enterprise. His new device, named the Orchestrope, was successfully placed in roadhouses and bars, but the Depression brought him financial crisis. He then shifted his target market to wealthier home buyers, and offered a deluxe phonograph that played both sides of discs. This venture was not sufficiently remunerative to save the business, and Capehart endeavored to sell out to RCA and other firms, eventually merging with Farnsworth Television and Radio Corp.

In 1932 Capehart established the Packard Manufacturing Co., another coin-op maker. In 1933 he became associated with Wurlitzer, serving until 1940 as vice president. He was successful in a bid for the U.S. Senate in 1944, and was reelected in 1950 and 1956. Capehart died in Indianapolis.

CAPEHART CO.

A firm established by Homer Earl Capehart in 1927, in Huntington, Indiana. The name was given as the Capehart Automatic Phonograph Co. in 1928 advertising. The president was J.W. Caswell. An early product was the Orchestrope, a coin-op that played 56 discs, but did not allow the user to choose among them. Producing a superior record changing player, the firm became recognized in the 1930s as the leader in its field. A unique mechanism that turned records over to play both sides, handling 10-inch and 12-inch discs intermixed, was based on patents acquired from Columbia in 1929; the firm moved to a new factory in Fort Wayne at that time and began to perfect its Capehart Deluxe Automatic Home Phonograph, first offered in 1931. Around 1940 Farnsworth Radio and Television Corp. took over the company.

CAPITOL (LABEL)

A major pop label established in Los Angeles in 1942. Its founders were Johnny Mercer, Buddy DeSylva, and Glenn Wallichs. Singles were issued in 1942 (the first issues bore the name Liberty, but this was quickly changed to Capitol) with a black label depicting the U.S. Capitol; a purple label appeared in 1949. During the "war of the speeds" both LPs and 45s were issued. Artists included Frank Sinatra (from the early 1950s), Johnny Mercer, Ray McKinley, Gordon Jenkins, Martha Tilton, the King Cole Trio, Jo Stafford, Kay Starr, Peggy Lee, and Stan Kenton; Paul Whiteman's last 78s were Capitols. In 1948 Capitol appeared in Britain, as a Decca affiliate. EMI, Ltd., acquired a controlling interest in Capitol in 1955, although the label continued to operate independently and could pass on EMI acts (as it initially did in 1963 when EMI signed the Beatles to its Parlophone subsidiary).

Capitol began the 1960s paying little attention to the new rock and roll phenomenon (although rocker Gene Vincent had been recording for them since 1956). However, in 1962, they signed the vocal-surf group, the Beach Boys, who would become major hit makers in the teen market. In 1964, realizing their earlier error, Capitol began selling the Beatles's albums in the U.S., although many of their albums were shortened for the U.S. market. Other British Invasion bands



Capitol 78 label from the early '50s. Courtesy David A. Jasen

followed, including Freddie and the Dreamers. The 1960s were also a rich time for Capitol's country artists, although unlike other labels it did not work out of Nashville. Country A&R man Ken Nelson did occasionally use Nashville studios, but most of his acts were from the Bakersfield, California, area, including Buck Owens and Merle Haggard.

Bad times came in the early 1970s, as the company found itself out of the mainstream and with an \$8 million deficit, at a time when the record industry was thriving. By 1973, the label had recovered. Major late 1960s–1970s-era signings included everything from the heavy metal of Grand Funk Railroad and Quicksilver Messenger Service to a new emphasis on R&B with Natalie Cole and Diana Ross. In 1979, EMI purchased the remaining shares in the label and took full control of it.

The 1980s saw Capitol imitating major labels like Warners and Columbia by releasing product in all major areas. Through Liberty Records (which was absorbed into the EMI group in the early 1980s and revitalized by Capitol beginning mid-decade), the label aggressively signed country acts; their most successful signing was Garth Brooks, who became one of the biggest country stars of the 1990s. During the 1990s, EMI consolidated various labels under the Capitol umbrella, including the rock label Virgin Records (purchased in 1992 and operated independently for a few years before being subsumed into Capitol), and the jazz labels Blue Note and Mosaic. The entire roster of labels and music publishing is collectively called the EMI Group as of 2002.

CAPPS, FRANK L.

[Bennett, B. 1981 has a matrix list; Bennett, B. 1987 lists the 15,000 series; Rust 1978; Website: www.hollywoodandvine.com.]

CAPPS, FRANK L.

(CA. 1868–2 JUNE 1943)

American inventor and recording expert. He worked with Emile Berliner, Thomas Edison, and Columbia, and later was production manager for U.S. Pathé. Among his 50 U.S. audio patents were #836,089 (granted 20 Nov 1906), for the Pantograph cylinder duplicating device, and #570,378 (granted 27 Oct 1896), for a spring motor. The motor had three springs; it was used in the 1899 Edison Concert machine. In 1923 Capps produced one of the earliest electrical recordings, of a speech by Woodrow Wilson, pressed by the Compo Co. In the 1940s he devised a cutting stylus with a burnishing facet. His work for Columbia included making records of Czar Nicholas in Russia, and of many artists in Vienna and Berlin. He retired in 1942. Capps died in New York. [Koenigsberg 1990.]

CAPRICCIO (LABEL)

A CD product of Delta Music GmbH, of Königsdorf, Germany; opera and vocal music are the specialties. American distribution is by Delta Music, Inc., Los Angeles; the British agent is Target Records, Croydon, Surrey.

CAPRICORN RECORDS

The Allman Brothers band's manager Phil Walden founded Capricorn Records in Macon, Georgia, to record the group in 1969. With the success of the Allmans' 1971 album *At Fillmore East*, Capricorn signed other Southern rock bands such as Wet Willie and the Marshall Tucker Band. But in 1979, the label went bankrupt, and its catalog was taken over by Polygram (now Universal Music Group). Walden relaunched Capricorn in Nashville in the late 1980s, achieving only modest success.

WILLIAM RUHLMANN

CAPSTAN

The drive spindle of a tape recorder. It consists of a motor-driven cylinder that works with a pinch roller (also known as the puck) to advance the tape at a constant speed. Actual tape speed is determined by the rotational velocity and diameter of the capstan.

CAR SONGS/HOT ROD MUSIC

Car songs, like surf music, were largely a southern California phenomenon. They were a byproduct of the region's active hot rod scene, which had evolved from the illegal street races of the 1940s to the Bonneville Salt Flats speed weeks and drag strips of the 1960s. Hot rodding included its own crew of culture heroes, including customizer George Barris and drivers "Big Daddy" Garlits and Craig Breedlove, who set a series of land speed records in his "Spirit of America." In addition to musical tributes, the hot-rod scene was lionized by Hollywood films, plastic car models available in hobby shops, and Bob Peterson's mass-circulation periodical, *Hot Rod*.

Recognizing the presence of the subculture of potential consumers (not to mention the vicarious interest of middle American youth as a whole), a nucleus of talented Los Angeles-based songwriters and arrangers/producers began fueling the craze in the early 1960s, most notably Brian Wilson of the Beach Boys, Jan Berry of Jan and Dean, Roger Christian (a deejay at KFWB), Gary Usher, Terry Melcher, and Bruce Johnston. Usher — who contributed to the success of the Hondells's hits, "Little Honda" (Mercury 72324; 1964) and "My Buddy Seat" (Mercury 72366; 1964), and many the Surfari's recordings — teamed with Christian to produce hit recordings and film soundtracks. Johnston and Melcher masterminded the success of the Ripchords (e.g., "Hey Little Cobra," Columbia 42921; 1963), and had their own hits as Bruce and Terry: "Custom Machine" (Columbia 42956; 1964), and "Summer Means Fun" (Columbia 43055; 1964). The Beach Boys produced a number of car song hits, including "Shut Down" (Capitol 4932; 1963), "Little Deuce Coupe" (Capitol 5009; 1963), and even the more sophisticated "Fun, Fun, Fun" (Capitol 5118; 1964).

As with surf music, the rise of folk-rock and protest music, in essence, submerged the car-song genre. The Beach Boys began experimenting with more progressive styles, augmented by the addition of Johnston to enable Wilson to avoid touring so as to concentrate on songwriting and studio production. Jan Berry, on the brink of creating increasingly sophisticated sounds of his own, nearly died when his Corvette Stingray crashed at the fabled Dead Man's Curve. Melcher and Usher teamed up to produce the latest West Coast sensation, the Byrds.

FRANK HOFFMANN

CARBONA CO.

A New Jersey firm, located (1919) in Newark. Advertising of 1919 identified the company as maker of the disc cleaner Carbona.



Cardinal label. Courtesy Kurt Nauck/Nauck's Vintage Records

CARDINAL (LABEL)

A disc made by the Cardinal Phonograph Co., with offices in New York, first offered in December 1920. Factories were at Zanesville, Ohio; Newark, Ohio (home of the firm); and Point Pleasant, New Jersey. Cardinal also sold phonographs. The disc repertoire was pop, standards, and sacred music. Label color was red, with a cardinal bird on it; surfaces were poor. Nothing unusual or distinguished was recorded in the 100 or so issues.

Cardinal moved to Cincinnati in November 1921. A new Cardinal record, of somewhat improved quality, appeared in 1922 or 1923, drawing masters from Gennett. [Rust 1978.]

FRANK ANDREWS

CAREY, MARIAH (27 MAR 1970–)

Mariah Carey belongs to the same torch singing, ballad tradition that spawned Barbra Streisand, Dionne Warwick, and Whitney Houston. Like these singers, Carey's florid style owes more to bel canto stage and mainstream pop conventions than rhythm and blues, gospel, and rock influences — all of which are nevertheless discernable in her recordings.

A native of Long Island, New York, she was groomed for a singing career by her mother, Patricia Carey, a former member of the New York City Opera. Carey's rise to fame was meteoric. In addition to winning the 1990 Grammy for best new artist, she enjoyed eight number one singles — "Vision Of

Love" (Columbia 73348; 1990), "Love Takes Time" (Columbia 73455; 1990), "Someday" (Columbia 73561; 1991), "I Don't Wanna Cry" (Columbia 73743; 1991), "Emotions" (Columbia 73977; 1991), "I'll Be There" (Columbia 74330; 1993), "Dreamlover" (Columbia 77080; 1993), and "Hero" (Columbia 77224; 1993) — during her first four years as a Columbia recording artist; 14 in all during the decade. Her albums — particularly the eponymous debut (Columbia 45202; 1990; #1 11 weeks; 113 weeks on the charts), *Music Box* (Columbia; 1993; #1), *Daydream* (Columbia 66700; 1995; debuted at #1), and the hip-hop-influenced *Butterfly* (Columbia 67835; 1997; #1) — also sold well. She was the most successful artist on the pop charts in the 1990s by a substantial margin. While Carey's vocal tools (including a seven-octave range) are considered above reproach from a technical standpoint, some critics have characterized her choice of material as bland at best. While she remains firmly in control of her career — making substantial contributions as a songwriter and producer — cracks have appeared in the firmament in recent years. After signing a lucrative recording contract with Virgin in early 2001, the disappointing performance of her first release — the *Glitter* soundtrack — led to the company to void the deal, albeit by making a large \$28 million payout to the artist. Furthermore, her productivity has allegedly been compromised by various personal problems. Nonetheless, by late 2002 Carey was back with a new album (*Charmbracelet*), issued on her own label, MonarC Music, through Island/Def Jam (a division of Universal Music Group).

FRANK HOFFMANN

CARLOS, WALTER [WENDY]

(14 NOV 1939–)

American organist and composer, born in Pawtucket, Rhode Island. He studied music and physics at Brown University and Columbia University. Working with Robert Moog, inventor of the Moog synthesizer, he made an album demonstrating the device. Entitled *Switched on Bach* (Columbia MS7194; 1969), it became the first successful record of electronic music, on the charts 31 weeks, and winner of two Grammy awards. He also created the soundtrack for Stanley Kubrick's landmark 1971 film, *A Clockwork Orange*. Following a sex-change operation in 1979, the artist performed as Wendy Carlos. During the 1980s and 1990s, Carlos turned her attention to creating ambient music. All of her albums have been re-released in new 20-bit remasterings by the East Side Digital label.

CARNEGIE MUSIC SET

CARNEGIE MUSIC SET

One of the monumental anthologies issued in the 78-rpm era, sponsored by the Carnegie Corporation. The intent was to provide material for small colleges, useful in teaching music appreciation. Beginning in 1933, sets of records were distributed — each with a record player and a four-drawer file of catalog cards. The standard repertoire was represented, performed by a variety of artists, along with a number of less familiar modern works. [Miller, P. 1972.]

CARNIVAL (LABEL)

A house label for the John Wanamaker department stores (New York and Philadelphia) in 1924–1925. Pressing was done by the Bridgeport Die and Machine Co.; masters were mostly from Emerson and Paramount. The only original take seems to have been “Mr. Jelly Lord”/“Steady Roll” (#11397), played by Jelly Roll Morton. [Rust 1978.]

CARRERAS, JOSÉ MARIA (5 DEC 1946–)

Spanish tenor, born in Barcelona. He studied in Barcelona and made his debut there in 1970. He sang for the first time in Italy in 1971, performing Rodolfo in Parma. He appeared at the Metropolitan Opera as Cavaradossi on 18 Nov 1974, and in the same year at Covent Garden; his La Scala debut was in 1975. Carreras has been greatly acclaimed for his Italian roles, notably Alfredo, Nemorino, Don José, the Duke, and Don Carlo. Despite an attack of leukemia in 1987, he was on stage again in 1988. In July 1990, Carreras first appeared on a triple bill with Plácido Domingo and Luciano Pavarotti. This began the “Three Tenors” phenomenon, selling millions of records and videos, and making several more appearances through the 1990s.

Carreras has recorded a number of complete operas, including *Elisir d'amore* (Philips 412714), *Lucia di Lamermoor* (Philips 6703080), *Pagliacci* and *Cavalleria rusticana* (Angel SZX-3895), and the principal Puccini and Verdi works. He took the male lead in a complete *West Side Story* recording under Leonard Bernstein's direction (DG 415253; 1986). He was one of the “three tenors” on the immensely popular CD *Carreras, Domingo, Pavarotti in Concert* (London 430433-2; 1990), which has sold some 5,700,000 copies.

CARRYOLA COMPANY OF AMERICA

A firm located in Milwaukee, Wisconsin. It made a portable disc player in 1926–1927, claiming in *TMW*

advertising to be the world's largest producer of these. In early 1929, Carryola was acquired by the Allen-Hough Manufacturing Co., of Milwaukee.

CARSON, FIDDLIN' JOHN

(23 MAR 1868–11 DEC 1949)

Fiddlin' John Carson was the first “hillbilly” recording artist to achieve nationwide popularity. Prior to his appearance on the scene, record companies employed mainstream singers — the best example being light-opera veteran Vernon Dalhart, whose rendition of “The Prisoner's Song,” sold a reputed 5 million copies, while igniting a rage for country/folk recordings — and professional musicians sight-reading from sheet music arrangements to record country music.

Hailing from Fannin County, Georgia, Carson worked at a variety of jobs — horse racing jockey, foreman at a cotton mill, house painting, and moonshining — while winning his state's fiddling championship seven times. His regional reputation was further enhanced when he began performing on radio station WSB, Atlanta, on 9 Sep 1922. Atlanta phonograph and record dealer Polk Brockman prevailed upon the General Phonograph Corporation to record Carson for its flagship label during one of its southern field trips. The first session, overseen on 14 June 1923 by the legendary producer, Ralph Peer, resulted in the release of “The Little Old Log Cabin in the Lane”/“The Old Hen Cackled and the Rooster's Going to Crow” (Okeh 4800). The initial pressing was released without a label or record number, because Peer felt it would have little attraction beyond the local area. However, Brockman immediately placed an order for 500 copies, and the disc's success led Okeh to bring Carson to New York City to record 12 (some experts place the total at 14) tracks on 7–8 Nov 1923. Carson's success inspired Okeh and other labels to search for other so-called “old-time” fiddlers and singers, many of whom became popular sellers in the rural South, including Gid Tanner and the Skillet Lickers and Charlie Poole and his North Carolina Ramblers.

In all, Carson would record approximately 150 discs for the company from 1923 to 1931, often backed by a string band, the Virginia Reelers, or his daughter, whom he dubbed “Moonshine Kate.” (Kate also recorded on her own, making her among the first female country artists.) Carson's material included square dances, British folk ballads, cowboy songs, minstrel tunes, Tin Pan Alley fare, and topical compositions celebrating the events of the day. Among his best-selling releases were “You Will Never Miss Your Mother Until She Is Gone” (Okeh 4994; 1924), “Fare You Well, Old Joe Clark” (Okeh 40038; 1924),

“Arkansas Traveler” (Okeh 40108; 1924), “John Henry Blues” (Okeh 7004; 1924), and “Old Dan Tucker” (Okeh 40263; 1925).

Carson worked as an elevator operator in his later years. He would intermittently cut material for RCA, much of which updated his earlier recordings. There has been a revival of interest in Carson’s work in recent decades, stimulated by Gene Wiggins’s book, *Fiddlin’ Georgia Crazy: Fiddlin’ John Carson, His Real World and the World of His Songs* (University of Illinois Press, 1987). Rounder Records released an LP reissue of Carson’s work in 1973, the first modern reissue of this material, followed by German-label Document Records’s release of Carson’s complete recordings in the late 1990s.

FRANK HOFFMANN

CARSON, MARY

American soprano, born in Houston, Texas. She studied in Italy, and made her opera debut there before 1912 in *Sonnambula*, scoring a great success. A noteworthy achievement was the performance of *Barbiere di Siviglia* two times in one night. When she returned to America she began to record for Edison, but the repertoire was one of popular songs and ballads, not opera. The Edison November 1912 catalog included her interpretation of “Oh Dry Those Tears” (#1592); her later work was similar. Carson’s best-selling records were “The Simple Melody” on Blue Amberol (#2607; a duet with Walter van Brunt), and “Kiss Waltz” (with chorus; #2665 and Diamond Disc 80061; 1913). She was heard under the name of Kathleen Kingston on Blue Amberol 2253, “You’re Here and I’m Here,” a duet with Billy Murray. Three of her Diamond Discs were still popular enough for the 1927 Edison catalog, and two — “Kiss Waltz” and “I’ll Change the Shadows” (#80122) — were sold until Edison quit the record business in 1929.

CARTER, BENNY

(8 AUG 1907–12 JULY 2003)

American jazz trumpeter, alto saxophonist, big band leader, and arranger; born Bennett Lester Carter in New York. He played with and made important arrangements for many great jazz ensembles, including those of Duke Ellington, Fletcher Henderson, and Chick Webb. Touring and recording in Europe in 1935–1938, he earned international acclaim. Returning to America in 1938, he led his own groups, which included such stellar performers as drummer Sid Catlett, trombonist J.C. Higginbotham, and pianist Teddy Wilson. Carter’s band was featured in the

motion picture *As Thousands Cheer* (1943), and Carter did arrangements for films and television. Among his fine recordings are “Lonesome Nights” (Okeh 41567; 1933), and one made in The Hague: “My Buddy” (Decca F-42136; 1937). After a period of inactivity as a recording and touring artist between 1946–1970, Carter resumed his career late in life, recording and performing prolifically. He received many honors later in life, including a Kennedy Center honor in 1996 and the National Medal of the Arts in 2000. He died in Los Angeles, California. [Berger, M. 1982.]

CARTER, BETTY

(16 MAY 1930–26 SEP 1998)

Carter was born in Flint, Michigan, moved to Detroit, and had the opportunity to sing with Charlie Parker and other musicians that traveled through town. She often performed with Lionel Hampton’s band and was booked numerous times at the Apollo Theater. Carter developed a style of jazz singing that was both brilliant and immediately identifiable. Her arrangements often utilized intricate accompaniments by a piano trio. Her radical vocal treatments of standards made them hard to recognize, but she was able to bring new meaning to some commonly heard tunes.

Her first recording, *Meet Betty Carter and Ray Bryant* (Epic 3202; 1955), was also a debut album for pianist Ray Bryant. One of her records as a leader, *Out There* (Progressive 90; 1958), is a good demonstration of her emerging, personal style. In 1961 she made an album with Ray Charles entitled *Ray Charles and Betty Carter* (ABC Paramount 385; 1961). Her style had matured into a fully formed artistic vision by the time she released *At the Village Vanguard* (Verve 835 681–2; 1970). Other notable albums from this great jazz singer include *Look What I Got* (Verve 835 661–2; 1988), and *It’s not About the Melody* (Verve 314 513 870–2; 1992). Carter died of cancer in Brooklyn, New York in 1998.

GARTH ALPER

CARTER FAMILY

A country music ensemble, originally established in Virginia in the 1920s, with Alvin Pleasant (“A.P.”) Carter as the lead and bass singer, his wife Sara as singer and guitarist, and her sister Maybelle, also a singer and guitarist. Discovered by Ralph Peer, a Victor talent scout, they began to record in August 1927, and became famous in the 1930s. By 1941 they had recorded more than 250 songs. Children of Maybelle and of A.P. and Sara joined the group in the 1940s, and the family was heard on the *Grand Ole Opry*. The group

CARTRIDGE (I)

broke up in 1943. Maybelle continued to perform with her daughters through the mid-1950s, and then as a solo performer until her death in 1978.

All of the Carter Family's recordings for Victor, ARC, Columbia, Bluebird, and other labels from 1927 to 1941 have been reissued on a lavish boxed set by Bear Family Records in Germany (15865). Rounder Records has reissued the complete Victor recordings on a series of eight CDs, and there have been various other compilations and reissues on domestic and European labels.

CARTRIDGE (I)

An enclosure for a roll of magnetic tape, so designed that it will be ready for use when it is inserted into a mated tape recorder or tape player. The advantage of the cartridge over the reel-to-reel tape mechanism is that it is self-contained and can be inserted without manual threading; it automatically engages the capstan and magnetic heads. The term usually refers to the cassette format introduced by Philips in 1963. With its great size advantage, the cassette made obsolete all the previous configurations, such as the four-track and eight-track cartridges that had been used in automobiles. This kind of enclosure is also known as the closed-loop cartridge, or continuous-loop cartridge.

CARTRIDGE (II)

A device (also known as a pickup) consisting of a stylus assembly, cantilever, and body, whose function is to convert the groove patterns traced from an analog disc into electric signals. There are four basic designs: moving iron, moving coil or dynamic, moving magnet, and crystal or ceramic.

In the moving-iron cartridge, a piece of metal (the vane) is attached to the opposite end of the stylus cantilever. As the stylus vibrates in the record groove it activates a coil of wire that is surrounded by a permanent magnet, producing the audio signal. Designs with "variable reluctance," introduced in the late 1940s, use a minute cantilever of magnetic material to vary the reluctance of a gap between two coils when the stylus is activated by the groove pattern. One example was the British Goldring 500 cartridge, known in the U.S. as the Recoton. Because of its low-voltage output, the variable reluctance pickup required a preamplifier to boost the output before regular amplification. With some modifications it was used successfully on LPs, but it never attained widespread use.

More common was the moving-coil cartridge. In that design, the stylus and cantilever moves the coil through a constant magnetic field, setting up electrical variations that comprise the signal. For stereophonic



Shure Whitelabel Phono Cartridge. Courtesy Shure Inc.

playback, there would be two coils, each responding to stylus movement against one of the groove walls. A cartridge usable for both monophonic and stereophonic discs, such as the Western Electric Model 9A or Westrex Model 10A, could be set so that the stylus moves vertically for mono or laterally for stereo. Problems encountered with this kind of pickup are the need for substantial amplification, and the need with some models to return the entire assembly to the factory for stylus replacement. Denon, Fairchild, Grado, Kiseki, and Ortofon have been associated with this type of pickup. Recent moving-coil cartridges by Denon and Ortofon require no extra amplification stage.

The moving-magnet cartridge is probably the most common design used in high-quality audio systems. The cantilever carries a tiny permanent magnet at the opposite end from the stylus. When caused to move by the action of the stylus in the record groove, it induces voltage in the coil. Manufacturers include: Audio-Technica, Empire, Fairchild, General Electric, Pickering, Shure, Signet, and Stereotwin. One advantage of the moving-magnet design is its rather high output, compared to most moving-coil designs. Another advantage is that the cartridge owner can usually replace the stylus assembly with little effort.

The early crystal cartridges were based on the piezoelectric properties of a material known as Rochelle salt. When a piece of this salt is bent or twisted an electrical output results. The original crystal cartridge had two slices of Rochelle about an inch long, pressed together with a metal foil separating

them; each slice had a lead connecting it to an external circuit. At the end opposite the lead the slices were held in a "torque jaw" clamp. When the stylus, also attached to the torque jaw, vibrated in the record groove, the motion was carried to the Rochelle slices, twisting them enough to generate a voltage. Such a pickup was inexpensive and simple to construct, and did not require equalization as other types do. Certain problems with Rochelle salt — for example its tendency to absorb moisture and deteriorate — were corrected with the introduction of ceramic piezo materials. Ceramic cartridges have been made by Astatic, Electro-Voice, Ronette, and Weathers.

A less common pickup is the capacitive type, modeled on the principle of the capacitive microphone: its stylus is attached to a diaphragm biased with a polarizing voltage.

In the 78-rpm era, with steel needles as the styli, the moving-iron pickup was standard. Its efficiency was limited by the mass of the armature, and frequency response was not above 8,000 Hz. The moving-coil cartridge had similar limits based on the size of the coil. Later designs with smaller moving parts allowed an extension of range to about 16,000 Hz. During the heyday of the LP era great improvements were made in all aspects of cartridge manufacture. By 1988 quality pickups offered very flat response up to 20,000 Hz.

Other measures applied to cartridges include vertical tracking angle (VTA), which should be between 15 and 20 degrees, channel separation, and tracking ability. Newer products in higher price ranges (\$300–\$1,300) often perform superbly on discs in good condition, but they do nothing to conceal the defects in worn or dirty grooves. It should be noted that price is no guarantee of quality, and some models, like the Shure V-15, Type V, are reasonably priced and competitive with the best other brands ever made. [AudioC 1969; Bauer, B. 1945; Bauer, B. 1963; Hirsch 1988; Klinger.]

See also **Tone Arm**

REV. HOWARD FERSTLER

CARUSO, ENRICO

(25 FEB 1873–2 AUG 1921)

Neapolitan tenor, widely regarded as the finest to sing the French-Italian repertoire, whose early discs had great impact on the recording industry. His debut took place in Naples, on 15 March 1895; he performed with varying success for several years thereafter until he acquired stellar rank during the 1900–1901 season at La Scala. In 1902 he made his first appearance at Covent Garden and on 23 Nov 1903, in *Rigoletto*, at the Metropolitan Opera. It was the Metropolitan that



Enrico Caruso (standing) previews one of his Victor discs with an unidentified listener, January 23, 1913. © CORBIS

became his favorite venue, and his final public rendition was there, in *La juive*, on Christmas eve, 1920. He died in Naples.

While in Milan in 1902, Caruso was approached by the enterprising Fred Gaisberg of G&T, and for a fee of £100 he recorded 10 numbers on 11 April. They were two arias from Franchetti's *Germania* — "Studenti! Udite" was his first record (matrix #1782) — two from *Mefistofole*, "Questa o quella," "Celeste Aida"; "Chiudo gli occhi" from *Manon*; and "Una furtiva lagrima," "E lucevan le stelle," and "Apri la tua finestra" from *Iris*. (When Heinrich Conried of the Metropolitan heard one of them, he offered Caruso a contract.)

Caruso made 10 other records for G&T in Milan, in November and December 1902 — then another 10 records in 1903 for the International Zonophone Co., under auspices of their Italian agent, the Anglo-Italian Commerce Co. Seven were lateral-cut discs issued by Zonophone, and the other three were cylinders (and later discs) issued by Pathé. A valuable essay by Canon H.J. Drummond presents rich detail about the Zonophone set, which consisted of these works: "Un bacio ancora" (Trimarchi); "Luna fedel" (Zardo); "Una furtiva lagrima"; "Elucevan le stelle"; "No non chiuder gli occhi vaghi" from *Germania* (which was also in his first G&T group); "La donna è mobile"; and

CARVER, ROBERT

“Siciliana” from *Cavalleria rusticana*. In the last-named piece, Caruso’s voice impressed Drummond as being “warm and full of ardour so that when I first heard it something of the beauty of that marvelous organ seemed to break through the haze of this early recording and I could almost fancy that the great singer stood again before me.”

It should be mentioned also that Caruso apparently made some records for Bettini before Victor signed him to an exclusive contract in 1904. There is testimony from Bettini’s son that “Caruso... often came to his office and sang through his machine.... I used to have them in the unfortunately destroyed material stored in France.” None of those recordings were listed in the Bettini sale catalogs, and none are known to exist today.

The recordings by Caruso, and those of other major voices in 1903 and 1904 — notably Charles Santley, Francesco Tamagno, and Nellie Melba — helped to change public and corporate attitudes toward the function of sound recording. Although the big producers were doing well enough, their output had been sharply tilted toward popular, novelty, and band numbers. A new emphasis on operatic music emerged, and soon after an interest in the symphonic repertoire.

Caruso’s labors — exclusively for Victor after 1904 — resulted in 245 sides of 78-rpm records, and royalties estimated at \$3.5 million. All his records are “in print,” in the sense that they are available in one reissue format or another. Many were reissued as enhanced electrics in the 1930s, and the material from 1906 was offered by RCA in 13 LP albums (*The Complete Caruso*, #ARK1; projected to be 16 LPs, but the first three, which would have contained all the 1902–1904 Milan recordings, as well as the 1904–1905 Victors with piano accompaniment, were never issued), and in various enhanced formats.

The first CD issue was *The Legendary Enrico Caruso* (RCA 5911–2RD, 1987), consisting of 21 arias. Fifteen CDs by a German label named Bayer were released as the *Complete Caruso* in 1990, but the set had many shortcomings (see the review by Gary Galo in *ARSCJ* 21–2, fall 1990). Pearl released a CD of his 1902–1908 recordings in 1990, and of the 1908–1912 recordings in 1991 (#EVC1 and EVC2; three CDs each). With volume 3 of the set, #EVC3 (1991), the 1912–1916 records were offered; and with the final volume, #EVC4 (1991), the 1916–1921 records were presented. RCA offered a CD *Complete Caruso* on 12 CDs (#60495–2–RG). Galo’s review of these sets points out that RCA inadvertently presented two recordings of an unpublished take, of Tosti’s “L’alba separa dalla luce l’ombra,” instead of both the published and unpublished versions. Thus the Pearl set is the only CD version to include all the known recordings. Those who listen to any CD transfers should be advised that pitch reference is inconsistent. The pitch

problem in Caruso’s recordings is discussed in Favia-Artsey 1965 and Galo 1991. In 2002, RCA created controversy by issuing a CD featuring Caruso’s vocals with new backings recording by the Vienna Radio Symphony Orchestra (RCA Victor 82569).

“Vesti la giubba” was the greatest of his market sensations, selling more than a million copies in its various versions. It was among those discs first made in Milan for Gaisberg, with piano only, then recorded with orchestral accompaniment in 1907 for Victor (#88061), and electrically rerecorded (#7720); both the acoustic and electric versions remained in the Victor catalog. [Bolig 1973; Caruso 1990; Drummond 1969; Favia-Artsey 1965; Feinstein 1985; Galo 1984; Galo 1990; Galo 1991; Hanna 1978; Klee 1981; Klee 1983; Klee 1987; Scott 1988.]

See also **Soundstream**

CARVER, ROBERT

SEE *CARVER CORPORATION*; *PHASE LINEAR CORP.*

CARVER CORPORATION

A leading American audio electronics manufacturer, located in Lynnwood, Washington. Founded by Robert Carver in 1979, after he left Phase Linear, it was quickly recognized for its remarkably small, cube-shaped (7-inches on a side) M-400 power amplifier and novel C-4000 and C-1 sonic holography preamplifiers, as well as the more conventional looking, but outstanding M-500 amp. Carver developed these products further, introducing a variety of superb and reasonably priced amplifier models such as the TFM-35x, and also added FM tuners, flat panel loudspeakers, CD players, and automobile audio to its line of products. Bob Carver left the company to found Sunfire Audio in the early 1990s, and the company then encountered some hard times. In 1995, the professional audio division of the company was sold to Phoenix Gold Corporation, which continues to operate the division under the name of Carver Pro. Carver Corporation filed for Chapter 11 bankruptcy protection in 1998. However, as of 2001, Carver Audio was back in business under new ownership, and currently produces some upscale surround-sound receivers. [Website: www.carveraudio.com.]

HOWARD FERSTLER

CASA LOMA ORCHESTRA

One of the outstanding big bands of the 1930s, established 1928; it took its name from a hotel in Toronto.

Although Henry Biagini was the first director, Glen Gray (1906–1963) was the actual leader from 1929; Gray preferred to sit in the saxophone section, and did not appear in front of the band until 1937. The common designation “Glen Gray and the Casa Loma Orchestra” was in use from 1933. The orchestra had various other stage names, including the Carolina Club Orchestra, Palais de Danse Orchestra, Louisiana Rhythmakers, Blue Racketeers, Sands Point Orchestra, Castle Orchestra, and Supertone Dance Orchestra.

Two brilliant arrangers were associated with the group, and defined its style: Gene Gifford (also the composer of “Smoke Rings,” the band’s theme song, heard on Decca 1473; 1937), and Larry Clinton. Among the fine Casa Loma vocalists were Kenny Sargent, Mildred Bailey, Connie Boswell, Ray Eberle, Lee Wiley, and Pee Wee Hunt (a trombonist who sang in lighter numbers). The band was featured on the *Camel Caravan* and *Burns and Allen* radio shows. Their earliest recording was “Love is a Dreamer” (Okeh 41329; 1929) with Eberle’s vocal. One of Lee Wiley’s fine renditions was “A Hundred Years from Today” (Brunswick 6775; 1934). Other hits were “Sunrise Serenade” (Decca 2321; 1939) and “No Name Jive” (Decca 3089; 1940). Hoagy Carmichael made one of his few singing appearances with the orchestra in 1939, doing “Washboard Blues” and “Little Old Lady” (Decca 2394).

CASABLANCA RECORDS

Veteran record company executive Neil Bogart founded Casablanca Records in 1973, and the label had its first success with the gold album *Here’s Johnny — Magic Moments from the Tonight Show*. But it went on to score hits with the heavy metal band Kiss and disco singer Donna Summer. Unfortunately, it suffered reversals in the 1970s and was sold to PolyGram (now Universal). Bogart founded Boardwalk Records, but died of cancer on 8 May 1982.

WILLIAM RUHLMANN

CASALS, PABLO

(29 DEC 1876–22 OCT 1973)

Spanish cellist and conductor, born Pau Carlos Salvador Defilló Casals in Vendrell. A child prodigy, he studied in Barcelona and gave his first solo recital there at age 14. He performed at the palace in Madrid, and also in a music hall in Paris, then joined the music faculty in Barcelona in 1896. He received great acclaim in London in 1899, and was invited to perform for the queen. Further tours brought him international renown, and an invitation to play at the White House in 1904 (he played there again, for President John F.

Kennedy, in 1961). Casals formed an orchestra in Barcelona, and a trio in Paris (with Alfred Cortot and Jacques Thibaud). Finally he settled in San Juan, Puerto Rico, his mother’s birthplace. The annual Festival Casals has been held there since 1957. He died in San Juan in 1973. On the centenary of his birth, the Spanish government issued a commemorative postage stamp in his honor.

Among the outstanding recordings by Casals are the Dvořák Cello Concerto, with Georg Szell (HMV HLM-7013; 1937), the unaccompanied Bach suites (Victor M611, three discs), and the Beethoven “Archduke Trio” with Cortot and Thibaud (Victor 8196/8200; 1928). These, and other discs he made in that period, were heard also on other labels. After World War II his most famous records were the five-disc rendition of the Schubert Quintet in C-Major, with Isaac Stern, Alexander Schneider, Milton Katims, and Paul Tortelier (Columbia M5-30069). A CD reissue of the Dvořák and Elgar concertos appeared in 1990 (EMI CDH7). [Morin 1982 has a complete discography.]

CASE, ANNA (29 OCT 1888–7 JAN 1984)

American soprano, born in Clinton, New Jersey. She has been referred to as “Edison’s favorite singer” — certainly she was one of his prolific artists. Case made her debut at the Metropolitan Opera in a minor role on 20 Nov 1909, and stayed with the company until 1919; Aida and Carmen were her best roles. In 1913 she sang Sophie in the American premiere of *Rosenkavalier*. She began to record on Edison wax cylinders with “Believe Me If All Those Endearing Young Charms” (#28108; 21 June 1912), and two other numbers. She then made 98 Diamond Discs, the first on 19 Sep 1913 (“Charmant oiseau” from *Perle du Brésil*: #80120), and the last on 24 June 1926 (“A Night of Love”: #80872). Her recorded repertoire consisted primarily of concert songs, though she included a few arias (Aida’s not among them). Two of the experimental Edison long-playing records of 1928 included Case’s voice, doing four songs on each disc. She made only one Victor record, taking part in the ensemble of “Du also bist mein” from *Zauberflöte* (#C13131; 16 Apr 1913).

Following some work for Vitaphone in 1926, Case moved to Columbia and made 41 discs from 1928 to 1930, again drawing on the concert repertoire. She retired in 1931. She died in New York in 1984. [Wile 1979 is a complete discography.]

CASH, JOHNNY

(26 FEB 1932–12 SEP 2003)

American country singer, born in Kingsland, Arkansas. He escaped from his childhood poverty by



Johnny Cash and June Carter Cash on the sheet music cover for "If I Were A Carpenter," mid-'60s. Courtesy David A. Jasen

joining the U.S. Air Force, serving from 1950 to 1954. When he returned to civilian life he formed a musical group in Memphis and received a Sun (label) contract in 1955. His first release was a Top 10 record: "Hey Porter" and "Cry, Cry, Cry." In 1956 three of his compositions were on the charts: "So Doggone Lonesome," "There You Go," and "I Walk the Line" (Sun 241). On Columbia from 1958, he made very successful pressings of "Don't Take Your Guns to Town" (Columbia 41313; 1959), "Ring of Fire" (Columbia 42788; 1963), and "Understand Your Man" (Columbia 42964; 1964). His most famous record is "Folsom Prison Blues" (Columbia 44513; 1968), for which he won a Grammy. He also received Grammys for the 1969 single "A Boy Named Sue" (Columbia 44944), and for a duet with his wife, June Carter (of the Carter Family), "If I Were a Carpenter" (Columbia 45064; 1970). In 1986 he left Columbia for Polygram, and made several successful LP albums consisting almost entirely of new material. Cash worked with rap producer Rick Rubin in the mid-1990s on a series of recordings for Rubin's American label. In 1997, he retired from performing after announcing he was suffering from a degenerative nerve disease. However, he

was able to record two more albums, released in 2000 and 2003, the last producing a hit with his eerie cover of the Nine Inch Nails's song, "Hurt." He succumbed to complications from diabetes in Nashville early in the morning of 12 Sep 2003. Cash was elected to the Country Music Hall of Fame in 1980, and the Rock 'n' Roll Hall of Fame in 1992. He has received nine Grammy Awards. [Hurd 1990; Smith 1985.]

CASH BOX (MAGAZINE)

Second only to *Billboard*, *Cash Box* was the major magazine aimed at the music industry for nearly five decades. During its existence between 1941–1997, *Cash Box* would pass through three stages of development. During World War II it was a mimeographed tip sheet two or three pages in length catering to distributors of coin-operated music and game machines. It provided information on issues concerning jukeboxes, pinball games, slot machines, and pool halls.

In the postwar era, *Cash Box* was a key forum for the integration of the hardware end of the music business with sound recordings. Recognizing that jukebox operators accounted for more than 90 percent of all records purchased during the 1930s and 1940s, the publication aimed its record reviews and sales charts at this market. Coverage of nonmusic vending machines, however, remained one of its primary concerns.

Beginning in the early 1950s, *Cash Box* redirected its focus to covering consumer record-buying habits, most notably at private sector impact points such as retail outlets, entertainment films, and the broadcast media. Geared to record-company executives, booking agents, artists and musicians, talent agents and managers, music publishers, and other music-industry organizations, the magazine employed a standard trade weekly format, incorporating feature stories, news briefs divided by various genre headings and formats, record and concert reviews, directories, specialized columns, and advertisements and classifieds. Like its chief competitor, *Billboard*, chart listings held a prominent place in each issue. Although eschewing blatantly negative forms of criticism typifying some consumer publications, *Cash Box* didn't hesitate to take a philosophical stance on controversial issues (e.g., racism, payola, censorship).

The publication was privately owned and published by three men (in varying combinations) — Joe Orleck, William Gersh, and George Albert — throughout its existence. This circumstance left it ill-equipped to compete with corporate trade weeklies such as *Billboard* and *Variety*. The failure to adequately track — and incorporate — new technological advances (e.g., the UPC bar code data provided by the music research firm, SoundScan Inc., to document

actual sales from a representative sampling of retail outlets, thereby resulting in more accurate chart listings) led to a further loss of prestige in the 1980s and 1990s. With the death of Albert, the surviving family members decided to cease publication of the magazine. [Fidler and James 1990.]

FRANK HOFFMANN

CASSETTE

Also known as audiocassette, or musicassette, the analog-audio cassette was introduced by Philips in 1963 as dictating-machine technology. Once introduced into the world of high fidelity, it was supposed to replace the reel-to-reel or open-reel format, and the awkward eight-track tape cartridge. While it did not displace analog open reel at the professional recording level (digital recorders eventually did, however), it came to dominate the audio-hobby oriented, home-recording field for three decades. The format is itself rapidly being replaced by the minidisc, recordable compact disc (CD), and DVD, as well as computer hard-disk technologies. Indeed, few serious audio enthusiasts take the analog cassette system seriously any more, and sales are but a fraction of what they were during the previous two decades.

Early analog cassette tapes did not produce high fidelity output, because of the slow playback speed that made flaws more obvious, and because particle density inhibited high frequency response. Superior tape formulations, better drive systems, and the introduction of noise reduction systems by Dolby and DBX, helped to bootstrap the format into the high-fidelity realm.

In the U.S. the number of prerecorded cassettes produced each year in the 1970s and early 1980s was about the same as the number of LP albums. Major record companies frequently issued tape versions of their new discs, and both formats were listed in Schwann and other catalogs of new releases. Sales were enhanced by the introduction of the Walkman (a small portable player), by the Sony Corporation, in 1979. The arrival of the compact disc in 1983 changed the market situation, and digital technology was applied to tapes as well. However, the sale of traditional stereo cassettes remained high, particularly among less discriminating enthusiasts, well into the 1990s.

See also **Cassette Deck; DAT (Digital Audio Tape); Hi-Fi Video Sound Recording**

HOWARD FERSTLER

CASSETTE DECK

The transport, recording, and playback device used with cassettes; it is part of an audio system, requiring



Harman Kardon DC520 Dual Cassette Deck. Courtesy Harman Kardon International

attachment to an amplifier or receiver, as well as loudspeakers. In principle the analog audiocassette deck is similar to the reel-to-reel tape recorder, but the size and spacing of the drive and rewind components is configured to work with the much smaller and self-contained cassette. Decks available in 2001 included Dolby B and Dolby C noise-reduction systems, with upscale models also including Dolby S. Deluxe versions often have three heads, to give a better fidelity and allow instant comparison between the input signal and the recorded output. Many of the more refined decks also have some form of bias or sensitivity adjustment. All the better decks also have two motors, one to turn the capstan, the other to handle fast-forward and rewind operations.

Auto-reverse is a questionable feature that has become standard on many good decks. It presents problems of audio quality that can only be overcome with additional expensive mechanisms, and it offers the possibility of confusion regarding which side of the tape is being played. Various convenience features are found in the high-end decks of the analog-cassette heyday: random access program play, music search, remote controls, remaining time indicators, and linear time counters. Among the principal manufacturers of cassette decks at the beginning of the 21st century were, Denon, Harman Kardon, Kenwood, Marantz, NAD, Nakamichi, Onkyo, Pioneer, Sherwood, Sony, Technics, and Yamaha. Prices ranged from \$100 to \$900. The high-end analog cassette deck has been eclipsed by recordable minidisc, CD, DVD, and computer hard disc technologies. Recent sales of players and prerecorded cassettes have plummeted, and the format is not taken anywhere near as seriously by dedicated enthusiasts as in the past.

HOWARD FERSTLER

CASSETTE NUMBER

CASSETTE NUMBER

The manufacturer's number on a cassette, equivalent to the disc number.

CASWELL, JOHN WALLACE (6 OCT 1870–25 JAN 1943)

American industry executive, born in Fort Wayne, Indiana. After various jobs as a clerk and salesman, in 1906 he and Winifred Runyan organized the Caswell-Runyan Co. in North Manchester, Indiana; the firm manufactured cedar chests. Caswell was president of the company from 1907 to 1935, and thereafter until his death was chairman of the board. Caswell was also the first president of the new Capehart Automatic Phonograph Co. in Fort Wayne, and a director of Utah Radio Products Co., Chicago. He died in Huntington, Indiana.

CASWELL MANUFACTURING CO.

Maker of portable phonographs, first advertised in 1926. The firm was located in Milwaukee, Wisconsin.

CATALOGING AND CLASSIFICATION

SEE SOUND RECORDINGS AND THE LIBRARY

CATALOGS

SEE DISCOGRAPHY

CBS

SEE COLUMBIA BROADCASTING SYSTEM (CBS)

CD

SEE COMPACT DISC

CD DIRECT

An input switch on an integrated amplifier that bypasses all circuitry except volume control and perhaps balance control.

CD-RECORDABLE

CD-Recordable (CD-R) is a write-once, read-many (WORM) recording media that is fully compatible

with audio compact disc (CD) players. The medium was jointly invented by Sony, Philips, and Taiyo Yuden and introduced in 1989 as an alternative to the audio-cassette for making private recordings of commercially available music. The recording laser of a CD-R "burns" a spot in a cyanine dye coating on the recordable disc. When played back on a conventional audio CD player, this spot imitates the effect of a pit on a conventional audio compact disc. CD-R uses a sample rate of 44.1 kHz and a sample resolution of 16-bits, the same as prerecorded audio CDs. CD-R discs are available in two formats, storing up to 74 or 80 minutes of high fidelity sound, respectively. CD-R recorders are available as stand-alone audio components that connect to a stereo system or as computer drives that create audio discs from audio files stored on a personal computer.

THOM HOLMES

CD-REWRITABLES

CD-Rewritable (CD-RW) is an audio medium related to CD-Recordables (CD-R). CD-RW was invented by Sony. Unlike CD-R, CD-RW allows discs to be erased and reused up to a thousand times. A disadvantage of CD-RW is that the lower reflectivity of the disc itself limits its readability by some commercially available audio compact disc players. A CD-RW drive can record discs in either a CD-R or CD-RW format. CD-RW drives are available as components to be added to personal computer system.

THOM HOLMES

CEDAR

A reprocessor for 78-rpm records, developed at the National Sound Archive in London. It was made by Cambridge Electronic Design, and first demonstrated at the Audio Engineering Society conference of March 1990. CEDAR is said to outperform other systems that suppress the clicks and noises in 78s. The acronym stands for Computer Enhanced Digital Audio Restoration. EMI and Columbia have used the system in preparing CD reissues. [Reid 1990.]

CELESTION INTERNATIONAL LTD.

An audio electronic firm located in Ipswich, Suffolk, England. Its specialty is loudspeakers. In 1990 Celestion's 3000 and 5000 series speakers won the annual award from the Federation of British Audio, and the 7000 model won the component of the year award in Japan. [Horn 1988.]

CELLO RECORDINGS (HISTORIC)

Hans Kronold of the New York College of Music was the first to record on the cello, making cylinders for Bettini. The latter's June 1898 catalog includes 12 numbers by Kronold, the first being a "Romance" by Fisher. Kronold also recorded for Edison, from 1905. William Henry Squire recorded for the Gramophone Co. on 19 Oct 1898, performing his own "Serenade" (#7850), and recorded again in November.

Josef Hollman (1862–1927) recorded for G&T in 1906, beginning with an arrangement of Chopin's Nocturne in E-Flat (matrix #C-3025), and doing three other numbers on the same day, 19 January. On 1 Feb 1906 he made three more discs. Rosario Bourdon (1889–1961) recorded for Victor in 1906, on two dates in June. Hollman and Bourdon were still in the Victor catalog in 1917, joined by Victor Herbert and Hans Kindler, but by the issue of the 1927 catalog they had all faded away before the arrival of Pablo Casals.

CELLOPHONE

A recording system based on the principle of the sound film, marketed for home use in 1937 by British Ozaphane, Ltd. The name Duo-trac was used for the device when it first appeared in February; advertising in August refers to the "Duo-trac" Cellophone. (It was the reels that were Duo-tracs, and the machine that was the Cellophone.) "Ozaphane" film — a kind of cellophane — carried two sound tracks that were read by a photoelectric cell. Playing time was either 15 or 30 minutes in each direction, depending on the spool size (seven or nine inch), and an automatic reverse moved from the first to the second track to double the duration of play. Back and forth running time of 90 minutes was achieved with reels that were recorded and played at a slower speed, but this was only suitable for nonmusical records.

Cellophones were offered in various models, including a basic "console"; and a "Radio Cellophone" that featured "an all-wave superheterodyne radio set, with triple diode circuit and inverse back-coupling." A deluxe version also had "a special high fidelity amplifier, with 10-watt undistorted output." Prices ranged from about \$30 to \$60. Since there was no needle scratch, no record wear, and a very long playing time, it is somewhat surprising that market outcome was only fair. One problem was the lack of artists; the company had to find unattached performers and start from nothing to build a catalog. Little of consequence emerged, and the possibility of recording symphonies and operas without troublesome interruptions was left unexploited. Buyers had to choose from dance music, variety numbers, salon orchestras, or

band pieces. But the crushing defects of the system were the same ones that kept open reel tape recording from overcoming the disc: it was necessary to thread the film onto the take-up reel by hand; and it was a lot of bother to find a given musical number somewhere on the film. On 29 July 1939 the last advertisement for the machine appeared in *Wireless Trader*. Documentation on the Cellophone is incomplete. No catalog or list of the reel records has survived. [Andrews 1984/4.]

CENSORSHIP OF RECORDED MUSIC

Narrowly defined, censorship in the United States is action by government or its agents that has one of two results: 1) puts a prior restraint on a speech act, or 2) interferes in the editorial function of the creators of expression. An example of the former is when the Broward County (Florida) Sheriff (1990) informed record retailers that continuing to sell 2Live Crew's *As Nasty as They Wanna Be* (Luke Skywalker 107; 1989; #29) would result in arrest because a judge had issued an advisory opinion that there was probable cause to find it obscene. Based on this "advice," retailers took the disc off sale even though it had not been found obscene in court. The same judge that agreed there had been an illegal prior restraint also found the disc to be obscene; fortunately, the second part of his opinion was overturned on appeal. The second category speaks to content-based regulation that encroaches on the protection of speech guaranteed by the First Amendment to the United States Constitution. Government is always free to request that editors and creators withhold some expression, but they cannot compel it. Only after a speech act has occurred and been allowed to circulate can its legality be questioned.

In 1735, New York newspaper publisher John Peter Zenger was arrested for libel. He was acquitted in a case viewed as a landmark for U.S. libel law and freedom of the press. Some of the material that motivated his arrest were the lyrics of ballads lampooning the British governor and his cronies. From this verdict forward, song lyrics have been presumptively protected speech in America. In a 1985 opinion in the case *Cinevision Corp v. City of Burbank*, the Court of Appeals for the 9th Circuit plainly stated "music is a form of expression that is protected by the First Amendment." Despite the Constitutional statement that "Congress shall make no law... abridging the freedom of speech," over the years the United States Supreme Court has identified three areas of speech that do not receive such protection: speech intended to incite violence (or "fighting words"); obscenity; and speech that could cause harm to minors. Popular music has been challenged in court in all these areas.

CENTER CHANNEL

On two occasions, former Black Sabbath frontman Ozzy Osbourne has been taken to court by bereaved parents who alleged that his music was a proximate cause of their children's suicides or suicide attempts. Attorneys argued there was a causal link between listening to his music and the unlawful act, under the Supreme Court doctrine developed in the case known as *Brandenburg v. Ohio*. Osbourne prevailed both times. The band Judas Priest was also taken to court for similar reasons, but it became a product liability case when the prosecution argued that the presence of "backmasked messages" caused the unlawful action. They were exonerated.

The only obscenity prosecution of popular music was the 2Live Crew case, which the musicians won on appeal. The "harm to minors" case that most directly impacted popular music focused on the third album by the Dead Kennedys, *Frankenchrist* (Alternative Tentacles VIRUS 45; 1985). Here, the music was not at issue, but a poster by internationally renowned fantasy artist H.R. Giger that was enclosed in the package. Despite a warning on the exterior about the potentially "shocking, repulsive, offensive" art within, prosecutors brought suit. The band won the case, but broke up in the aftermath, having spent \$60,000 on their defense. Popular music has prevailed against challenges in all three areas where it could lose First Amendment protection.

Few cases have been brought since, but the "harm to minors" rationale has turned up frequently in legislative language at both the federal and state levels, because of the government's compelling interest in the future well-being of the nation's youth. American legislators have discussed popular music with increasing frequency since the mid-1980s. Numerous congressional hearings have been held, with legislators repeatedly asserting that no legislation is contemplated. Government transcripts of these, held in 1985, 1994, 1997, 1998, and 2000, can be found easily via a computerized keyword search of "Congress music." In the wake of the shootings at Columbine High School, Senators Joseph Lieberman (D-CT) and John McCain (R-AZ), introduced the "21st Century Media Responsibility Act of 1999." This proposed a rating system for popular media, including music, based on the frequency and intensity of occurrences of violence; it did not pass. Shortly thereafter, Senator Henry Hyde (R-IL) added amendments to a crime bill that would criminalize sale or rental of stickered materials to minors and require music retailers to have at hand the lyrics of all songs on sale. However, he withdrew his amendments.

State legislatures have considered, and even passed, laws about popular music. In 1989 Missouri and Pennsylvania considered mandatory music stickering

ills, and model legislation was circulated nationwide; none passed. In 1992 the state of Washington added the words "sound recordings" to an existing "erotic material" law. It was struck down as vague and a prior restraint, with Judge Mary Brucker saying of possible prosecutions: "knowing the possibility exists causes self-censorship which deprives creativity." In 1998 Michigan nearly passed a concert-ratings bill that would have allowed local authorities to declare shows "harmful to minors," if the artists appearing had performed violent or sexually suggestive material in the previous five years. Also in 1998 two bills criminalizing the sale or rental of stickered material to minors were introduced. One died in committee in Tennessee and the other was voted down on the floor of the Georgia legislature.

All these concerns are related to a narrow, legal definition of censorship and are not exhaustive. It should also include the history of the Federal Communications Commission providing content-based "guidance" to media outlets and law-enforcement agencies' warnings to rappers N.W.A. and Dr. Dre. Thus far, none of these attempts to restrict musical expression has survived a legal challenge, but, public tolerance of these cases, record stickering, congressional hearings, and proposed laws contribute to an atmosphere that could lead to "self-censorship" by artists and a chilling effect on musical speech.

This discussion doesn't address actions by non-government lobbying groups, major retailers, etc., which have similar impacts. [For extensive treatments of music censorship using a broader definition, see Martin and Seagrave 1993; Nuzum 2001; and Cloonan and Garofalo 2003.]

PAUL D. FISCHER

CENTER CHANNEL

In traditional two-channel stereophonic recording, a simulated center-channel image will exist when identical signals from the left and right speakers are produced and the listener sits out in front and equidistant from both systems. In early surround-sound systems, a simulated center could be created from the same input signals by means of electronic circuits in the playback hardware, such as what we have with Dolby Pro Logic, that "steer" identical left-plus-right signals to a discrete center feed. In this arrangement, there is no genuine center, per se, but the steering systems can simulate one quite effectively. More modern systems, such as Dolby Digital, DTS, SDDS, SACD, and DVD-A, actually have a true center channel (as well as discrete surround channels), and with proper recording techniques the addition of a center can greatly enhance soundstaging,

imaging, and overall realism, particularly for listeners who are not sitting in the "sweet spot" that is centered up out in front of the front speakers.

See also **Channel; Surround Sound**

HOWARD FERSTLER

CENTRAL NEBRASKA PHONOGRAPH CO.

One of the North American Phonograph Co. group, established in Kearney, Nebraska, in 1890; E.A. Benson was director.

CENTRAL STATES TALKING MACHINE JOBBER ASSOCIATION

A trade organization established in Columbus, Ohio, in March 1906 (at first lacking the "jobbers" in the title), with George Ilsen as president. Members were all jobbers. It merged with Eastern Talking Machine Jobbers Association to form the Talking Machine Jobbers National Association in September 1907.

CERAMIC PICKUP

SEE *CARTRIDGE (II)*

CETRA (LABEL)

An Italian independent label established in Turin in 1937, devoted entirely to classical music. Parlophone, Odeon, and HMV issued its materials for a time in Britain. In 1953 Capitol took over the firm, but the label name was continued into the early 1970s.

CHALIA, ROSALIA (17 NOV 1864–16 NOV 1948)

Cuban soprano, born in Havana, one of the most prolific artists to record before 1900. Educated in Europe, she married a Philadelphian and came to America. Her opera debut was in Washington, D.C., as a substitute Aida; then she sang in Milan in 1895, and for Mapleson in New York (1896–1897). Her only Metropolitan Opera appearance was as Santuzza on 17 Dec 1898. Thereafter she concentrated on Latin American performances. Most of her records were for Bettini; in his 1897 catalog she had eight numbers, in the 1898 catalog 15, and in the 1899 catalog there were 67 arias and songs, plus 36 duets. Of this 193-cylinder output none have survived.

One of the first opera singers to make discs, she recorded for Zonophone ca. 1900, making seven records. Then she made a fine "Jewel Song" for Eldridge Johnson's new label in 1901 (#3431), and continued on Victor until 1913; her South American records were for Columbia. "Voilosapete" (Victor 68400; 1913) is a particularly fine effort. Chalia died in Havana. [Fassett 1945/9–10; 1956/2.]

CHALIAPIN, FEODOR (13 FEB 1873–12 APR 1938)

Russian bass, born in Kazan. He left his apprenticeship (to a cobbler) to join a traveling opera company at age 14, with the author Maxim Gorky as a fellow chorister. A generous teacher gave him free lessons, and he was able to gain employment in the St. Petersburg summer opera in 1894. From there he went to the Imperial Opera, and to solo concertizing, which brought him great acclaim in Moscow and elsewhere. In 1901 he made his La Scala debut in Boito's *Mefistofele*, and sang the same role at the Metropolitan Opera on 20 Nov 1907. His unsurpassed interpretation of Boris Goudonov was heard at the Metropolitan on 9 Dec 1921; he remained with the company until 1929. Chaliapin came to be known as the greatest of singing actors. He died in Paris on 12 Apr 1938.

Chaliapin's earliest discs — apart from some private cylinders in 1898 — were made for G&T in Moscow in 1901; they do not reveal a particularly smooth or attractive voice. Of the eight numbers he did then "Le veau d'or" from *Faust* (#22824) may be the most effective. In 1907–1914 he recorded for HMV in St. Petersburg, Riga, Paris, and London; producing about 65 discs; among them were five arias from *Boris Goudonov*, including his famous death scene (#022223; subsequently recorded 12 more times, five being issued).

In 1921 and 1923–1934 Chaliapin sang for HMV in London and Paris. Then he was with Victor in New York, in 1922, 1924, and 1927. His final Victor was made in Tokyo in 1936.

He sang the standard bass repertoire, but his finest work on record was in the Russian operas: *Prince Igor*, *Sadko*, *Ruslan and Ludmilla*, *Life of the Czar*, and *Boris*; he rerecorded material from these works many times on acoustic and electric discs. Excerpts from *Boris* were made in 1928 at a live Covent Garden performance, and issued by HMV on DB 1181/83; #3464. Altogether, his discs carried about 130 different titles, most of which were reissued in 1973 on LP by Melodiya. EMI issued a CD (7610092), in 1988, surveying performances from 1926 to 1931, and Pearl offered another in the same year (9314), with 15 selections not on the EMI. [Kelly 1988; Semeonoff 1974.]

CHALLENGE (LABEL) (I)

CHALLENGE (LABEL) (I)

A stepchild in the Plaza family, given masters from Gennett and other companies; it issued discs in the late 1920s. Distribution was through Sears, Roebuck, and Co., whose name appears on the label along with a knight in shining armor. Repertoire was dance and pop, and artists were often presented under pseudonyms.

CHALLENGE (LABEL) (II)

Cowboy movie star Gene Autry launched Challenge Records in March 1957 at the instigation of Joe Johnson, who worked for Autry's music-publishing company, Golden West Melodies. The label was to be called Champion after Autry's horse, but Autry and Johnson discovered that Decca Records owned the name. After a minor hit with the Kuf-Linx's "So Tough," Challenge scored a number one pop hit in March 1958 with the Champs's "Tequila!" In October 1958, Autry sold his 56-percent share of the label to Johnson and sales manager John Thompson. That same year, the partners started a country imprint, Jackpot Records, signing Wynn Stewart and Jan Howard, but folded the label in 1959. Challenge Records's mainstay throughout the late 1950s and early 1960s was crooner Jerry Wallace. The roster also included Bobby Bare, Justin Tubb, and rockabilly singer Huelyn Duvall, and the regular sessionmen included Glen Campbell (who was also a member of the Champs). Johnson moved the label to Nashville in

1972, acquired part of the 4-Star catalog (including Patsy Cline's earliest recordings), and sold his label group to Tree Music (lately Sony Music) in 1976.

COLIN ESCOTT

CHALMERS, THOMAS

(20 OCT 1884–17 JUNE 1966)

American bass-baritone, born in New York. He studied in Florence, and made his opera debut in Fossombrone (Italy), as Marcello on 30 Apr 1911. From 1913 he performed in New York, Boston, and other American cities, and on 17 Nov 1917 he appeared at the Metropolitan Opera, singing Valentine. He remained with the Metropolitan through 1922, doing the French/Italian roles. After a tonsillectomy in 1922, his voice deteriorated and he had to withdraw from opera and to some extent from recording. Chalmers was a dramatic actor as well as a singer, with many important stage roles. After he retired from stage appearances, he went into motion picture production. Later he was seen on television, and his voice was heard as the narrator in the classic documentary films *The Plough that Broke the Plains* and *The River*. He died in Greenwich, Connecticut.

On record, Chalmers drew his repertoire from the narrow list of songs that were favorites of Thomas Edison — "Old Man Edison's mother, home and heaven repertoire" — old ballads and hymns. He was successful in portraying these genres on Edison Diamond Discs. Before he became an Edison artist in 1908, Chalmers had made one Columbia disc and a few Zonophone discs. His first Edison cylinder was issued in November 1908, "Evening Star" (#9982). In May 1909 he made his earliest four-minute Amberol cylinder, 127, Valentine's aria (in English) from *Faust*. After his study and performances in Italy, Chalmers returned to Edison and made his acclaimed series of Diamond Discs, and many of the most impressive tone tests. One side of the second Diamond Disc to be issued was his "Nearer, My God to Thee" (#50002). Among his best-selling discs were #80055, "Carry Me Back to Old Virginy"; "Abide with Me" with Elizabeth Spencer (#80276; 1915); "My Old Kentucky Home" with chorus (#80321; 1916); and "O That We Two Were Maying" with Spencer (#82510; 1913). His final discs were made in 1925. Chalmers was also heard on Edison Amberol cylinders until 1925. Although he was a member of the American Quartet, Criterion Quartet, Harmony Four, Metropolitan Quartette, and Knickerbocker Quartet, he made only one record in a quartet, "I Surrender All" (#80343; 1916) with the Metropolitan group. [Walsh 1981/5–9; Wile 1977.]



Challenge label, a subsidiary of Plaza Records, distributed by Sears, Roebuck. Courtesy Kurt Nauck/Nauck's Vintage Records

CHAMBERS, W[ILLIAM] PARIS (1 NOV 1854–1 NOV 1913)

Born in Newport, Pennsylvania, Chambers was an American cornetist, the first to record on this instrument. Chambers was heard on Berliner records made in 1895 and 1897: "Last Night" (#215), "Nellie Bly" (#237), and "Narcissus" (#259). He was in the Columbia cylinder catalog of 1897, and performed also for Edison. Chambers also composed pieces for brass band (including a few collaborations with the better-known composer/conductor John Philip Sousa) that remain in the repertoire today. He died in Newville, Pennsylvania. The International Trumpet Guild has reissued two recordings by Chambers, among others, on the instrument, on the CD *Cornet Solos by Pioneer American Recording Artists Made prior to 1906* (ITG 004).

CHAMPION (LABEL)

A Gennett subsidiary, issuing jazz, dance, blues, and pop discs from September 1925 to December 1934. Decca acquired the label and kept using it into 1936. Riverside offered reissues in 1953. Champions are rare collectibles because of their scarcity and the high quality of some performances. Among artists found on Champion are Gene Autry, Vernon Dalhart, Jack Kaufman, Clyde McCoy, and Red Norvo. [Blacker 1980/1 is a complete list, 1925–1930; Rust 1978.]



Champion label, after Decca purchased it from Gennett; c. 1934–36. Courtesy Kurt Nauck/Nauck's Vintage Records

CHANDOS (LABEL)

A British label, produced by Chandos Records, Commerce Way, Colchester, since 1979. Music of British composers (e.g., the complete symphonies of Arnold Bax) has been a specialty. Chaconne, a subsidiary label begun in 1989, is devoted to early music. By the early 21st century, the label claimed to be the largest independent classical label in the world. [Website: www.chandos.net.]

CHANNEL

The path followed by a signal through a sound system. In a monaural system there is just one signal, and one channel. A basic stereophonic system has two channels, one for the left and right signals, with each helping to create a complete soundstage up front. Modern, consumer-oriented surround-sound systems may have as many as five discrete channels (left, center, right, left surround, and right surround), plus an optional subwoofer channel that handles just the low bass. The latter may also handle explosive low-frequency effects in Dolby Digital, DTS, and SDDS movie soundtracks. The three front channels will deliver the soundstage in most recordings, with the surround channels either recreating the sense of hall, church, or studio space or delivering instrumental effects that allow the system to be an artistic form in itself, rather than a way to simulate a live performance.

See also **Center Channel; DVD-A (DVD-Audio); SACD (Super Audio Compact Disc)**

HOWARD FERSTLER

CHANNEL BALANCE

The condition of a sound system when all channels (two, three, four, five, or even more) are properly adjusted in terms of levels, so as to properly simulate what the recording or mastering engineers wanted when they created a musical recording. Important with home-theater playback, also.

See also **Stereophonic Recording; Surround Sound**

HOWARD FERSTLER

CHANNEL REVERSAL

An arrangement in which the sound emanations from right and left speakers in a stereophonic system are reversed.

CHANNEL SEPARATION

The extent to which two, three, four, five, or even more channels of a hi-fi playback system are able to keep

CHAPPELL PIANO CO., LTD.

their signals isolated from each other. Poor separation makes it impossible for the system to properly simulate a live performance or duplicate what the recording engineers wanted when they produced the recording.

HOWARD FERSTLER

CHAPPELL PIANO CO., LTD.

A firm of piano makers, publishers, and concert agents, established in 1810, in London. It had strong connections to the recording industry in the U.K. An association with Cliftophone was followed by one with U.S. Brunswick in 1923. The masters from America were pressed under the Brunswick Cliftophone label. In 1926 Chappell marketed discs made under Brunswick's "light-ray method," and in the same year British manufacture of Brunswicks began with the creation of British Brunswick, Ltd. Chappell's name was no longer included in the advertising after August 1927. But when the new Warner Brunswick, Ltd. appeared Chappell was again involved, as sole vendor of the records. The company has made many of the recordings used as background music for television programs and motion pictures. Today the firm is a subsidiary of Philips. It ceased manufacture of pianos ca. 1965. [Andrews 1981/1.]

CHAPPELLE AND STINETTE (LABEL)

In March 1922 the Black husband-wife vaudeville team of Thomas Chappelle and Juanita Stinnette produced their own records, making just nine blues



Chappelle & Stinnette label. Courtesy Kurt Nauck/Nauck's Vintage Records

discs. The C&S Phonograph Record Co. was cited on the discs as the manufacturer. Clarence Williams "Decatur Street Blues" (#5005) is one of the numbers, and the other eight are by the two producers. All the records are rare today. [Rust 1978.]

CHARISMA (LABEL)

British rock label active in the 1970s and 1980s, founded by ex-pop music manager Tony Stratton-Smith in 1969. Initially, the label was distributed by the small B&C label, but soon was picked up by Island Records. It scored major hits with the prog-rock bands Emerson, Lake, and Palmer and Genesis and the folk-rock group Lindisfarne through the 1970s. The label also recorded comedy albums by the popular Monty Python troupe. The label also formed a publishing division to publish books and the rock magazine, *Zigzag*. After Stratton-Smith died in 1984, the label was sold to Virgin, which has revived the name from time to time.

CARL BENSON

CHARLES, RAY (23 SEP 1930– 10 JUN 2004)

American singer, pianist, and composer of popular songs; born Ray Charles Robinson in Albany, Georgia. He began to lose his vision at age six, and eventually became totally blind. Nevertheless, he played the piano and wrote music in the rhythm and blues idiom, later turning to soul music and country styles. Charles first achieved recorded success in the mid- through late 1950s for Atlantic Records, notably with the 1959 single "What'd I Say (Part I)," a number one R&B, number six pop hit (Atlantic 2031). He left Atlantic for ABC-Paramount a year later, where he had a string of hits through the 1960s. Charles's greatest record is "Georgia on My Mind" (ABC 10135; 1960), one of his nine Grammy winners. Other discs that topped the charts were "Hit the Road Jack" (ABC 10244; 1961), and "I Can't Stop Loving You" (ABC 10330; 1962), both Grammy winners. ABC also offered Charles the chance to branch out into other styles of music. On its Impulse subsidiary, he released the 1961 album *Genius + Soul = Jazz* (Impulse AS-2). His 1962 album, *Modern Sounds in Country and Western Music* (ABC 410), was a landmark, and a daring move for the artist; it was so successful that a second volume was issued immediately (ABC 435). He had more than 60 other hit records in the 1960s and 1970s. Charles owned his own recordings, which he leased to ABC through his own TRC company, an unusual arrangement for a pop performer during this era. Charles had fewer hits after the late 1960s, although he continued to be popular as a touring artist.

A 1975 single, "Living for the City" (Crossover 981), took the Grammy for R&B vocal. A duet with Chaka Khan won a Grammy in 1990: "I'll Be Good to You." Charles has continued to tour and record through the 1990s. He also has holdings in a record label (Crossover Records), music publisher, and recording studio.

CHARLIE PARKER (LABEL)

The New York label was formed by Charlie Parker's widow, Doris, and Aubrey Mayhew in 1961 with the aim of releasing previously unissued recordings by the legendary saxophonist. Ultimately, five Parker LPs were produced, two featuring unissued material and three comprised of sides first made available by Le Jazz Cool.

During its two years or so of existence, the company put out a substantial number of albums by other jazz artists, including reissues of Red Norvo's Comet sessions, the first commercial release of air checks featuring Lester Young and Billie Holiday, and new work by Joe "Bebop" Carroll, Slide Hampton, Duke Jordan alone and in collaboration with Sadik Hakim, Mundell Lowe, Barry Miles, Cecil Payne, and Teddy Wilson, among others. Many of the label's studio sessions were leased to Egmont Records, Lancashire, for distribution in Great Britain.

The New York-based Audiofidelity Enterprises later purchased the Charlie Parker Records catalog and, for a brief time, reissued some of the Parker selections combined with some previously unavailable performances.

FRANK HOFFMANN

CHARLY (LABEL)

Charly Records was established in 1974 by French concert promoter, Jean-Luc Young (b. Strasbourg, 1947). Transferring headquarters to London in 1975, it quickly gained recognition as a leading reissue label, specializing in post-World War II era rockabilly (most notably, Sun Records), and rhythm and blues (including the catalogs of Vee-Jay, Chess, Bluesway, and other independents). The company's boxed sets — while not issued on the scale of Germany's Bear Family label — are especially prized by collectors. In addition, Charly has also released contemporary material on a regular basis, spanning jazz (via its Affinity subsidiary), salsa (e.g., Rubén Blades), and postpunk (e.g., the Bullock Brothers).

Most of Charley's early titles were released in either the 10- or 12-inch vinyl configurations. The sound quality — generally mono or rechanneled stereo — often revealed studio flaws, deterioration from storage and handling of masters, and distracting surface noise. The first wave of CD releases appearing in the mid-1980s

also exhibited similar roughness, although there has been gradual improvement since that time.

FRANK HOFFMANN

CHARTERS, SAMUEL BARCLAY (1 AUG 1929–)

Record producer, author, and performer, born in Pittsburgh, Pennsylvania. After military service and graduation from the University of California-Berkeley (1956), he served as recording director for Folkways Records, 1956–1963, where he produced numerous albums, including the *Music of New Orleans* series, *Music of the Bahamas*, and particularly *Lightnin' Hopkins*. He next worked as recording editor for Prestige Records until 1965, when he switched to Vanguard Records. From 1965 to 1966 he worked as a freelance editor and producer for Vanguard, then from 1966 to 1970 he was the company's pop and blues A&R producer, adding numerous Chicago blues men such as Buddy Guy and Otis Spann to the list, as well as Country Joe and the Fish. He moved to Sweden, where he has continued to live on and off, and worked as a producer of the company that distributed Vanguard in Scandinavia; in 1984–1985 he again worked for Vanguard in New York. In Sweden he also produced records for Sonet Grammofon, Silkheart, and Gazell; he established a branch of the latter in the U.S. in 1986. He also appeared as a performer on a few records, starting with the Orange Blossom Skiffle Five on the Lyrichord label in 1958, and later with the Dave Van Ronk Ragtime Jug Stompers for Mercury. His study of *The Country Blues* (1959), an early exploration of the topic, was soon followed by Charters's Folkways/RBF compilation album of the same name, as well as numerous other books, most recently *Blues Faces: A Portrait of the Blues* (2000).

RONALD D. COHEN

CHASSIS

The frame on which working components of an electronic system are mounted.

CHECKER (LABEL)

SEE *CHESS* (LABEL)

CHECKER, CHUBBY (3 OCT 1941–)

A native of South Carolina, Ernest Evans grew up in Philadelphia performing for classmates along with friends such as future teen idol Fabian Forte. The

CHEEVER, CHARLES A.

owner of the meat market, where Evans worked after school, arranged a private recording session with *American Bandstand* host Dick Clark. As Evans completed a Fats Domino imitation, Clark's wife asked him his name. When he indicated "my friends call me Chubby," she playfully responded, "Like in Checker?" That episode of humorous word play inspired Evans's professional name.

The resulting Christmas novelty, "The Class" (which featured impressions of popular singers by Checker), attracted the attention of the Cameo-Parkway label, which decided to release the record commercially (Parkway 804; 1959). His breakthrough came when Clark advised Cameo-Parkway to record "The Twist," a dance number written by R&B singer Hank Ballard and released as the B-side of "Teardrops on Your Letter" (King 5171; 1959), by Ballard and his group, The Midnighters. Checker sang his parts over an already-recorded instrumental track; released June 1959 (Parkway 811; 1960), the record took nearly 14 months to reach the charts. Checker's nonstop itinerary of interviews, TV dates, and live appearances (he is said to have lost 30 pounds during one three-week stretch of demonstrating the Twist) ultimately paid off, however, when the single reached the top of the *Billboard Hot 100* in September 1960.

The Twist phenomenon inspired a rapid succession of additional dance fads. Due to his close relationship with Clark and a savvy record label, Checker was well positioned to continue as the King of Dance. His dance hits included "The Hucklebuck" (Parkway 813; 1960), "Pony Time" (Parkway 818; 1961), "Dance the Mess Around" (Parkway 822; 1961), "Let's Twist Again" (Parkway 824; 1961), "The Fly" (Parkway 830; 1961), "Slow Twistin'" (Parkway 835; 1962), "Limbo Rock"/"Popeye the Hitchhiker" (Parkway 849; 1962), "Let's Limbo Some More" (Parkway 862; 1963), "Birdland" (Parkway 873; 1963), and "Twist It Up" (Parkway 879; 1963).

When the dance craze subsided, Checker managed to record additional hits, most notably "Loddy Lo"/"Hooka Tooka" (Parkway 890; 1963) and "Hey, Bobba Needle" (Parkway 907). However, his popularity was ultimately eclipsed by the British Invasion and American Renaissance styles such as surf music, soul, and folk-rock. Checker has continued to perform extensively, occasionally attempting large-scale comebacks. [Gilbert and Theroux 1982.]

FRANK HOFFMANN

CHEEVER, CHARLES A. (CA. 1853–1900)

Record company executive who held multiple posts in 1890: president of the Metropolitan Phonograph Co.

and the Alabama Phonograph Co., and director of the New England Phonograph Co.

CHEMICAL BROTHERS

Seminal forces in the British dance club scene, the Chemical Brothers melded synth-rock, funk, and hip-hop to redefine the emerging techno style. Perhaps more than any other artist, they paved the way for the acceptance of techno music in the United States.

The core of the group, deejays Tom Rowlands and Ed Simons, joined forces in 1989 as the Dust Brothers. Following the release of a 12-inch single and two EPs (on the Junior Boys Own label) aimed at underground club deejays, the duo attracted major label attention. An objection by the U.S. hip-hop production team, the Dust Brothers, led to a name change in early 1995.

The Chemical Brothers's debut album, the frenetically paced *Exit Planet Dust* (Virgin/AstralWorks 6157; 1995; #9 UK), failed to make much of a splash stateside; however, the follow-up, *Dig Your Own Hole* (Virgin/AstralWorks 6180; 1997; #1 UK, #14 US) — augmented by psychedelic touches such as "Tomorrow Never Knows"-styled arrangement in "Setting Sun," a chart-topping single in England that featured vocals by Oasis frontman Noel Gallagher — achieved international success. Their third LP, *Surrender* (Virgin/AstralWorks 47610; 1999; #1 UK, #32 US), featured a significantly greater number of vocal tracks (many of which would be issued as singles), featuring the likes of Gallagher, Bernard Sumner, Bobby Gillespie, Hope Sandoval, and Jonathan Donahue.

FRANK HOFFMANN

CHENEY TALKING MACHINE CO.

A firm located in Chicago, founded by Forest Cheney; maker, from 1914, of deluxe and custom-built phonograph cabinets and then the actual phonographs. Litigation with Victor developed over Cheney's brazen use of a tapered tone arm, one of the prize patents of Victor; but in 1922 Cheney was successful in convincing the court that their tone arm was not really tapered, but "octagonally stepped." President in 1923 was Alfred C. Harper.

CHER (20 MAY 1946–)

Born Cheryl Lynn Sarkasian LaPier, Cher was "discovered" by Sonny Bono in 1963, when he was working for producer Phil Spector. Bono initially hoped to promote her as a solo act, but it was as the duo of Sonny and Cher that she had her first success. As the duo took

off, Cher signed separately as a solo act with Liberty Records, scoring solo hits with Bob Dylan's "All I Really Want to Do" (Imperial 66114; #15), in 1965 and the memorably campy "Bang Bang (My Baby Shot Me Down)" a year later (Imperial 66160, #2). Cher's career went into eclipse along with Sonny's in the late 1960s, but she returned big time with the number one hit "Gypsies, Tramps, and Thieves" (Kapp 2146; 1971). Two years later, she had a second number one hit with "Half-Breed" (MCA 40102), followed in 1974 by "Dark Lady," also a number one hit (MCA 40161). Cher's career became tabloid fodder through the 1970s thanks to her stormy marriage to Greg Allman, but then she made a stunning career turnaround in the early 1980s as an actress, earning an Academy Award for her performance in *Moonstruck* in 1987. In 1989, she scored another number one hit with "If I Could Turn Back Time" (Geffen 22886), propelled by a slightly racy video featuring the scantily clad singer entertaining the troops on the deck of an aircraft carrier. Another career lapse followed, with Cher reduced to hawking items on the Home Shopping Network, but then she returned once again with the major disco-flavored hit, "Believe" in 1998 (Warner Bros. 44576), making her a rare pop phenomenon to have at least one number one hit in every decade since the 1960s. Cher became a favorite on VH-1's annual diva concerts and in Las Vegas. In 2003, she made a "farewell" tour that was lavishly staged and broadcast on network television.

See also Sonny and Cher

CARL BENSON

CHERNEY, EDWARD (16 JUNE 1950–)

After stints at Wisconsin State University and University of Arizona, studying history and pre-law, as well as involving himself in technical studies at the Devry Institute of Technology for a year, Cherney decided that the life of a recording engineer was for him, and he has been freelancing in the business for the last 20-plus years. During this time, he has produced recordings for every major label, as well as most of the minor ones, and has distinguished himself as a recording and mixing engineer as well as a producer. His background includes the R&B scene in Chicago, where he began as an apprentice engineer in 1976. Those R&B roots served as a solid foundation for his later work with such rock and pop artists as the Rolling Stones, Bob Dylan, Eric Clapton, the B-52's, Ringo Starr, Jann Arden, and Roy Orbison.

In 1989, he recorded and mixed Bonnie Raitt's breakthrough LP *Nick of Time* (Capitol 92168; 1989; #1), and in 1994, he was nominated for Grammy

awards as best engineer in four out of five entries, winning for Raitt's album, *Longing In Their Hearts* (Capitol; 1994). In addition to those four nominations and one engineering Grammy win, he has also recorded and/or mixed three best album of the year winners, and has been a six-time tech award nominee, winning three times. He is founder and chairman of the Music Producers Guild (MPGA) that was absorbed into NARAS as the Producers and Engineers Wing (P&E Wing), and is currently NARAS governor of Los Angeles chapter and national alternate trustee.

HOWARD FERSTLER

CHEROKEE RANCH

A Hollywood recording studio used by many rock stars (Alice Cooper, David Bowie, Elton John, etc.). By the end of the 1970s, 30 gold albums and about 20 platinum albums had been produced at the studio.

CHESKY RECORDS (LABEL)

Started in 1986, by composer and musician David Chesky and his brother Norman, as a way to gain more artistic control over production and improve final product sound quality, Chesky Records has embraced a recording philosophy that stresses refined minimalist techniques over mastering and mixing excess. In that same year, David Chesky met pianist Earl Wild, who not only gave the younger musician some pointers on composition and performance, but also introduced Chesky to the people at *Reader's Digest*, who, with Wild's blessing, then allowed the Chesky to reissue a few previously released *Digest* recordings on Chesky mastered, audiophile-quality vinyl. The resulting products met with such widespread critical success that the company went on to reissue still more previously released *Reader's Digest* recordings, and then do the same with a number of orchestral works that had been previously released by RCA.

From there, the company went on to produce original releases of very high quality, working with jazz violinist Johnny Frigo, as well as jazzmen Clark Terry and Phil Woods. The resulting transcriptions received rave reviews from jazz fans, audiophiles, and reviewers, and from there the company went on to build a formidable roster of Latin American talent, such as Luiz Bonfá, Grammy-winning clarinet and alto saxophonist Paquito D'Rivera, and vocalist Ana Caram. Further refining their technical capabilities, Chesky became the first company to use 128x digital oversampling, and was also the first independent American record label to develop and record using 96/24, 6.0 DVD technology. The Chesky catalog has grown steadily ever since, and

CHESKY, DAVID

includes jazz legends Peggy Lee, Herbie Mann, Joe Henderson, and McCoy Tyner; adult contemporary artists Livingston Taylor, Kenny Rankin, Rebecca Pidgeon, Sara K., John Pizzarelli, and Christy Baron; classical keyboard masters Earl Wild and Igor Kipnis; and world music innovators Orquesta Nova, celebrated guitarist Badi Assad, Carlos Heredia, and I Ching. [Website: www.chesky.com.]

HOWARD FERSTLER

CHESKY, DAVID (29 OCT 1956–)

Born and raised in Miami Beach, Florida, Chesky's education was varied, with much of what he learned about performing and recording being self-taught. Basically a musical prodigy, he went on to perform at the Village Vanguard, Storyville, the JVC Jazz Festival, and the Monterey Jazz Festival, and ended up as a budding performer/composer with an option to record material for Columbia Records. After several years of not being satisfied with what he saw that company and others doing in the way of producing technically proficient transcriptions, he and his brother Norman started Chesky Records in 1986, with the company earning praise for its technical and artistic accomplishments, and eventually becoming quite successful. In the meantime, Chesky the artist went gone on to earn praise for his performing and composing talents, and has released several highly regarded productions on the company's label, including the impressive composed and recorded oratorio, *The Agnostic*, for orchestra, choir, and soloists. Chesky has also worked to endear classical music to younger audiences, with the result being the Chesky Records Kids, a new division of his company that concentrates on music education and environmental awareness.

HOWARD FERSTLER

CHESSE (LABEL)

A record made in Chicago from 1947 to 1971, named for founder-producers Leonard and Philip Chess, specializing in blues, jazz, and popular music. The label was known at first as Aristocrat. Checker, a blues label (1952), and later Argo — which became Cadet in 1965 — were parts of the same group. Neptune, Thomas, and St. Lawrence were Chess subsidiaries. Artists associated with the labels include Chuck Berry, Bo Diddley, Willie Dixon, Red Holt, Howlin' Wolf, Ahmad Jamal, Ramsey Lewis, Little Walter, Jimmy Rogers, Sunny Stitt, Muddy Waters, and Sonny Boy Williamson. Gene Ammons, Jamal, and Lewis recorded extensively for Argo. Sermons by Rev. C.L.

Franklin were of special interest; his daughter, Aretha Franklin, made her debut on the label.

On 10 June and 11 June 1964 the Rolling Stones cut 13 numbers at the Chess Studios, including one named for the firm's address: "2120 S. Michigan Ave." The songs were released on various commercial and boot-leg labels, not on Chess.

After the death of Leonard Chess in 1971, the firm was sold to GRT, which continued to use the Chess, Checker, and Cadet labels until 1975. Sylvia and Joe Robinson's All Platinum Records acquired the Chess matrices in August 1975, and incorporated it into their Sugar Hill Records. MCA purchased the Chess label in 1985, and began reissuing many of its earlier recordings in lavish boxed sets and on individual CDs. Andy McKaie in MCA's special markets division has been at the forefront of restoring and reissuing the Chess material since 1987. [Ruppli 1983; Cohodas 2000; Website: www.mca.com/mca_records/chess/hub.html.]

CHEVALIER, MAURICE (12 SEP 1888–1 JAN 1972)

French singer and motion picture actor, born in Paris. He appeared in the Folies-Bergère and other cabarets in Paris, served in World War I, performed in musicals in Paris and London, then went to Hollywood in 1929. International fame came with two later movies, *Gigi* (1958), and *Can Can* (1960). He was presented with a special Academy Award in 1958. Chevalier died in Paris.

He recorded extensively, beginning in March 1919 with one song for HMV, "On the Level You're a Little Devil" (#B-1024). Then he did many French songs on Pathé from 1920 to 1927 and also for Columbia. Turning to Victor in 1929, he made his signature record of "Louise" (Victor 21916). He remained with Victor through the 78-rpm era, then made LPs for various companies. His famous songs from *Gigi*, "Thank Heaven for Little Girls" and "Ah Yes, I Remember It Well," were in the MGM sound-track album #3641. [Rotante 1975 is a complete discography.]

CHICAGO (CHICAGO TRANSIT AUTHORITY)

Chicago is widely held to be the first American rock group to include a horn section, thereby providing the impetus for the big band rock genre of the late 1960s. Although initially considered an experimental, albums-oriented recording act, only the Supremes, the Temptations, and Beach Boys, among U.S. groups, have enjoyed greater success on the singles charts.

The band formed in Chicago in 1966; they were initially named the Chicago Transit Authority by manager and producer James William Guercio, then known for his work with the Buckingham. Original members included Robert Lamm (vocals, keyboards), Terry Kath (vocals, guitar), Dan Seraphine (drums), Lee Loughnane (trumpet, vocals), James Pankow (trombone), and Walter Parazaider (woodwinds). Vocalist/bassist/organist Peter Cetera was added during the group's developmental years.

Their debut double-disk LP, *Chicago Transit Authority* (Columbia 8; 1969; #17), won critical raves for its deft blend of jazz and progressive rock styles complemented by politically leftist lyrics (penned primarily by Lamm). "Free Form Guitar," with its extended feedback-drenched jam, was as avant-garde as anything in rock during that Woodstock summer. Shortening their name to Chicago, the band followed with a string of more pop-leaning albums — *Chicago II* (Columbia 24; 1970; #4), *Chicago III* (Columbia 30110; 1971; #2), *Chicago V* (Columbia 31102; 1972; #1), *Chicago VI* (Columbia 32400; 1973; #1), *Chicago VII* (Columbia 32810; 1974; #1), *Chicago VIII* (Columbia 33100; 1975; #1), *Chicago X* (Columbia 34200; 1976; #3), *Chicago XI* (Columbia 34860; 1977; #6) — all featuring variations of their name logo on the cover. Their commercially successful approach consisted of romantic ballads (generally delivered by Cetera's high tenor) — most notably, "Saturday in the Park" (Columbia 45657; 1972; #3), "Just You 'N' Me" (Columbia 45933; 1973; #4), "(I've Been) Searchin' So Long" (Columbia 46020; 1974; #9), "Old Days" (Columbia 10131; 1975; #5), "If You Leave Me Now" (Columbia 10390; 1976; #1), and "Baby, What A Big Surprise" (Columbia 10620; 1977; #4) — punctuated by mildly up-tempo rockers.

Kath's accidental death coincided with a downturn in the group's fortunes. Although sticking to their tried-and-true formula, *Hot Streets* (Columbia 35512; 1978; #12), featuring ex-Stephen Stills guitarist Donnie Dacus, suffered from mediocre song material and changing industry trends (disco and punk had both entered the pop music mainstream). Nevertheless, Chicago soldiered on, bolstered by occasional blockbuster hits like "Hard To Say I'm Sorry" (Full Moon 29979; 1982; #1), and "Look Away" (Reprise 27766; 1988; #1). Still a big concert draw, especially with the aging baby boomers, their recent studio work — e.g., the big band revival-styled *Night and Day* (Giant/RCA 24615; 1995; #90), which featured passable covers of classic Tin Pan Alley material, and *Chicago 25 – The Christmas Album* (Chicago 3035; 1998; #47) — reveals a band in the throes of a musical identity crisis.

FRANK HOFFMANN

CHICAGO CENTRAL PHONOGRAPH CO.

A Chicago firm founded in 1890; one of the North American Phonograph Company affiliates. Charles L. Raymond was president in 1892, with Ernest A. Hamill, vice president, and George B. Hoit, general manager. Hoit spoke at the 1890 convention of the National Phonograph Association, saying that phonographs were already in use by "every first-class court reporter in the city." The firm had 187 machines on lease to clients. Chicago Central was succeeded in 1892 by the Chicago Talking Machine Co.

CHICAGO PUBLIC LIBRARY

One of the world's largest city libraries, established in 1873. In 1990 the main library moved to an imposing new building, the Harold Washington Library Center. The library's collection of musical scores includes more than 110,000 items. There are about 160,000 sound recordings. Music materials are housed in the music information center.

Among the research collections of recordings are the Chicago Blues Archive, the New Music Chicago Festival tapes, the Made in Chicago collection, the Jazz-Blues-Gospel Hall of Fame repository, the Jubilee Showcase video collection of gospel music (100 programs), and the Arnold Jacobsen Recorded Sound Collection. The Jacobsen collection, including classical and popular material, includes 30,000 78s and 10,000 LPs. There are extensive holdings of popular music in all disc formats. Twenty listening stations are available for public use. [Website: <http://www.chipublib.org/008subject/001artmusic/music.html>.]

CHICAGO RECORD CO.

A firm located in Chicago, established by J. Mayo Williams, a race record talent scout for major labels in the 1920s. It distributed Black Patti records, recorded by Gennett, in 1927. At that time the management team consisted of J. Mayo Williams, general manager, and Robert E. Butler, sales manager.

CHICAGO SYMPHONY ORCHESTRA

One of the world's premier orchestras, founded in 1891 as the Theodore Thomas Orchestra (for its first conductor; renamed in 1912). It performed in the Auditorium Theater, then in 1904 moved to the new Orchestra Hall, which remains its concert home (in 1997, the space was expanded and renamed Symphony Center). When Thomas died in 1905 he

CHICAGO TALKING MACHINE CO.

was succeeded by Frederick Stock, who was conductor until 1942. Subsequently the orchestra was directed by Désiré Defauw (1943–1947), Artur Rodzinski (1947–1948), Rafael Kubelik (1950–1953), Fritz Reiner (1953–1962, and guest conductor 1962–1963), Jean Martinon (1963–1968), Georg Solti (1969–1991), and Daniel Barenboim (1991–). In 1995, Pierre Boulez was named principal guest conductor, and in 1999 William Eddins was named resident conductor, a newly created position.

The Chicago Symphony was the first major American orchestra to record under its regular conductor, as Stock took the group to Aeolian Hall in New York to record 20 light concert pieces for Victor on the first two days of May 1916. The orchestra made more records in 1925, in Orchestra Hall, and then went on to cover most of the standard symphonic repertoire under its various conductors. "Sabre Dance" from Khachaturian's *Gayne Ballet Suite* was its first million-selling record.

Important discs were made in 1951 by Mercury, including an acclaimed *Pictures at an Exhibition*. Renovations in Orchestra Hall in summer 1966 made it less satisfactory for recording, and records were made elsewhere, e.g., at the University of Illinois in Urbana, and after 1973 in Chicago's Medinah Temple. Improvements in the acoustic situation made it possible to record again in Orchestra Hall in 1989, under guest conductor Neeme Järvi (for the Chandos label). Victor was the orchestra's principal label until the arrival of Solti, who contracted with London/Decca. EMI, Mercury, and Angel are other labels that have been used. Barenboim's records have been for Erato.

Among the outstanding discs made by the orchestra are the most popular concertos of Beethoven (with Vladimir Ashkenazy), Brahms (with Emil Gilels, Jascha Heifetz), Rachmaninoff (with Artur Schnabel), and Tchaikovsky (with Gilels, Heifetz); all these under Fritz Reiner. Acclaimed discs by Georg Solti include the Bartók *Concerto for Orchestra*, symphonies of Bruckner and Mahler, and the complete Beethoven symphonies. The orchestra won 20 Grammys under Solti, one under Barenboim, and seven under guest conductor Boulez. In observance of the orchestra's 100th anniversary in 1991, the orchestra issued a monumental set of 12 compact discs, offering 13 hours of historic recordings, many of them previously unpublished. [Website: www.cso.org.]

CHICAGO TALKING MACHINE CO.

A cylinder and phonograph sales company established in 1892 by Charles Dickinson, Leon F. Douglass, and H.B. Babson, a successor to the Chicago Central

Phonograph Co. of 1890. The firm was identified later as the Talking Machine Co., or Talking Machine Co. of Chicago. Columbia took control of it in 1897. Another firm advertised (in *Phonoscope*) from the same address: the Polyphone Co. Both firms sold the Polyphone, a double-reproducer phonograph described in the Talking Machine Co. 1899 catalog, which sold for \$15–\$35. A Polyphone Concert Grand, advertised as the "loudest talking machine made," sold for \$130. Cylinders by Silas Leachman were featured in the 1899 catalog. There was also a wide array of records by Columbia artists, such as Len Spencer and Cal Stewart.

Victor bought the company in 1905. The name was again Chicago Talking Machine Co. in 1916. It advertised itself as the largest Victor distributor in the world. Arthur D. Geissler was president in 1920.

CHILD, CALVIN G. (?–1943)

Phonograph industry executive who operated a recording studio in 1897 as part of the Berliner structure. He had worked earlier with the Ohio Phonograph Co. and the New England Phonograph Co. In 1894 he was music director for Columbia, then recording director for Victor. Although he retired in 1923, he served as a Victor board member as late as 1927.

CHILDREN'S RECORDS

The earliest discs sold commercially (1889), by Berliner in Germany, were probably aimed at children; they were used on Berliner's toy gramophone. Records for regular play on turntables were available early in the 20th century, and Victor's 1917 catalog had 70 such items. Included were games, Orphan Annie, nursery rhymes, and Christmas records. However, the major labels were slow to recognize the potential for children's recordings. In the early 1940s, independent producer Moses Asch began issuing children's recordings on his Asch label, including recordings by Woody Guthrie and Leadbelly. After World War II, he built a large catalog of children's recordings on his Folkways label. Disney also began mining the children's market in the 1950s, primarily by issuing records based on their successful soundtracks to animated features. The children's record industry really exploded beginning in the mid-1970s, thanks to the popularity of new performers like Raffi and Tom Chapin. Labels such as Rounder Kids, Live Oak Media, Harper's Children, and Spoken Arts continued to issue recordings aimed at this market through the turn of the 21st century. The ALA issues an annual list of "Best Children's Recordings" for libraries to use in building their collections.

See also Educational Recordings; Talking Dolls; Toy Records

CHIP

SEE SWARF

CHR

SEE CONTEMPORARY HITS RADIO (CHR)

CHRISTIAN, CHARLIE**(29 JULY 1916–2 MAR 1942)**

American jazz guitarist, born in Dallas. During the time of his brief career the guitar was established as a solo instrument in modern jazz, and electric amplification of the instrument was accepted. Christian began with trumpet, turned at age 12 to guitar, but also played string bass and piano; he did local work in Oklahoma City and played in his brother Edward's band. He was introduced to Benny Goodman by jazz critic John Hammond in Los Angeles, and became a member of the Benny Goodman Sextet in 1939. Christian was first heard on the *Camel Caravan* radio program, 19 Aug 1939 in "Flying Home," which was recorded for Columbia in October (#35254). The coupling had another outstanding guitar improvisation in "Rose Room." Christian's famous contribution to "Stardust" was recorded then, too, but not given a regular issue until CBS #62581 on LP. He performed and recorded also with Lionel Hampton, Louis Armstrong, Ida Cox, Count Basie, and others. Two Vanguard issues (#8523, 8524), made at the Carnegie Hall concert of the Kansas City Six on 24 Dec 1939, present Christian playing three numbers with Lester Young; his performance was described as "so perfect that it will be remembered as long as a single jazz fan is alive." He died of tuberculosis and pneumonia in New York. In 2002, Columbia issued a four-CD set of all of Christian's recordings, newly remastered (Columbia Jazz Legacy 66564); this has supplanted earlier partial reissues by Columbia and other European and smaller label reissues. [Evensmo 1976, source of the quote above, is a complete discography.]

CHRISTIE, CARY L. (2 AUG 1944–)

Educated in mechanical engineering at UCLA, Christie help found Infinity Loudspeakers in 1968. He served as vice president and then president of the company until 1994, and provided much of the creative leadership that helped to establish Infinity as one of the world's premier loudspeaker manufacturers. After leaving Infinity, he went on to found still another company, Christie Designs. He sold his company to Recoton Corp. and went on to serve as president of the Acoustic Research brand, which the company had purchased in 1996.

During his career, Christie has designed a number of notable loudspeaker systems, including the first high-efficiency electrostatic systems, the EMIM and later-design EMIT midrange/tweeter drivers (the EMIT had been initially designed by Daniel R. von Recklinghausen, and both the EMIT and EMIM drivers were configured by Christie to replace the electrostatic and Walsh drivers that Infinity had been using), and the classic and monumental Infinity RS and IRS systems. He also designed the Black Widow tone arm, and went on to design both the HO series and highly regarded, low-profile Phantom models for AR/Recoton. Christie's products have been lauded by the audio press and he has himself won several design awards. He continues to create innovative speaker designs for the audio industry.

HOWARD FERSTLER

CHRISTMAS RECORDS

The first Christmas record was "Jingle Bells," played on a banjo by Will Lyle (an Edison cylinder of October 1899). Among the famous early renditions of traditional carols were "O Holy Night," by Enrico Caruso, and also by Marcel Journet (Victor 6559), John McCormack's "Adeste Fideles" (Victor 6607), Ernestine Schumann-Heink's "Stille Nacht" (Victor 6723, backed by Engelbert Humperdinck's "Weihnachten"; also on Victrola 88138), and another "Silent Night" by Elisabeth Schumann (Victor 2093, backed by the "Coventry Carol"). In 1908 Victor offered the Irish specialty singer/monologist Steve Porter in "Christmas Morning at Clancy's" (Victor 5604, then 16936), a dramatization of children opening gifts; and in 1918 there was Victor 35679, "Santa Claus Tells About His Toy Shop," a reading by Gilbert Girard. (Texts of the Porter and Girard efforts are in Ault 1987.) Among the novelty records of the acoustic era was "Santa Claus Hides in the Phonograph," on Edison and Brunswick.

Columbia got a late start on Christmas, but had a full list of carols in its catalogs of the 1940s, in addition to Basil Rathbone's version of the Dickens *Christmas Carol* (on six sides, in #MM-521). *Amahl and the Night Visitors*, by Gian-Carlo Menotti, was a Christmas opera produced for television (NBC, 1951); Victor has the original cast on #6485-2.

The best seller among Christmas records is "White Christmas," which has had more than 400 versions on disc; the first and most important is that by Bing Crosby. Crosby also recorded very successful renditions of "Silent Night" and "Adeste Fidelis" (Decca 621) in 1935. Mel Tormé's "Christmas Song" — best known via Nat "King" Cole's Capitol 311 version (1946; #3) — and Gene Autry's "Rudolph the Red-Nosed Reindeer" (Columbia 38610; 1949; #1),

CHRISTOFF, BORIS

stand out among later examples of the genre. Autry's "Rudolph" may have been the second highest seller of holiday songs; there were about 450 recordings of it by other artists. Another holiday perennial was introduced in 1958 by the Harry Simeone Chorale, "The Little Drummer Boy" (20th Century Fox 121), which returned to the Top 10 for the next five years, and is still played during the Christmas season.

The rock era saw a new generation of Christmas songs. Bobby Helms's "Jingle Bell Rock" (Decca 30513, 1957; #6), Elvis Presley's "Blue Christmas" (RCA; 1957), and Brenda Lee's "Rockin' Around the Christmas Tree" (Decca 30776, recorded in 1958 and reaching number 14 in 1960), were among the first. Rock groups often released Christmas albums during the 1960s, most notably the Beach Boys, the Ventures, and the Four Seasons. The Beatles issued an annual record for their fan club with skits and mock carols; these have become highly collectible. Perhaps the most unusual Christmas recording of the rock era was the Bing Crosby-David Bowie duet on "Little Drummer Boy" (RCA BOW 12, 1977).

The first rock benefit record, organized by Bob Geldof to feed starving people in Ethiopia, was "Do They Know It's Christmas?" (Columbia 04749), released under the group name Bandaid in 1984. The song inspired other charity recordings, most notably "We Are the World," although it has not become a holiday favorite.

Parodies of Christmas songs are also popular, as are humorous takes on the Christmas spirit. Among these, perhaps the most successful has been "Grandma Got Run Over by a Reindeer," by Elmo and Patsy (Epic; 1984), said to be one of the most-played Christmas recordings of the 1980s and 1990s.

Many of these recordings were reissued on two releases by Rhino (#11E-70636/37), entitled *Billboard's Greatest Christmas Hits*. There are many other Christmas anthology recordings available, by genre, era, and artist. [Ault 1987.]

REV. CARL BENSON

CHRISTOFF, BORIS (18 MAY 1914–28 JUNE 1993)

Bulgarian bass, born in Plovdiv. He studied in Rome with Riccardo Stracciari, and made a solo debut there in 1946. He appeared at La Scala in the following year, and made his American debut in San Francisco, as Boris Godonov, on 25 Sep 1956. His great role is Boris, and he has often been described as the successor to Feodor Chaliapin. Christoff has also sung the regular bass/baritone repertoire. The Boris arias were recorded for HMV in 1949. An LP reissue of favorite

numbers was produced in 1976 (EMI Electrola IC 147003 336/337). He died in Rome, Italy.

CHRYSALIS (LABEL)

Chrysalis evolved out of the West London-based Ellis Wright Agency, created by two former university social secretaries, Chris Wright and Terry Ellis, to facilitate managing and booking rock bands. Experiencing problems placing clients Ten Years After and Jethro Tull on other record companies, they entered into a licensing arrangement with Island Records in 1968 that included the proviso that, should agency acts achieve a specified number of hits, Wright and Ellis would be awarded their own label. As a result, Chrysalis was established the following year.

Due to the success of artists such as Ten Years After, Jethro Tull, Procol Harum, and Blodwyn, Chrysalis soon rivaled Island as an independent label, spurring the majors to establish their own designer progressive rock subsidiaries. Specializing in folk- and blues-inflected rock, the company continued to thrive during the 1970s with a roster including former Procol Harum guitarist Robin Trower, Steeleye Span, Leo Sayer, UFO, and Frankie Miller. It adapted successfully to the punk revolution, signing Generation X, Ultravox, and Blondie.

During the 1980s Chrysalis expanded to include a number of subsidiaries concerned with foreign music scenes and the proliferation of post-punk styles. Ska-revival acts such as Madness, the Specials, the Selector, and the (English) Beat were handled by 2-Tone, while the Reformation imprint was devoted to Spandau Ballet and other New Romantic artists. Chrysalis purchased the Ensign label — the home for Irish talent such as Sinead O'Connor and the Waterboys — and its Los Angeles-based U.S. operations brought Pat Benetar, Huey Lewis and the News, Slaughter, and Billy Joel into the fold.

In 1985 Ellis sold his stake to Wright, and Chrysalis became a public company later in the year. Due largely to increasing overheads in the U.S. division and an increasing commitment to other entertainment fields (most notably, the acquisition of Lasgo Exports), 50 percent of the record label was sold to Thorn EMI in 1989. When Thorn activated an option to purchase the other half 18 months later, Wright retained the Chrysalis Group's widespread music publishing interests and expanded into radio broadcasting and television production. In 1998 the media products division acquired extensive book publishing holdings, including Brasseys, B.T. Batsford, Conway, Greenwich Editions, Putnam, Ramboro Books, Robson Books, Salamander, and ZigZag.

FRANK HOFFMANN

CINCH

A disc player made by British Zonophone Co., Ltd., also known as the Zonophone Cinch. Measurements as given in an advertisement July 1907: 14 1/2 × 12 1/2 × 10 1/2 inches. It had a tapered tone arm, 10-inch turntable, and a wood interior horn. The price was £2 12s 6d.

CINCH (LABEL)

A British record introduced in 1913 by the Gramophone Co., sold for 1s 1d, as part of the price war in that year.

CINCINNATI SYMPHONY ORCHESTRA

The fourth oldest orchestra in the United States, organized in 1895; it was the first American orchestra to make a world tour (1967), and the third to be recorded. Conductors have been Frank van der Stucken (to 1909), Leopold Stokowski (1909–1912), Ernst Kunwald (1912–1917), Eugène Ysaÿe (1918–1922), Fritz Reiner (1922–1931), Eugene Goossens (1931–1947), Thor Johnson (1947–1958), Max Rudolf (1958–1970), Thomas Schippers (1970–1977), Michael Gielen (1980–1985); Jesús López-Cobos (1986–2001); and Paavo Järvi (2001–).

The orchestra recorded first on Columbia A5966 (July 1917) under Kunwald (Offenbach's "Barcarolle"), and made three other records that were released. In 1919 it recorded again for Columbia, under Ysaÿe, doing the "Navarraise" from Massenet's *Le Cid* (#A6159); in 1921 it added 11 others. A distinguished period of recording took place for Victor, under Goossens, in the city's fine Music Hall from 1941 to 1946. Among the outstanding examples perhaps the most notable is the Walton Violin Concerto with Jascha Heifetz (Victor M-868, three discs; 1941). Other important discs were of the Vaughan Williams's Second Symphony (Victor M916, five discs; 1941), and Respighi's *Pines of Rome* (Victor M-1309, two discs; 1946). Under Thor Johnson and Max Rudolf, the Cincinnati Orchestra made another group of acclaimed discs, for London and Remington; many of the composers were contemporary. During the 1990s, the orchestra has recorded for the Telarc label, with several Grammy-nominated releases.

Beginning in 1977, there were concerts and recordings by the new Cincinnati Pops Orchestra under Erich Kunzel. Drawn from members of the orchestra, this group also records for Telarc, having released more than 70 albums as of 2002. This ensemble has taken its place as one of the principals of its type. [Fellers 1978.; Website: www.cincinnati-symphony.org.]

CINERAMA

A three-projector motion-picture system designed by Fred Waller that used a wide, curved screen and a separate seven-track magnetic soundtrack designed by Hazard E. Reeves for specially equipped Cinerama theaters. Sound was recorded on separate magnetic stock for superior fidelity, in discreet seven-channel stereo. Because of the high cost of equipment and technical complexity, the Cinerama company made only a few feature films in the three-strip process, such as *This is Cinerama*, in 1952; *Seven Wonders Of The World*, in 1956; and *How the West Was Won*, in 1962.

HOWARD FERSTLER

CIRCUIT

A network consisting of one or more closed paths.

CIRELLIGRAPH CO., INC.

A Philadelphia firm, maker of a disc player, "The Cirelligraph," which — according to a 1917 advertisement — would play "any make of record without... any special extra attachment or apparatus." An elaborate console model, similar to the Victrola, cost \$1,500; portables sold for \$50.

CITY OF LONDON PHONOGRAPH AND GRAMOPHONE SOCIETY

One of the early gramophone societies, and probably the oldest one extant, organized in April 1919 by Norman Hillyer. Its original name was the "London Edison Society"; its founding membership consisted of about 40 persons, "a number of whom were ladies." Thomas Edison himself was invited to be president, but he declined, and he also disapproved the use of his name. So the name of the group was changed to "City of London Phonograph Society." In August 1919 Edison became "patron" of the society. At the fifth meeting, in September 1919, Adrian Sykes became the first president. To suit the interests of various radio enthusiasts among the members, another name change took place in 1923, to "City of London Phonograph and Radio Society," but "radio" was quietly dropped from the name in 1925, although it remained in the official title until the outbreak of World War II, when meetings were suspended until 1946. With the resumption of meetings "gramophone" was substituted for "radio." Sykes served as president until he died in 1959. Major H.H. Annand became the second president of the society. George Frow was president in 1991, and Oliver Berliner (grandson of Emile Berliner) the "honorary patron."

CLANCY A.W.

In addition to regular meetings, held for the most part in London pubs — but from October 1991 at the National Sound Archive — the society has promoted research and invention related to the cylinder phonograph. Sykes was a significant inventor, who patented a magnetic pickup for playing cylinder recordings. R.H. Clarke, hon. secretary, also produced a pickup, one usable on hill-and-dale discs or cylinders. *Hillandale News* was established as the society's official publication in October 1960. [Lewis, T. 1964; website: <http://www.clpgs.org.uk/>]

FRANK ANDREWS

CLANCY, A.W.

Record industry executive; vice president (1890) of the Missouri Phonograph Co., and president in 1891–1892. In association with Charles Swift, he worked toward unification of all the American phonograph interests, and was elected first president of the National Phonograph Association in 1891. He was reelected in 1893.

CLAPTON, ERIC (30 MAR 1945–)

Born Eric Clapp in Ripley, England, Clapton has been one of the most influential rock/blues guitarists of the rock era, both as a member of groups like Cream and Blind Faith, and also as a solo artist. Clapton was an art student in London when he began playing blues guitar on the local club scene in 1963. He played with the blues-rock group the Yardbirds from late 1963 through early 1965, but left the band when it started to take a more pop direction. He next worked with blues revivalist John Mayall in his famous Bluesbreaker band, which established him as a powerhouse figure in the blues scene. He left Mayall in mid-1966 and formed Cream with bassist Jack Bruce and drummer Ginger Baker.

After Cream fell apart, Clapton formed another supergroup, Blind Faith, this time with Baker, singer/keyboardist Stevie Winwood (late of The Spencer Davis Group), and bass player Rich Grech, but it too was short-lived. He also toured with the husband-and-wife rock duo, Delaney and Bonnie, and took part in John Lennon's live Plastic Ono Band for a famous Montreal concert in 1969 (released on record as *Live Peace in Toronto* [Apple 3362]).

After moving to New York City toward the end of 1969, Clapton recorded his first solo album, which yielded the number 18 hit, "After Midnight" (Atco 6784). He then formed a new group, Derek and the Dominoes, recording the classic two-album set, 1970's *Layla* (Atco 704; #16 on the pop album charts), which featured second guitarist Duane



Eric Clapton in the mid-'70s. Courtesy David A. Jasen

Allman of the Allman Brothers. The title song became a cult classic, and two years later a Top 10 hit single. Clapton also appeared at George Harrison's Concert for Bangladesh in 1971.

Clapton fought heroin addiction for the next three years, but then returned triumphantly with the album *416 Ocean Boulevard* (RSO 2479118), which yielded the number one pop hit "I Shot the Sheriff" (RSO 409). He continued to produce hits through the 1970s, including 1978's "Lay Down Sally" (#3; RSO 886), and "Promises" (#9, 1978; RSO 910). Some felt, however, that the hard edge of his playing had become softened. The early 1980s saw his last Top 10 hit for a while, "I Can't Stand It" (RSO 1060), from 1981. The balance of the 1980s produced a series of less-even studio albums. However, Clapton established the retrospective boxed-set craze with the four-CD set *Crossroads* released in 1988 (Polydor 835261), which was a major best seller.

Beginning in 1987, Clapton began giving an annual series of concerts at London's Royal Albert Hall, with a number of "special guests" appearing at each show. The 1990–91 series was immortalized on the live set *24 Nights* (Reprise 26420). In 1992, Clapton made a major comeback in his acoustic *MTV Unplugged* program and related album (Reprise 45024), which brought "Layla" back to the charts (#12, 1993; Duck 18787). Facing personal tragedy in

the death of his son, Clapton composed the song "Tears in Heaven" (Reprise 19038), which reached number two in 1993. The sympathy for Clapton — and long-time admiration for his skills — led to nine Grammy nominations in 1993, with the singer/guitarist taking home six awards (to date he has earned a total of 16 Grammys). That same year, Clapton reunited with his bandmates from Cream to perform at their induction into the Rock and Roll Hall of Fame.

Returning to his blues roots, Clapton released *From the Cradle* (Reprise 45735) in 1994. It was a huge chart success, and he earned a Grammy award for best traditional blues album for it. A year later, he was awarded the prestigious M.B.E. medal from Queen Elizabeth II. In 1997, he had a soft-pop hit paired with producer Babyface on "Change the World," recorded for the film *Phenomenon*. In 1998, he released the pop-rock album, *Pilgrim* (Reprise 46577), scoring another hit with a soft ballad, "My Father's Eyes" (Reprise four-song CD single 0443). He teamed with B.B. King for the duo album *Riding with the King* (Reprise 47612), in 2000; the title track was a minor hit. Another popish album followed, 2001's *Reptile* (Reprise 47966), followed by a live album commemorating his 2001 tour, *One More Car, One More Ride* (Warner Bros. 48374).

See also Cream

CARL BENSON

CLARANCE, EDWARD (1861–1903)

American singer, whose surname also appears as Clarence. He was in the New Jersey Phonograph Co. catalog in 1892, worked for Edison from 1892 to the late 1890s, and was in the Columbia catalog in 1896–1897. He performed popular ballads and lyric numbers, such as "The Gallant Emmett Guards" (Columbia #7902; 1896), and "The Day That You'll Forget Me" (Columbia #7903; 1896). [Brooks 1979.]

CLARINET RECORDINGS (HISTORIC)

The First Book of Phonograph Records (1889–1892), written by Theo Wangemann at the Edison Laboratory, lists Henry Giese as the first clarinetist to record on 29 May 1889. From that date until 26 June 1889 Giese participated in eight recording sessions. These sessions included chamber music as well as solo recordings. Each session included 9–17 different cylinder recordings with each being about two minutes in length. Wangemann lists eight other clarinetists who recorded during those three years including William Tuson who recorded first on 18 Sep 1889. He was probably the most recorded clarinetist of the early

years. During that time, Tuson recorded at least 14 times and made more than 175 cylinders for Edison's North American Phonograph Company. Tuson continued to record for Edison as well as Columbia until at least 1905. Although his early recordings for North American are difficult to find, his recordings from the later years are common. Of particular interest during the later years are his recordings: *Fantasia Somnambula* (Bellini), and *Polonaise Brilliant*. One of the most unusual pieces that he recorded was *The Esquimaux Dance with Jangling of Bells and Barking of Dogs* recorded in 1892. Popular melodies, waltzes, polkas and themes and variations on classical melodies were typical of the pieces recorded by all clarinetists, with each recording limited to about two minutes.

The earliest known clarinet recording on disc may be a recording, Allegro from *Attila* (Verdi), from June 12, 1892 on the Berliner label. According to Charosh, *Berliner Gramophone Records*, the artist is unknown. Artists who recorded for Berliner in the United States during the late 1890s include August Stengler, George McNeice, Felix Jardella, and Joseph Norrito. Several of these clarinetists were members of Sousa's, Glimore's or other touring bands of the time.

Another early clarinet recording artist, Theodore Pusinelli, recorded many selections from 1901 to 1903 for Victor and Zonophone. Two of his recordings for Zonophone, *Intermezzo from Cavalleria Rusticana*, and *Cara Nome* (Verdi), are typical. Leo Medear, a graduate of the Brussels Conservatory, recorded cylinders for Bettini before 1900 as well as recordings for Victor, Leeds, and others after 1900. His Leeds recordings of 1903, including Luxembourg Serenade for Clarinet and Band and Chopin's D-flat Waltz for Clarinet and Piano are examples. The September 1903 edition of the Lambert Co. catalog of unbreakable two-minute cylinders lists both "clarionet" as well as bass "clarionet" solos. Pierre Leo is listed as the clarinet artist for eight different recordings, including Polonaise from *Mignon* and the *Carnival of Venice*. Henri Lefebvre, a pupil of Cyrille Rose, recorded as early as 1903 for Edison in Paris. His two-minute recording of the Erwin Fantasie (1905), as well as later recordings of the same piece and other pieces with the Garde Republicaine Band are examples. Manuel Gomez recorded variations on "Caro Nome" from Verdi's *Rigoletto* in 1904. Charles Draper, the great English clarinetist, recorded a cylinder for Pathé as early as 1901.

Recordings of standard literature for clarinet didn't appear until about 1906. Two of the earliest recordings are Charles Draper's recording (1906) of Weber's Concertino for Gramophone Monarch and Carl Esberger's recording (1907) of the first movement of

CLARION (LABEL) (I)

Weber's Concerto No. 1 for G&T. Due to limited recording length (by this time, about four minutes), both examples are abridged editions with band accompaniment. Phono-Cut released in 1913 a recording of George Grisez, a member of the Baltimore Symphony, performing an arrangement with piano of Weber's Polonaise from Concerto No. 2. A 1914 recording of the same piece may be found on the Rex label with Antonio Decimo, clarinetist.

Chamber music recordings including duets, trios, and quartets also appear very early. Duets for two clarinets or clarinet and another instrument with piano or band accompaniment are quite common. Stengler and McNeice recorded several examples for Berliner before 1900 including Titi's "Serenade." Wangemann even lists North American cylinders for flute and clarinet in 1889, including a selection from Faust. After 1905 there are many examples of a duet for flute and clarinet, "The Butterfly," recorded by Pusinelli, George Rubel, a member of Sousa's Band, and others. Antonio Giammateo, an Italian immigrant, recorded (on both cylinder and disc) many fine duets for Edison after 1912. His recordings of the Ponchielli *Divertimento* and the Baermann *Duo Concertant* with Fred Brissett are particularly delightful. His recordings with several different flutists of various opera selections are also interesting. The Renard Clarinet Quartet recorded a minuet and *Marche Grottesque* for Pathé in 1915. In 1917, Charles Draper and the London Quartet recorded for Columbia an abridged version of the Brahms Quintet, Op. 115.

Complete recordings of great clarinet literature didn't appear until the late 1920s. Haydn Draper may have made the first complete recording of the Mozart Concerto in 1929 on the Brunswick label. Charles Draper's recording with the Lener String Quartet on Columbia of the Brahms Clarinet Quintet appeared about the same time. During the 1930s, recordings of most of the well-known classical pieces for clarinet appeared. These include Gaston Hamelin's recording of the Debussy Rhapsody in 1933, Reginald Kell's recording of Schubert's *Der Hirt auf dem Felsen* in 1937, and Benny Goodman's recording of the Mozart Clarinet Quintet in 1938. Other well-known clarinetists who recorded at this time include Frederick Thurston, Auguste Perier, and Louis Cahuzac.

By the end of the 1940s most of the well-known pieces for clarinet had been recorded. Reginald Kell and Benny Goodman were among those who recorded most often. Benny Goodman's jazz recordings are well known, but he also recorded much of the major classical literature for clarinet. It is interesting that many of the great clarinet pieces of the early 20th century were written for this jazz clarinetist. These include the Bartok *Contrasts* and concertos by Copland,

Hindemith, Milhaud, and Britten. Goodman's 1940 recording of *Contrasts* includes Joseph Szigeti, violin, and Bela Bartok, piano, is particularly wonderful.

STAN STANFORD

CLARION (LABEL) (I)

A British cylinder label, manufactured by the Premier Manufacturing Co., Ltd. beginning in 1905. It seems that the firm took the name Clarion Record Company, Ltd., after a reorganization in 1910. The factory was at The Point, Wandsworth, London. A 1907 advertisement describes the product as "long gold moulded." Discs were made as well, first announced in December 1908; the two examples available to one writer were of different types: one needle-cut (lateral), the other vertical cut with an edge start. Around 1907 a cylinder player was made in Britain, and sold also in America. Clarion seems to have been the longest surviving British cylinder manufacturer, continuing production until at least February 1922; the evidence for this late date is a letter from the company to a customer, printed in the October 1974 *Hillandale News* (however, the letter may have referred to old factory stock rather than to current production). [Carter 1977.]

CLARION (LABEL) (II)

A New York-based firm featuring J.M. Kohner as general manager. The repertoire was dance music, with fewer than 150 known releases. The company first advertised in September 1921; no advertising appeared after November 1921. [Kendziora 1954/11, reprinted in RR 211/212.]

CLARION (LABEL) (III)

"A high-water mark in the achievements of the recording industry during the first half-century of its life," according to Rust, this label was a Columbia product, selling at only \$0.35 but of superior quality both in its acoustic and electrical manifestations. Among the performers were Bing Crosby, the Boswell Sisters, Kate Smith, and Gene Autry. Between August 1930 and June 1932, 477 records were issued. [Rust 1978.]

CLARK, ALFRED C.

(19 DEC 1873–16 JUNE 1950)

American/British inventor and recording industry executive, born in New York. He was educated at City College of New York and Cooper Union, and became an associate of Thomas Edison in 1889. In 1895 he

developed, at the Edison Laboratory in New Jersey, the first motion picture films with continuity; he made Edison's only feature film. Joining the Berliner organization in Camden in 1896, he was coinventor with Eldridge Johnson of a new soundbox for the gramophone in 1896; the improved hand drive eliminated much of the old turntable waver. This research led to the Improved Gramophone. In the summer of 1896 Clark managed a retail store in Philadelphia (1237 Chestnut Street), selling Berliner discs and equipment. Moving to Britain, he was one of the founders and an early executive of the new Gramophone Co. (established in April 1898), and opened the Paris branch in 1899. In 1907 he founded the Musée de la Voix in the archives of the Paris Opéra. He began using Nipper as a symbol in 1907, several months before the Gramophone Co. From 1909 to 1931 he was managing director of the Gramophone Co., becoming a naturalized British subject in 1928. With the formation of EMI, Ltd., in 1931, he became its first chairman; he was also managing director of EMI from 1931 to 1939. In April 1946 he was appointed president of EMI, then he retired in September of that year. He was also the first president of the Radio Industry Council. Clark died in London.

CLARK, DAVID (29 APR 1941–)

Born in Detroit, Michigan, where he served as an apprentice and draftsman under one of the city's most influential architects of the 1950s, and later educated at Lawrence Technological University (where he received a B.S. in engineering in 1977), Clark has worked in the audio industry for more than 30 years. He began his adult career as a technician at the University of Michigan, later worked at both management and technical positions in the recording industry for Motown Records, Holland-Dozier-Holland Sound Studio, and the Audio Design and Manufacturing company, and also served as adjunct professor of architecture at the University of Michigan, Ann Arbor.

In 1977, Clark began his own company, DLC Design, initially providing engineering services for concert sound reinforcement, motion-picture theaters, recording studios, and other areas of professional audio. He also cofounded the ABX Company in the early 1980s, with the purpose being to produce a device that would let serious researchers do unbiased, level-matched comparisons of various audio products. The procedure has become an industry standard (being employed by DBX, Dolby, and Lucasfilm, among others), and has become the bane of the lunatic fringe in consumer audio. Now working primarily in automotive audio, Clark also developed DUMAX, a product that enables an entirely new method of predicting loudspeaker drive-unit performance.

An audio consultant for the Detroit Institute of Arts from 1977 through 1987, and also a consultant for Delco Electronics, Bosch, Mitsubishi, Chrysler, Harman, and Ford, among others, Clark has also published extensively, both in professional journals and consumer magazines. He has also presented numerous technical papers on subjective testing, room acoustics, loudspeaker design and testing, automotive audio, and psychoacoustics to the Audio Engineering Society, the Acoustical Society of America, and the Society of Automotive Engineers. Clark is a member of each group, helped to found the Detroit section of the AES in 1979, and served six years as vice president and governor of the international AES. He became a fellow of the society in 1985 for his work in double-blind testing.

HOWARD FERSTLER

DAVE CLARK FIVE

The Dave Clark Five were an offshoot of the Tottenham Hotspurs (suburban London) soccer team; the band was started in order to raise money for a match in Holland. The drummer, Dave Clark, soon took on the main songwriting, producing, and managing responsibilities.

The DC5, as they were frequently called, were one of the first British Invasion groups to achieve hit status in the United States following the Beatles. Between 1964 and 1967, they placed 24 singles and 13 albums on the charts. Among their notable successes were "Glad All Over" (Epic 9656; 1964), "Bits and Pieces" (Epic 9671; 1964), "Can't You See That She's Mine" (Epic 9692; 1964), "Because" (Epic 9704; 1964), "Catch Us If You Can" (Epic 9833; 1965), and the number one hit "Over and Over" (Epic 9863; 1965).

Unlike many of their British compatriots, who favored softer romantic or novelty styles, the DC5 featured a loud, dynamic sound punctuated by Denis Payton's blaring sax and Clark's taut snare-drum figures. Mike Smith's gruff vocals and the densely textured production work added to the overall sense of excitement. However, the group lacked the ability — or inclination — to develop beyond the simple formulas that had initially resulted in fame and fortune. With poor record sales and new popular music trends such as psychedelia and progressive rock, the band split up in 1970. Smith has continued to record in various projects, while Clark found success in business, including television production. After years of holding back the rights to his earlier recordings, Clark released a double-CD retrospective of original DC5 masters in 1993. [Schaffner 1983.]

FRANK HOFFMANN

CLARK, DICK

CLARK, DICK (30 NOV 1929–)

One of the most influential American disc jockeys, host of television's *American Bandstand* program from 5 Aug 1957; the show had first aired on Philadelphia's WFH in 1952, and grew in a few years to a national network program including more than 100 stations. Clark was a force in bringing rock and roll music to mass audiences, and in legitimizing its image. More than 65,000 records were played on the show over the years. It provided the first national forum for such performers as Chubby Checker, Bill Haley, Johnny Mathis, the Supremes, Fabian, Madonna, the Beach Boys, Linda Ronstadt, James Brown, Neil Diamond, Bobby Darin, Tina Turner, and Buddy Holly. Though Clark was a central figure in the payola scandals of 1959–1960, he was never indicted and his career did not suffer. He developed extensive interests in music publishing and artist management, as well as in record industry activities. In April 1989 he left *Bandstand*, which has continued on the air with David Hirsch as host.

CLARK, PETULA (15 NOV 1932–)

Although Clark is best remembered in America for her string of British Invasion pop-rock hits in the mid-1960s, at age eight she was already a professional singer. Born in Epsom, England, she was appearing regularly on radio as a nine-year-old; two years later she hosted her own program, *Pet's Parlour*. By 12, she was performing for British troops and had appeared in her first film, *A Medal for the General*. Her acting skills were in high demand by the early 1950s, with more than 20 film credits.

Clark's first British hit record, "The Little Shoemaker" (Polygon), reached number 12 on the British charts in mid-1954. More hits followed in rapid succession, including her first chart topper, "Sailor" (Pye; 1961), and million-seller, "Romeo" (Pye; 1961). After marrying Vogue Records publicity director Claud Wolff in 1961, and settling in France, she went on to chart success there with hits such as "Chariot" and "Monsieur."



Dick Clark interviews The Skyliners during their appearance on his "American Bandstand" TV show. Courtesy Ben Car Archives

By now a fixture in much of continental Europe, Clark breached the U.S. market with the number one hit (and Grammy award winner for best song in 1964), "Downtown" (Warner Bros. 5494). She would go on to have 20 more stateside hits through 1972, including "I Know A Place" (Warner Bros. 5612; 1965, "My Love") (Warner Bros. 5684; 1965–1966), "I Couldn't Live Without Your Love" (Warner Bros. 5835; 1966), "This Is My Song" (Warner Bros. 7002; 1967), and "Don't Sleep in the Subway" (Warner Bros. 7049; 1967).

As the hits slowed down in the late 1960s, Clark revived her acting career. In addition to starring roles in films (e.g., *Goodbye, Mr. Chips*, and *Finian's Rainbow*), she appeared in British stage productions such as *The Sound of Music*, *Candida*, and *Someone Like You* (1990; cowritten with Fay Weldon). She appeared on Broadway for the first time in *Blood Brothers* (1993), costarring David and Shaun Cassidy. In the midst of these activities, she still found time to sing live and record; "Downtown'88" (PRT), a remix of "Downtown," returned her to the British Top 10. [Romanowski and George-Warren. 1995.]

FRANK HOFFMANN

CLARK, TOM (1854–1943)

British-born cornetist and band director, playing in Gilmore's and Sousa's bands and then conducting the Columbia Orchestra. He made cornet cylinders for Edison, New Jersey Phonograph Co., and New York Phonograph Co. between 1891 and 1893. In 1898–1899 he worked for Berliner. Later he made arrangements for the publisher G. Schirmer. [Brooks 1979.]

CLARK (MELVILLE) PIANO CO.

A Chicago piano making firm, established in 1900 by Melville Clark (1850–1918). The Clark Co. was the first to market (1901) an 88-note player piano roll (Clark's invention). In 1911 another of Clark's inventions was produced: a music roll cutting machine that was said to capture the nuances of the pianist's performance. Clark died in 1918, and the firm was acquired by Wurlitzer in the following year. The Clark family was also involved in the formation and management of the QRS Co.

CLARK PHONOGRAPH RECORD CO.

A Newark, New Jersey, firm, active in 1922–1923. It offered to make records for clients, and produced its own "Wallace Reducing Method" records.

FRANK ANDREWS

CLARKE, HERBERT L[INCOLN]

(12 SEP 1867–30 JAN 1945)

American cornetist, regarded as the finest of his era, born in Woburn, Massachusetts. He moved to Toronto with his family in 1880. While a teenager he taught himself the cornet and violin, and played in various groups. He became a band director, and joined the faculty of the Toronto Conservatory. From 1893 to 1917 he was with the Sousa Band as soloist and assistant director. Then he led the Anglo-Canadian Leather Co. Band until 1923, before moving back to the U.S., where he conducted the Municipal Band in Long Beach, California, a position he held for 20 years. Clarke wrote an autobiography as well as various methods for the cornet. Clarke recorded first for Berliner, making seven-inch discs in Montreal during 1899–1903 as conductor and soloist, and he made a few Edison cylinders from 1903 to 1906. Most of his work was for Victor from October 1900 to 1908. He also made discs for Columbia in 1917, and Brunswick in 1923. In 1996, Crystal Records issued a CD of Clarke's disc recordings made from 1900 to 1922 (Crystal 450). Clarke died in Long Beach, California, and is buried in the Congressional Cemetery, Washington D. C. Clarke's daughter donated his papers to the University of Illinois. [Moogk 1975 gives a list of his records; Website for the Clarke Collection at the U of Illinois: <http://door.library.uiuc.edu/sousa/clarke.htm>.]

CLARKE, KENNY

(9 JAN 1914–26 JAN 1985)

American jazz drummer, one of the developers of bebop, and a founding member of the Modern Jazz Quartet (1952). He settled in France in 1956, playing with Bud Powell and then organizing his own band with Francy Boland. His style was highly innovative in its departure from the steady bass drum beat and the introduction of rhythmic counterpoints to the soloists. "Epistrophy," which he cowrote with Theolonious Monk, was recorded on Swing #224 in 1946.

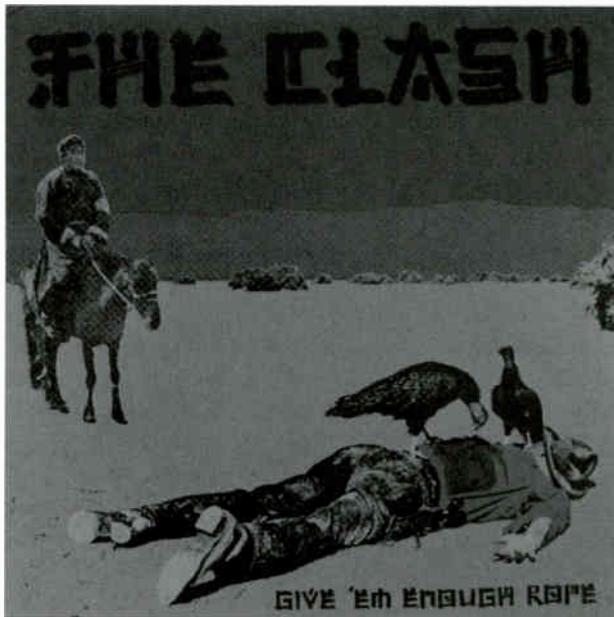
CLARKSON J.C.

American recording industry executive in the 1890s, identified as the "superintendent" of both the Florida Phonograph Co. and the Georgia Phonograph Co. In 1890 he represented those firms at the convention of the National Phonograph Association.

CLASH, THE

The Clash are widely recognized to have been the premier British band within the 1970s punk revolution.

CLAVES (LABEL)



The Clash album cover. Courtesy Frank Hoffmann

More politically astute than the Jam, the Buzzcocks, and other inherently pop bands, and able to sustain a high order of creativity over a comparatively long career as opposed to the incendiary Sex Pistols, the Clash supplanted the Rolling Stones as the greatest performing rock band in the minds of many critics and fans during the 1977–1986 period.

Aware of the U.S. underground punk scene espoused by bands such as the Ramones, Blondie, and Talking Heads, the Clash — comprised of founding members Joe Strummer and Mick Jones, who shared singing and guitar roles, and later additions, bassist Paul Simonon and drummer Nicky Headon — came together in 1976. Their ability to communicate the alienation of Britain's working class youth was evident in the crudely recorded debut album, *The Clash* (CBS 82000; 1977; #12 UK), which sold well at home.

With hopes of breaking into the American market, CBS hired Sandy Pearlman (known for his work with heavy metal band, Blue Oyster Cult) to produce the second LP. *Give 'Em Enough Rope* (Epic 35543; 1978; #2 UK) earned kudos from stateside critics for its energy and intelligent lyrics, and sold moderately well due in part to a North American tour in early 1979. *The Clash*, which had previously been available stateside as an import, was released as a two-disc set — with added singles releases — on Epic (#36060), adding further luster to the band's reputation.

On the strength of increasingly sophisticated musicianship and tight studio arrangements, the Clash's recordings — the EP, *Black Market Clash* (Epic 36846; 1980; #74 US); the dynamic live set, *London*

Calling (Epic 36328; 1980; #9 UK, #27 US), the sprawling *Sandinista* (Epic 37037; 1981; #19 UK, #24 US), and pop gem, *Combat Rock* (Epic 37689; 1982; #2 UK, #7 US); and singles "Train In Vain" (Epic 50851; 1980; #23 US), "Should I Stay or Should I Go" (Epic 03061; 1982; #45 US), and "Rock the Casbah" (Epic 03245; 1982; #8 US) — enjoyed increasing success on the American charts. Interest was further fueled by the release of the docu-film, *Rude Boy*, which spotlighted a fictionalized Clash roadie along with live footage of the band.

The departure of Jones in 1983 due to musical differences with Strummer, however, led to a drop off in the quality of the band's output. While the new Jones vehicle, Big Audio Dynamite, made an immediate impact on the American charts, the Clash's next album, *Cut the Crap* (Epic 40017; 1985; #16 UK, #88 US), sold poorly. Opting to disband the band in early 1986, Strummer pursued a solo career, writing film music (e.g., "Love Kills" for *Sid & Nancy*, *The Walker*), acting (*Straight to Hell*, *Lost in Space*), and performing on tour with the Pogues.

FRANK HOFFMANN

CLAVES (LABEL)

Founded in 1968 by Marguerite Dütschler-Huber, in Switzerland. The company specializes in recordings of uncommon and neglected works from the classical repertoire. In addition to the Swiss artists Jörg Ewald Dähler and Peter-Lukas Graf, the list of soloists recorded includes Teresa Berganza, Dietrich Fischer-Dieskau, Ernst Haefliger, Tibor Varga, Lawrence Foster and Marcello Viotti, as well as young and upcoming artists such as Maurice Steger, Stephan Genz, Ursula Dütschler, Gabriella Dall'Olio, and Emanuele Segre. The current catalog contains some 350 CDs and more than 400 performing artists, chamber ensembles and orchestras. The company has received numerous international awards such as the Grand Prix International du Disque de l'Académie Charles Cros, the International Record Critics award, the Diapason d'Or, and the Prix mondial du Disque de Montreux, among others. [Website: www.claves.ch.]

HOWARD FERSTLER

CLAXTONOLA (LABEL)

An American disc made by the Brenard Manufacturing Co., Iowa City, Iowa, from 1922 to 1925. The material came from Paramount and Gennett. Some important jazz numbers appeared, with the names of artists changed. [Rust 1978.]

CLEAN FEED

In recording, a version of the program signal that omits one source — for example, the voice part — to allow overdubbing, as in another language.

CLEANING

1. *Cylinders* — One expert recommends that cylinders be cleaned with “a specially formulated treatment of L.A.S.T. [Liquid Archival Sound Treatment]” (Owen). Alternatively, distilled water may be used, with suction drying; the water must not be hot, and the exposed plaster core should not be wet. Water is not advisable on cracked cylinders. “Probably the safest” cleaning implement is an air gun. (Owen).

2. *78s* — “The best method of cleaning is the Keith Monks Record Cleaning Machine [in which a vacuum removes water and suspended dust from the disc as it is being washed] and a dose of Liquid Archival Sound Treatment” (Owen); Ivory soap and water, freon-based cleaning, and such commercial products as Discwasher are other possibilities. Most discs can be cleaned with water, but laminated shellac must not be (including most Columbia 78s and all instantaneous recordings). Distilled water is used, often mixed with ordinary non-ammoniated detergent at one teaspoon per gallon of water. Discs are rubbed with a soft cloth in a circular motion while in the solution, then wiped with a lint-free cloth and dried in a rack away from heat without rinsing. Freon TF or another organic solvent is used on oil-based discs such as acetates and nitrates. Ultrasonic vibration, favored by some writers, “can lead to structural damage” (Owen). Vinyl discs (78 or LP) are washed like shellacs, but separately; the grit that is removed from shellac surfaces may damage vinyl surfaces. Both 78s and LPs should be wiped before and after playing with a soft bristled brush, followed by a “dust bug” — a carbon fiber brush that releases static.

Something else to watch for in washing discs is the label; if it is printed in water soluble ink, like the Victor Red Seal, it may be damaged by water. One approach is to polish the label with beeswax prior to washing the disc.

3. *LPs* — The cleaning methods for 78s apply. But static is a major problem with LPs, as it causes dust buildup and may interfere with stylus performance. An effective antistatic pistol, such as the original one by Zerostat, incorporates a quartz element; it releases positive and then negative charged ions. After an LP is cleaned it may be sprayed with Sound Guard to protect its surface; however, Sound Guard cannot be removed, and its long term effects are not known.

4. *Compact discs (CDs)* — “If you must, clean a disc with a soft, moistened cloth. If possible, pat it dry.

Otherwise, wipe the disc from the center out.... Preventive cleaning is unnecessary and potentially harmful.... Do not use solvents.... (Pohlmann).

Discwasher Compact Disc Cleaner is a hand-cranked device that sprays the disc with fluid and wipes it in a radial motion. Oily fingerprints on a CD can actually prevent the player from functioning, and they are hard to remove. Whyte recommends the Nitty Gritty CD-1 Compact Disc Cleaner as an effective print extractor and general cleaner; it is motorized.

5. *Tapes* — Emphasis falls upon the equipment, rather than the tape itself. A tape player should be cleaned after eight hours of use. Parts needing attention are the magnetic heads, capstan, pinch roller, tape guides and lifters, scrape and flutter filters, and tape tension arms. Isopropyl alcohol, methyl alcohol (methanol), xylene, or Freon TF, applied with a lint-free wiper (or if necessary, in hard to reach places, a cotton Q-tip), will serve the purpose, but a rubber cleaner instead of alcohol should be used on the pinch roller. Aerosol cans of Freon are best avoided, since they have metallic particles that may contaminate the equipment. As for the actual tape, it is cleaned by scraping, not washing, followed by a tissue wipe to remove shreds. This task may be performed with a simple razor blade, or with a commercial device that runs a tape through a cleaning assembly. BOW Industries, Computer-Link Corp., and Recortec, Inc. are among the makers of such cleaning devices. For cassette players there are cleaning tapes that may be played through the machine to do what is needed; of course, the cassette tape itself is not subject to direct cleaning. [Barnes, K. 1974; Owen 1982; Pohlmann 1989; Whyte 1986/8.]

See also Preservation of Sound Recordings

CLEARTONE (LABEL)

A product of the Cleartone Phonograph Co., New York, during 1920–1923. The material was from Arto, with some pressings from Pathé. Jazz and blues were featured. [Rust 1978.]

CLEF (LABEL)

A record issued during 1953–1957 by Clef Records of Beverly Hills, California. It was founded by Norman Granz as successor to his Jazz at the Philharmonic series that had been released on the Asch and Mercury labels. Granz engaged many leading artists, including Count Basie, Ella Fitzgerald (after 1956), Stan Getz, Dizzy Gillespie, Gene Krupa, Charlie Parker, Oscar Peterson, and Lester Young. He consolidated his several labels (Clef, Down Home, Norgran) under the

CLÉMENT, EDMOND

label name Verve in 1956. The final Clef release was in March 1957. [Ruppli 1986.]

CLÉMENT, EDMOND (26 MAR 1867–24 FEB 1928)

French tenor, born in Paris. His debut was at the Opéra-Comique on 29 Nov 1889, in Gounod's *Mireille*. He then sang across Europe, and at the Metropolitan Opera from 1911 to 1913. His special role was as Des Grieux in *Manon*, and his record of "La rêve" (Odéon 56050; 1905, and Victor 74258; 1912 or 1913), is regarded as one of the best tenor renditions of the acoustic era. Clément recorded also for Pathé (1916–1918). There have been many reissues on LP. He died in Nice.

CLEMENTS, MICHAEL (18 FEB 1949–)

Born in Slough, Buckinghamshire, England, Clements received his early education at Slough Technical High School from 1960 until 1967. After graduation, he was apprenticed as a mechanical engineer at the British Aircraft Corporation and studied engineering at Kingston College of Advanced Technology from 1967 to 1969. Employed by KPM Music Publishing in 1970, he trained and worked as a studio recording engineer until 1975. He has been a freelance recording engineer since 1978, recording diverse material for many companies including Classics for Pleasure, Music for Pleasure, Listen for Pleasure, EMI Records UK, RCA, BMG Classics, Virgin Classics, Collins Classics, Gimell Records, and EMI Classics. During his career, he has won various gold, silver, and platinum discs for U.K. sales achievements, a number of *Gramophone Magazine* record awards, including best Baroque recording and best early music recording 1991, best engineered recording 1991 and 1995, and a NARAS Grammy award for best orchestral recording in 2000.

HOWARD FERSTLER

CLEPHANE, JAMES OGILVIE (21 FEB 1842–30 NOV 1910)

American inventor and record industry executive, born in Washington, D.C. As secretary to Samuel Seward, U.S. secretary of state, he became interested in office machines and contributed to the invention of the typewriter, the first of which was built for the use of his staff. Later he and Ottmar Mergenthaler began the development of the linotype machine, revolutionizing printing technology. Impressed with a demonstration of the Graphophone, he — with Andrew Devine and

John H. White — entered into a marketing agreement with Volta Graphophone Co. on 28 Mar 1887, in effect establishing the American Graphophone Co.

Clephane was a director of the Mergenthaler Linotype Co., and of the American Graphophone Co. From 1890 to 1893 he was secretary of the Eastern Pennsylvania Phonograph Co. He died in Englewood, New Jersey. [Wile 1990/2.]

CLEVELAND ORCHESTRA

One of the distinguished orchestras of the world, established in 1918. The first conductor was Nikolai Sokoloff (1918–1933), followed by Artur Rodzinski (1933–1943), and Erich Leinsdorf (1943–1946). A peak period began with the engagement of George Szell, who was musical director from 1946 until his death in 1970. Lorin Maazel directed in 1971–1982, and Christoph von Dohnányi has been director since 1984. Von Dohnányi left this position at the end of the 2002 season, taking the Music Director Laureate title, and was replaced by Franz Welser-Möst. The orchestra moved into its permanent home, Severance Hall, in 1931.

The first recording was the *1812 Overture*, made for Brunswick (#50047) in January 1924. Another 10 discs were made for Brunswick in October 1924, and 18 more through 1928. There was then a recording gap until Rodzinski led the orchestra in *Finlandia* and the *Khovantchina* Prelude in December 1939 for Columbia. Outstanding records were made by Szell on the Epic label in the 1950s and 1960s, including works by Mozart (piano concertos with Robert Casadesus), Schumann, and Wagner. The recordings made under von Dohnányi have also been highly praised, especially the Mahler First Symphony (London 425718–4). The orchestra under von Dohnányi recorded exclusively for London/Decca Records. Various earlier recordings have been reissued on CD on Columbia and Angel records. [Fellers 1978; Website: www.clevelandorch.com.]

CLEVELAND PHONOGRAPH RECORD CO.

Original name for U-S Phonograph Co., from 1908–09;

See also Cylinder

CLIBURN, VAN (12 JULY 1930–)

American pianist, born Harvey Lavan Cliburn, Jr., in Shreveport, Louisiana. He studied at the Juilliard School, made a debut with the Houston Symphony Orchestra at age 13, and played with the New York

Philharmonic at 24. He gained sudden world attention in 1958 by winning the Tchaikovsky competition in Moscow. Cliburn's recording of the Tchaikovsky First Concerto was the first classical LP to sell a million copies (Victor LSC 2252; 1958); indeed, sales had reached 2.5 million by the end of the 1960s. Cliburn made other important recordings, all for Victor, including the Liszt concertos with the Philadelphia Orchestra and the Rachmaninoff Second Concerto with the Chicago Symphony Orchestra.

CLICK TRACK

A device used to help conductors and performers to synchronize music with action on a film. The track was at first made up of sprocket holes punched at fixed intervals into a piece of 35 millimeter film that ran concurrently with the image film; the sprockets clicked in the manner of a metronome, audible through headphones. Later the click track was electronically constructed, and allowed for tempo variations as needed.

CLIFTOPHONE

A line of disc players marketed in Britain by Chappell Piano Co., Ltd., in 1925, offering "new musical joy" and the promise of "Great Artistes...with you, as in life, vivid, real, just as you heard them in living flesh sing or play upon a platform." Console models sold for £7 10s; there was also a portable, seven inches by 12 inches by 14 inches in size.

CLIMAX (LABEL) (I)

Under this name Columbia entered the disc field, in late 1901. The matrixes were made by the Globe Record Co., and pressing was done by the Burt Co., a button manufacturer in Milburn, New Jersey. Label color was black and gold. In January 1902 Victor's Eldridge Johnson purchased the firm without the knowledge of Edward Easton, Columbia president. When, in the following month, the two companies came to an agreement to share patents, the Climax matrices went back to Columbia. Some of the records had been embossed with "VTM" in the wax near the edge of the label. Performances by the Climax Band included "The Jolly Coppersmith" (#628), and "Tell Me, Pretty Maiden" (#82). Use of the Climax name ceased in fall 1902 as Columbia inscribed labels with its own name, beginning the so-called black and silver series. [Brooks 1975; Foote 1970.]

See also Disc



The first Columbia Records were issued on the Climax label between 1901–02. Courtesy Kurt Nauck/Nauck's Vintage Records

CLIMAX (LABEL) (II)

A subsidiary label of Blue Note, devoted in 1943 to the George Lewis group of New Orleans jazz veteran artists; the records were made on location. [Rust 1978.]

CLINE, PATSY (8 SEP 1932–5 MAR 1963)

American country music singer, born Virginia Hensley in Winchester, Virginia. She was known both for her traditional country singing (with yodeling and growling), and for the country-pop style of the 1950s. She recorded first on the Four Star label in 1955, then moved to Decca. Her first big hit was "Walkin' after Midnight" in 1957 (Decca 30221). "I Fall to Pieces" (Decca 31205; reissued as MCA 51038; 1980), and the Willie Nelson song "Crazy" (Decca 31317) were two 1961 records that reached top hit status. She had 14 other chart songs, some of which were released posthumously. Loretta Lynn was a frequent touring partner. After her death in an air crash, Decca issued the *Patsy Cline Story* album (DXSB7176), which appeared on the *Cash Box* chart for eight weeks. In 1973 she was elected to the Country Music Hall of Fame. Her career was the subject of a 1985 film, *Sweet Dreams* (Jessica Lange in the Cline role; the title coming from another of her songs). Cline was also portrayed (more effectively, by Beverly D'Angelo) in the 1980 film about Lynn's life, *Coal Miner's Daughter*. A stage re-creation by singer Rainie Cole, *Always, Patsy Cline*, was presented in 1991. Cline's Four Star recordings were



Sheet music cover for “She’s Got You” by Patsy Cline.
Courtesy David A. Jasen

reissued on LP by Rhino in 1989 on three records; these were later released on CD by Platinum Disc. MCA has reissued Cline’s Decca recordings in various different packages over the years.

CLINTON, GEORGE (22 JULY 1940–)

One of the most innovative forces in Black popular music during the rock era, George Clinton’s restless muse could not be confined for long within any particular genre. Establishing his first group, the Parliaments, in order to perform doo-wop, Clinton would utilize a wide array of artistic settings in addressing soul, psychedelia, funk, fusion, disco, and hip-hop, among other styles.

Born in Kannapolis, North Carolina, Clinton formed the Parliaments while growing up in Newark, New Jersey. Beginning in 1955, the group recorded sporadically with a number of labels, including Hull, Flip, Symbol, USA, Motown, and Golden World. By the mid-1960s, the group included vocalists Clarence “Fuzzy” Haskins, Raymond Davis, and Grady Thomas. After adding lead guitarist Eddie Hazel, rhythm guitarist Tawl Ross, bassist Billy Nelson, organist Mickey Atkins, and drummer Tiki Fulwood in 1966, the Parliaments enjoyed a moderate pop hit, “(I Wanna) Testify” (Revilot 207; 1967; #20).

Following more failed releases, Clinton was forced to change the group’s name by Motown writers Holland-Dozier-Holland, who claimed to own the “Parliaments” name. Strongly influenced by Jimi Hendrix-styled acid rock, the proto-funk exemplified by Sly and the Family Stone, and the radical polemics of white working-class bands like the MC5 and the Stooges, he redirected the core of his band, now called Funkadelic, toward progressive rock. The skewed social commentaries and extended jams of Funkadelic’s early albums — *Funkadelic* (Westbound 2000; 1970), *Free Your Mind...And Your Ass Will Follow* (Westbound 2001; 1970; #92), *Maggot Brain* (Westbound 2007; 1971), *American Eats It’s Young* (Westbound 2020; 1972), *Cosmic Slop* (Westbound 2022; 1973), and *Standing On The Verge Of Getting It On* (Westbound 1001; 1974) — would sell moderately well to both young urban Blacks and white hard rock fans. In the meantime, Clinton, getting back the rights to the Parliaments name, changed it to Parliament (while continuing to use most of the Funkadelic personnel), and produced a string of recordings — most notably, *Chocolate City* (Casablanca 7014; 1975; #91), *Mothership Connection* (Casablanca 7022; 1976; #13), *The Clones of Dr. Funkenstein* (Casablanca 7034; 1975; #20), and *Funkentelechy vs. The Placebo Syndrome* (Casablanca 7084; 1977; #13) — emphasizing a dance-floor funk groove. Parliament’s success, in turn, stimulated further interest in Funkadelic, which peaked with the release of *One Nation Under a Groove* (Warner Bros. 3209; 1978; #16).

Clinton’s P-Funk collective would grow to include more than 35 musicians and additional spin-off acts like Bootsy Collins’s Rubber Band, Parlet, and Horny Horns. These wide-ranging activities appear to have sapped Clinton’s creative energy and, by 1982, he had decided to focus on a solo career, with an on-again, off-again collaborative side project known as the P-Funk All Stars. With the exception of the LP, *Computer Games* (Capitol 12246; 1982; #40) — including a single, “Atomic Dog” (Capitol 8556; 1983), which received heavy exposure in clubs and on cable TV as a video clip — his post-1970s work has been lackluster at best. However, other artists (e.g., Ice Cube, Primal Scream) still recruit his services in the recording studio, and his Parliament-Funkadelic material continues to be widely sampled within the hip-hop community.

FRANK HOFFMANN

CLINTON, LARRY (17 AUG 1909–2 MAY 1985)

American big band leader, composer, and arranger, born in Brooklyn. He was most prolific in his twenties, as a prominent arranger for Isham Jones, the Casa Loma

Orchestra, both the Dorsey bands, Bunny Berigan, and others. An example of his distinguished arrangements is "I Dreamt I Dwelt in Marble Halls," and "Martha" — a record made with his own orchestra, which he established in 1937 (Victor 25789; 1938); the vocalist, Bea Wain, was a great asset to his group. She also sang on Clinton's most acclaimed record, "Deep Purple" (Victor 26141; 1939). Clinton's most popular compositions were "Dipsy Doodle" (1937), "My Reverie" (sung by Wain on Victor 26006; 1938), and "Our Love" (1939). Clinton saw military service, and when he returned the dance band style was losing public appeal; he did not regain his pre-war popularity. Later he worked with Kapp Records as A&R man. He died in Tucson, Arizona.

CLIPPING

SEE DISTORTION

CLOONEY, ROSEMARY (23 MAY 1928–29 JUNE 2002)

American popular singer, born in Maysville, Kentucky. She and her sister, Betty, sang on radio in the mid-1940s, and later with the Tony Pastor band. She made a great hit in 1951 with "Come on-a My House" (Columbia 39467), and was on the charts again the next year with "Tenderly" (Columbia 39648). She appeared on various television shows and in several motion pictures during the 1950s.

CLOSED LOOP CARTRIDGE

SEE CARTRIDGE (I)

CLOUGH, ARTHUR C.

American tenor and vaudeville artist, active in recording from 1908 to 1915. His first disc was "Somebody That I Know and You Know Too" (Victor 5527; 1908); his best seller was "When I Dream of Old Erin" (Victor 17412; 1913). On Columbia his earliest disc was a great success: "Put on Your Old Gray Bonnet" (A778; 1909). He was also heard on Edison Amberols, beginning in March 1911 with "Let Me Call You Sweetheart" (#637), and on two Edison Diamond Discs (in 1915 and 1922). Clough was a member of the Brunswick Quartet.

CLOVER (LABEL)

An American issue of the mid-1920s, produced by the Nutmeg Record Corp., one of the Emerson-Consolidated group. The repertoire was primarily dance and popular vocal. [Rust 1978.]



Clover label. Courtesy Kurt Nauck/Nauck's Vintage Records

CM/S

Centimeters per second; a rate of speed applied to tape velocity in recording or playback.

COARSE GROOVE

A designation of the 78-rpm disc, in contrast to the microgroove LP.

See also Groove

COASTERS, THE

The Coasters were — along with the Platters and the Drifters — one of the first Black rhythm and blues vocal groups (doo-wop) to find consistent success on the mainstream pop charts. Their entrée consisted of satirical commentaries on American popular culture, particularly the teen lifestyle, supplied by the legendary songwriting/production team of Leiber and Stoller.

The group formed in Los Angeles in 1947 as the Robins, finding success with the up-tempo, R&B classics, "If It's So, Baby" (Savoy 726; 1950; #10 R&B), and "Smokey Joe's Café" (Atco 6059; 1955; #10 R&B). Eyeing the rapidly emerging rock 'n' roll market, the members — consisting of tenor Carl Gardner, baritone Billy Guy, tenor Leon Hughes, bassist Bobby Nunn, and guitarist Adolph Jacobs — assumed the name of the Coasters (a reference to their West Coast home base), and smoothed out the bluesy, rough edges characterizing the Robins's releases. Signing with Atlantic Records in 1956, who immediately assigned

COAXIAL CABLE

the group to Leiber and Stoller, the Coasters — now including tenor Cornell Gunther and bassist Will “Dub” Jones in place of Hughes and Nunn — enjoyed a long string of brilliantly arranged hit singles, including “Down in Mexico” (Atco 6064; 1956; #8 R&B); the private-eye send-up, “Searching” (Atco 6087; 1957; #3 pop, #1 R&B), backed by “Young Blood” (#8 pop, #2 R&B); a diatribe on parental authority, “Yakety Yak” (Atco 6116; 1958; #1 pop, #1 R&B); “Charlie Brown” (Atco 6132; 1959; #2 pop, #2 R&B), which featured — like “Yakety Yak” — an inventive sax break by King Curtis; a spoof on TV western heroes, “Along Came Jones” (Atco 6141; 1959; #9); “Poison Ivy” (Atco 6146; 1959; #7 pop, #1 R&B), and “Little Egypt” (Atco 6192; 6192; 1961). The animated vocal interplay between group members (undoubtedly a byproduct of the Leiber and Stoller studio arrangements) played a large role in the success of these records. Like many teen-oriented artists of the time, their albums sold in limited quantities.

The Coasters split up in the mid-1960s after the hits dried up. However, they reunited later in the decade due to opportunities presented by the rock ‘n’ roll revival vogue. In addition to numerous LP reissues of their classic tracks, they returned to the studio with Leiber and Stoller to recut old material on *Sixteen Greatest Hits* (Trip; 1973). The group — featuring various personnel configurations led by Nunn, Gardner, and Hughes individually, and Guy and Jones together — has continued to perform live. They were inducted into the Rock ‘n’ Roll Hall of Fame in 1987.

FRANK HOFFMANN

COAXIAL CABLE

An electrical cable in which a center conductor is surrounded by insulation and a braided shield.

COAXIAL LOUDSPEAKER

A type of loudspeaker in which a tweeter is mounted concentrically within a woofer, each having its own voice coil. A substantial frequency overlap is desirable between them.

COBRA PICKUP

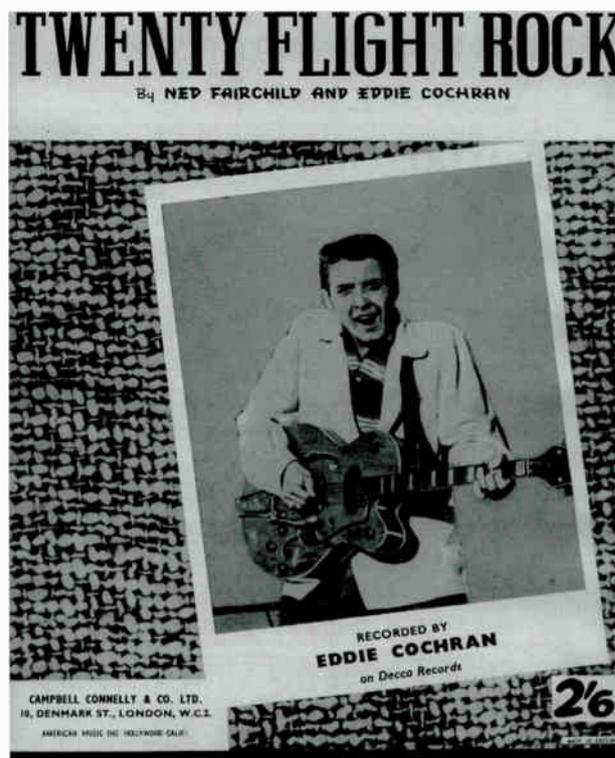
One of the popular cartridges of the high fidelity era, marketed by Zenith ca. 1948. It was a moving iron type, lightweight to give three times as many plays per record without loss of frequency response. A round flat vane was attached to the top of the stylus, with a small coil adjacent to the vane; movements of the vane were transmitted to a connected oscillator.

COCHRAN, EDDIE (3 OCT 1938–17 APR 1960)

Although he placed only three singles in the American Top 40, Eddie Cochran remains one of the seminal artists of the 1950s rock ‘n’ roll. He was particularly influential in England, where his recordings continued to chart until 1988 (“C’mon Everybody,” Liberty 501; #14), in addition to being covered by the likes of Rod Stewart, the Who, Humble Pie, and the Sex Pistols.

Born in Oklahoma City, Eddie first recorded with fellow vocalist/guitarist Hank Cochran (no relation) as the Cochrans in 1955. Following the release of several unsuccessful singles, Cochran embarked on a solo career. A cameo role performing “20 Flight Rock” in the rock ‘n’ roll film, *The Girl Can’t Help It* (1957), help propel his debut Liberty single, “Sittin’ in the Balcony” (#55056; 1957) to #18 on the *Billboard* charts. His self-penned “Summertime Blues” (Liberty 55144; 1958; #8 US, #18 UK), became an instant classic of teen rebellion. The party anthem “C’mon Everybody” (Liberty 55166; 1959; #35 US, #6 UK), and hormone-dripping “Somethin’ Else” (Liberty 55203; 1959; #58 US, #22 UK), were almost as good, despite lackluster stateside sales.

Whatever greatness Cochran might have achieved became a matter of conjecture due to his premature



British sheet music cover for Eddie Cochran’s hit “Twenty Flight Rock.” Courtesy David A. Jasen

death in a London car crash. Nevertheless, his recordings — reissued in a steady stream of anthologies — have continued to sell well to the present day.

FRANK HOFFMANN

COCKER, JOE (20 MAY 1944–)

Born John Robert Cocker in Sheffield, England, he sang in local bands as a teenager. Under the name Vance Arnold, Cocker formed a group called the Avengers in 1961, and they recorded locally and toured as an opening act for the Rolling Stones and the Hollies, leading to a contract with Decca Records in 1964, but the band went nowhere. In 1966, Cocker formed The Grease Band for local gigs, and then moved to London in 1967 under the guidance of producer/manager Denny Cordell. A year later, his album *A Little Help From My Friends* (released in the U.S. as A&M 3106), was a major British hit, the title track reaching number one there. Cocker sang the song at the 1969 Woodstock festival, and his jerks and twitches onstage engrained him in the minds of viewers of the later film and sparked a memorable impersonation by comedian John Belushi (in 1976, a well-worn Cocker joined Belushi on “Saturday Night Live” in a duet where Belushi [some felt cruelly] aped the singer’s physical mannerisms). Cocker also scored as a member of Leon Russell’s 1970 “Mad Dogs and Englishmen” tour along with Rita Coolidge and the Delaney and Bonnie band. Yet after that Cocker all but disappeared from view, a victim of excessive drinking that led to several arrests and a reputation for instability. Though the singer’s raw, bluesy voice, chiefly influenced by Ray Charles, suffered from steady deterioration, amply evident in the 1975 hit with Randy Newman’s “You Are So Beautiful,” he managed to cast off his reputation as a wasted talent and earn a new one as something of a “soul survivor.” Cocker’s chart-topping duet with Jennifer Warnes on “Up Where We Belong” (Island 99996, 1982) from the movie *An Officer and a Gentleman* marked a gratifying comeback for the hard-living singer. However, since the 1990s top 15 hit, “When the Night Comes,” he mostly has been absent from the charts. He has continued to record sporadically into the 21st century.

BOB SILLERY

CODEC

An electronic program that converts analog signals into digital form and also compresses them to conserve bandwidth. Most codecs employ proprietary coding algorithms for data compression, common

examples being Dolby’s AC-2 and AC-3, PASC, DTS, ADPCM, MPEG, and Meridian Lossless Packing.

HOWARD FERSTLER

COHEN, JOHN (2 AUG 1932–)

American old-time music performer, record producer, filmmaker, and photographer, born in New York City. Cohen graduated from Yale University with a B.F.A. (1955), and M.F.A. (1957), then joined with Mike Seeger and Tom Paley to form the New Lost City Ramblers in 1958. Cohen appeared on the Ramblers’s eponymous first album for Folkways Records in 1959, and on numerous albums that followed through the 1960s, including *Old Timey Songs for Children* (1959), *American Moonshine and Prohibition* (1962), *Rural Delivery Number One* (1965), and *Cousin Emmy with the New Lost City Ramblers* (1968). Subsequently, retrospective albums were produced by Flying Fish (1978), and Vanguard (1994). Cohen issued one solo album, *Stories the Crow Told Me* (Acoustic Disc 1999). He also recorded and produced six albums of southern traditional music for Folkways, such as *Mountain Music of Kentucky*, *Roscoe Holcomb*, and *When Kentucky Had No Union Men*, as well as two volumes of the *Mountain Music of Peru* for Folkways and three volumes of *Huayno Music of Peru* released by Arhoolie. Cohen has also written liner notes for numerous albums. In 2001 he produced and annotated *There Is No Eye: Music for Photographs* (Smithsonian Folkways), designed to accompany the book *There Is No Eye: John Cohen Photographs*. A filmmaker as well as photographer, he has released *The High Lonesome Sound* (1963), *Sara & Maybelle: The Carter Family* (1981), and numerous other films on musical subjects. A most versatile performer, producer, and artist, Cohen has introduced audiences to a wide range of traditional music styles from the U.S. and South America. [<http://www.johncohenworks.com>.]

RONALD D. COHEN

COHEN, LYOR (1959–)

Cohen was born in New York to Israeli parents, who subsequently relocated to Los Angeles. He began his career in concert management and promotion in Los Angeles, befriending rap star Russell Simmons. He became the manager for Run-DMC, and then, with Simmons and Rick Rubin, formed Def-Jam Records in 1983. Within five years, the label had sales of over \$180 million, primarily releasing rap recordings. In 1999, the trio sold out the label to Seagram/MCA, and Cohen was named president of the newly formed

COHEN, PAUL

Island Def Jam Group. He has continued to work with rap musicians, but has broadened his pallet to work with mainstream pop and rock stars, helping to revive the career of Jon Bon Jovi in 2000. In 2002, he picked up Mariah Carey's contract after she was dropped by Virgin/EMI. Cohen left Island Def Jam at the end of January 2004, when he was offered the position of heading the newly formed Warner Music Group.

COHEN, PAUL

(10 NOV 1908–1 APR 1971)

American recording industry executive, born in Chicago. From 1927 to 1933 he worked with Columbia, then moved to Decca as a salesman. He was given direction of the Decca country music operation in the 1940s, and built it into the finest of its kind. Focusing on Nashville, he made the first commercial recordings there in 1945 (Red Foley), and contracted with stars of the *Grand Ole Opry* to join Decca. Bill Monroe and Ernest Tubbs were among his artists. Cohen moved to the Decca subsidiary Coral label in 1958, and later set up his own Todd label. In the 1960s he was with Kapp Records and ABC Records. He died in Bryan, Texas.

COINCIDENT STEREO RECORDING

A microphone technique (variants being X/Y stereo, M-S stereo, intensity stereo, or a crossed figure eight technique) that involves the use of two dipolar or other directional microphones located and aimed in such a way that sounds reaching them are primarily intensity controlled, rather than controlled by time-of-arrival clues. Often used with small ensemble recording from fairly close-up distances, the result is an often clear and well-focused soundstage and workable monophonic compatibility.

See also **Blumlein Stereo Recording; Microphone; Spaced Array Microphone Recording**

HOWARD FERSTLER

COIN-OP

The name given to a variety of devices in which playback of one or more recordings is activated by the insertion of a coin into a slot. Also known as coin-slots, or coin-in-the-slots. The final development of the concept was the jukebox.

"The earliest known musical coin-operated phonograph was filed for in England on July 5, 1888, by electrician Charles Adams Randall (#9762), who called it a Parlophone. There is some dispute as to whether it was actually built...." (Koenigsberg).

Louis Glass, manager of the Pacific Phonograph Corp., introduced a coin-op on 23 Nov 1889, at the Palais Royal Saloon; for five cents it played a single Edison cylinder audible through any of four listening tubes. These humble gadgets quickly found a national public, and many firms hastened to manufacture and distribute them: the principal one was the Automatic Phonograph Exhibition Co. Before 1900 there were models capable of playing four or five cylinders in sequence — but the customer could not choose among them. The Automatic Reginaphone offered by the Regina Music Box Co. in 1905 played six cylinders consecutively, requiring a coin for each one; its successor was the Hexaphone of 1908, which offered the customer a choice among six two-minute "indestructible" cylinders — it ran on an electric motor and gave good acoustic results from a wooden horn. But the first machine to give ample choice to the patron was the 1905 Multiphone, which allowed a selection among 24 cylinders. The 1906 Concertophone offered 25 choices; it was sold also in a home model, without the coin slot, becoming the first of its kind. By 1900 there were also disc coin-ops, with the first apparently made for export to Germany by the Universal Talking Machine Co.; it played one seven-inch record. The Gramophone Co. advertised a penny-in-the-slot device in 1902. Soon America had various multi-disc and multi-cylinder devices made by Autophone and the Automatic Machine and Tool Co. — the last-named being the producer of the spectacular John Gabel's Automatic Entertainer in 1906.

The coin-slot idea was also applied to music boxes, player pianos, a combination disc player and music box and to machines that showed pictures along with music.[Edison 1893; Koenigsberg 1990; Marty 1979, illustration of an Automatic Graphophone; *HN* #149 (April 1986), p. 12 has an illustrated account of the Excelsior concert coin-op; Hoover 1971 has a photo of the Reginaphone.]

See also **Jukebox; Picturized Phonographs; Regina Music Box Co.**

COLE, NAT "KING"

(17 MAR 1917–15 FEB 1965)

American jazz pianist and — perhaps in spite of himself — popular singer, born Nathaniel Adams Cole in Montgomery, Alabama. A nightclub pianist in the 1930s, he began to sing in response to audience requests. His King Cole Trio (1939–1951) brought him recognition as both pianist and vocalist. "Sweet Lorraine" (Decca #8520; 1940), was an early favorite, and his first as a vocalist. "Nature Boy," recorded for Capitol in 1948 — as a singer only, with an orchestral



Nat "King" Cole trio, c. late 1940s. Courtesy David A. Jasen

accompaniment — was a surprise hit, remaining 15 weeks on the charts. Other notable recordings were "The Christmas Song" in 1946 (Capitol 311); and "Mona Lisa" in 1950 (Capitol 1010). In 1946 he became the first Black artist to have a sponsored radio show. Cole's records were on the charts for 23 years; he had more than 100 hits. He won a Grammy for the single "Midnight Flyer" (Capitol 4258; 1959), and also received the Grammy lifetime achievement award (1989). His daughter Natalie is also a successful singer. She won a Grammy in 1992 for her overdubbed duet with her father, "Unforgettable" (Elektra CD 61049-2). During 1959–1961 Cole toured Europe (with a command performance for Queen Elizabeth), South America, and Japan. He died in Santa Monica, California.

Cole's 16 recordings made for Decca in 1940 have been reissued several times, notably on the CD *That Jive Jack: The Earliest Recordings* (Decca 42350, 1990; GRP 662, 1996). His countless Capitol albums are available on CD, both in their original issued forms and in compilations.

COLEMAN, MICHAEL (31 JAN 1891–4 JAN 1945)

The greatest of the Sligo-style Irish fiddlers, Coleman was born in Knockgrania, County Sligo. Coleman began to play fiddle at age 6, in duet with his father (a farmer and amateur musician) or older brother Jim. He also began stepdancing, and by his mid-teens was admired as both a dancer and musician. Coleman

dropped out of school first when he was 14, and then permanently ended his education at age 18. That same year, he made his first appearance at a fiddle convention in the nearby town of Bunnanadden.

Coleman continued to compete and perform locally through October 1914 when he sailed for America. On his arrival in New York, Michael almost immediately found work as a fiddler for local dances and small concerts; he even toured on the Keith vaudeville circuit for a while. Coleman's big "break" came early in 1921 when he made his first recordings. At first he recorded for small labels catering to the Irish market, as well as for some of the mainstream "budget" American labels, such as Vocalion and Columbia. His first major "hit" was his 1922 recording of "The Boys of the Lough"; it was issued in Ireland by the Beltona label under the pseudonym of "Dennis Molloy." By 1927, Coleman was signed to the prestigious Victor label, which brought further distribution to his recordings.

However, the stock market crash of 1929 — and the growth of radio — both took their tolls on the recording industry. Much recording of ethnic or traditional musics dried up; and work was hard to come by. Nonetheless, Coleman persevered, working locally whenever he could. He was also a regular on New York radio programs geared to the Irish audience. When the economy picked up in the mid-1930s, he was invited to record again, this time for the new Decca label. These records were not as successful due to the changing tastes of the market. By the early 1940s, his health began failing due to ulcers and other digestive problems; he made some final recordings privately in 1940 and for radio transcriptions in 1944 (these later recordings have never been found). He died in January 1945 in New York City. Viva Voce has issued a two-CD set of all of Coleman's recordings.

CARL BENSON

COLEMAN, ORNETTE (9 MAR 1930–)

Ornette Coleman is one of the most innovative — and controversial — figures in jazz history. An early proponent of free jazz, his recordings led the way in illustrating how both musicians, and listeners, could resist the traditional laws of harmony, melody, rhythm, and pitch. He would formalize his techniques in the early 1970s under the heading of "harmolodics," in which harmonies, rhythms, and melodies — assigned equal importance — function independently.

Born in Fort Worth, Texas, Coleman began playing tenor and alto sax in R&B and jazz bands while still in his teens. Following more than a decade of experimentation and study, he burst upon the scene with a quartet comprised of kindred spirits including trumpeter

COLISEUM (LABEL)



Ornette Coleman's breakthrough album, *Free Jazz*. Courtesy Frank Hoffmann

Don Cherry, bassist Charlie Haden, and drummer Billy Higgins. In *Something Else!* (Contemporary 7551; 1958), and *Tomorrow Is the Question!* (Contemporary 7569; 1959). His basic group, augmented with additional veteran players, remained tied to established chordal and structural formats. However, his Atlantic albums released between 1959–1961 — most notably, *The Shape of Jazz to Come* (Atlantic 1317; 1959), *Change of the Century* (Atlantic 1327; 1959), *This Is Our Music* (Atlantic 1353; 1960), *Free Jazz* (Atlantic 1364; 1960), *Ornette!* (Atlantic; 1961), and *Ornette on Tenor* (Atlantic; 1961) — were milestones in the development of a more natural jazz form.

After several years outside the public eye, Coleman entered a new phase of productivity during the latter half of the 1960s characterized by a more directed lyricism. While his solos on violin, trumpet, and musette — on which he produced individual, unorthodox sounds — were highly controversial, his work as a whole revealed a more directed lyricism, best exemplified on *At the "Golden Circle" Stockholm, Volume 1* (Blue Note 84224; 1965), and *At the "Golden Circle" Stockholm, Volume 2* (Blue Note 84225; 1965).

Coleman's theory of harmology was introduced in his extended compositions, *Skies of America* (Columbia 31562; 1972), performed with the London Symphony Orchestra. He then embarked on another of his frequent sabbaticals, studying world music, the rock scene, and electrified instruments such as the guitar. These experiences were all integrated into the funk-fusion album, *Dancing In Your Head* (Horizon 722; 1977), featuring his new band, Prime Time. Later

versions of the band would vary in configuration, reflecting Coleman's far-ranging interests over the last decades of the 20th century. In addition to reunions with old associates — the most acclaimed being his duet project with Haden, *Soapsuds, Soapsuds* (Artists House; 1977) — he has collaborated with a diverse array of artists, including Pat Metheny — *Song X* (Geffen; 1986) — and Jerry Garcia in *Virgin Beauty* (CBS Portrait; 1988).

As the world has gradually caught up with Coleman's innovations, an increasing number of reissued albums and retrospectives have been issued. Notable examples of the latter include *Broken Shadows* (Columbia; 1979), a collection of unissued material from the early 1970s, and *Beauty Is a Rare Thing* (Atlantic/Rhino; 1993), a six-CD compilation of his entire Atlantic oeuvre.

FRANK HOFFMANN

COLISEUM (LABEL)

A British issue of 1912–1927, The offerings were mainly dance records, made from Gennett, Vocalion, and other masters, with the artists adorned by pseudonyms; for example, Fletcher Henderson's orchestra, including Louis Armstrong and Coleman Hawkins, appeared as the Maryland Dance Orchestra doing "Words," taken from Vocalion #14925 (1924). [Rust 1978.]

COLLARO LTD.

A British high-fidelity manufacturer, located in Barking, Essex. In the 1950s it made the successful RC 456 record-changer that intermixed seven-inch, 10-inch, and 12-inch discs at any of four speeds.

COLLECTOR (LABEL)

A Dutch rockabilly/early rock reissue label founded by record collector Dies Klop, who originally reissued material on LP in the 1970s under the "White Label" name. He has gathered many rare 45s, unissued takes, and other hard-to-find material to appeal to the diehard fan of these musical genres. In 1991, he began issuing CDs of this material, and now offers more than 200 compilations.

COLLECTORS AND COLLECTING

Collectors of recorded sound were active before the turn of the 20th century. A note in an 1898 issue of *Phonoscope* stated that "old records are now in great demand, by enthusiasts who aim to possess valuable

collections" (quoted in Brooks 1979). In 1897, *Phonoscope* reported that Edgar Cayple of Denver had a collection of 1,760 records; and there were numerous other cumulations of cylinders in private hands.

Many libraries and archives of recorded sound were developed around the collections of individuals. Some of the earliest archives were based on field recordings of ethnomusicologists, or the collections of journalists, or of radio and record company personnel. For example, the original collection in the Berlin Phonogramm-Archiv (1905) consisted of field recordings deposited there by Carl Stumpf. Parts of that collection later found their way to America via George Herzog, who established the Archives of Folk and Primitive Music at Columbia University in 1936 and later moved the collection to Indiana University's Archives of Traditional Music. That archive also houses the Laura Boulton collection of folk music and liturgical music.

The Frances Densmore collection of Native American Indian music recordings became an important part of the Archive of Folk Song in the Library of Congress, which is now the American Folklife Center. Other significant private collections have shaped the research holdings of the Library of Congress; for example, the John Secrist collection of recordings by Enrico Caruso.

G. Robert Vincent began recording the voices of important people when he was still a youth, and eventually accumulated several thousand items that are now in the National Voice Library of Michigan State University. The outstanding resources of the Stanford Archive of Recorded Sound were based on donated private collections, notably that of William R. Moran. Walter C. Allen's collection of jazz materials formed the foundation for the Rutgers University Institute of Jazz Studies. The country/western collection of John Edwards was the basis for the archive that was originally at the University of California at Los Angeles, and is now at the Middle Tennessee State University.

Considerable impetus was given to collecting of records with the refinement of research and of discographical method, from the 1930s. In the 1930s and 1940s the British record collector societies flourished. Magazines devoted to records and collecting began to appear in quantity during the same period. The Gramophone Shop opened in New York in 1928, providing American collectors with access to imported discs. Julius Gabler's Commodore Music Shop, opened in 1924, became a haven for jazz collectors. Another New York emporium that featured jazz and popular music was the Liberty Music Shop (1927).

In the 1930s there were also mail order sales available from such emporia as Arnold's Archive (of Arnold Jacobson) in Grand Rapids, Michigan and

Records Unlimited (of Frank B. Pope) in Carnegie, Pennsylvania.

Other active collectors/dealers and reissuers of some of their collections include Stanley F. Kilar (1924) of Rar-Art's Records; Lewis G. Green (1926) of Lew Green productions; Moe Asch of Folkways Records; Andre Ross of Ross, Court & Co. (Rococo Records); A. Knight and D. Rocha (Dom Art Collection). Collectors were also helped by important dealers such as Jack Melzer of Merit Music Shop (New York); Henry Hirsch of the Record Album (New York); Julian Moses of American Record Collectors Exchange (New York), who compiled several early price guides, and *Collectors' Guide to American Recordings 1895-1925*; H. Royer Smith who began *New Records* publication, and "Music Man" Murray (Hollywood, California).

Archie Green, a millwright and labor organizer collected mining song recordings from which he produced his unique book, *Only a Minor*, a discographical history of the mining industry. In the 1960s he also became active in issuing folk music recordings for an Illinois folk music society.

In 1923 Compton Mackenzie (an avid collector), and Christopher Stone founded *The Gramophone* magazine, offering a forum and information source for British enthusiasts. It was through their journal that recognition of the collector was made, via the "Collectors' Corner" column that was featured from June 1928.

It was in *The Gramophone* that the earliest published attempts to list all the known records by certain artists were found; the April 1930 issue included a discography of Emmy Destinn. With the increase in the number of journals about records, especially in the U.S. and Britain, collectors benefited from an improved factual base. The *Phonograph Monthly Review* (1926) was the earliest magazine entirely devoted to commentary on new records; in 1935 it took the name *American Record Guide*. Another journal of importance was *New Records* (1933). *Record Research* (1955) has offered a forum for the publication of label discographies based on private collections. *Antique Phonograph Monthly* (1973) is a periodical emphasizing the cylinder record; the editor, Allen Koenigsberg, has a collection of more than 5,000 cylinders.

During the 1930s there emerged the supportive movements of record clubs and the issue of society records. Guides for collectors by collectors began to appear in print in this period, too, beginning with B.H. Haggin's *Music on Records* (1938) and later, Charles O'Connell's *The Other Side of the Record* (NY: Knopf, 1947).

As private collections gained in strength and organization, authors for scholarly treatises used a number

of them. For example, the 1970 study and discography of the Sousa Band, by James Smart, grew out of collaboration with Glenn D. Bridges of Detroit, and others. Bridges had accumulated an exhaustive Sousa and brass soloists collection, now with the International Trombone Association at the University of North Carolina-Greensboro. Bridges himself wrote the important work *Pioneers in Brass (1965, 1968, 1972)*. Biographies of those performers he collected were republished (2001) by his nephew Paul T. Jackson, with additions and recordings on a CD-ROM.

A devoted collector of recordings by the earliest performers, Jim Walsh began to write in 1942 an invaluable series of articles for *Hobbies* magazine, entitled "Favorite Pioneer Recording Artists." The series continued under his authorship until 1985. *Hobbies* also published a series of articles on operatic records and artists by Aida Favia-Artsay. James F.E. Dennis, Alfred Frankenstein, William R. Moran, John B. Richards, Leo Riemens, John Stratton, and Laurence C. Witten were among the collectors of vocal recordings who wrote regularly for the U.K. journal *Record Collector*, established by Dennis in 1946.

Important library archives were being shaped and formalized in the 1930s and 1940s, and to a large extent they have replaced private collections as the sites of discographical research. Communication among collectors — private and institutional — has benefited from the establishment of active organizations like the International Folk Music Council (1947), International Association of Music Libraries (1949), International Association of Jazz Record Collectors (1964), Association for Recorded Sound Collections (1966), International Association of Sound Archives (1968), and the International Society for Jazz Research (1969).

Directories of private and library archives began in the 1930s and 1940s with various specialized listings for folk music and jazz. These included Herzog (1936), Fry (1942), and Bannister (1948). The *World Wide Record Collectors Directory* first appeared in 1957. The first attempt at a comprehensive inventory of private and library collections was the *Preliminary Directory of Sound Recordings Collections in the United States and Canada*, prepared by the Association for Recorded Sound Collections 1966–1967. There was so much going on that *Library Trends* (July 1972) devoted its semiannual monograph to "Trends in Archival and Reference collections of Recorded Sound" edited by Gordon Stevenson.

Many specialized directories appeared in the 1970s. One such directory of mail order sources, including a short bibliography of recorded sound resources for record collectors was compiled by Paul T. Jackson in 1973, the *Collector's Contact Guide, 1973–74*. A revised and expanded edition appeared in 1975. Later,

other directories of resources were issued, such as the *Record/Tape Collector's Directory* (1976, 1978); the *Record Collector's International Directory* by Gary S. Felton, (NY: Crown, 1980); the *Kastlemusick Directory for Collectors of Recordings* (1981); and James Heintze's *Scholars' Guide to Washington, D.C. for Audio Resources* (1985). The Association for Recorded Sound Collections membership directory currently serves to identify the interests and holdings of many private collectors and libraries in America and beyond. Between 1967 and 1981 there had been no less than 18 directories for collectors published.

Toward the middle 1980s, personal computers began to make headway into the collector's arena. Some collectors initially used the computer to catalog their collection or to make lists, while others started communicating online via bulletin boards and public servers like Fidonet. Derek McDonald of the Rock Record Collectors Association recalls that Fidonet was where the RRCA began, the group of collectors eventually founded RRCA in 1995, and went on the Internet in 1996 at <http://rrca.hypermart.net/rrcmenu.html>. They launched their important review and biography archive project in 1999.

A few collectors were brought together through H&R Block's private network and service, Compuserve, prior to the freenets that opened the Internet and the World Wide Web to the public at large. Most of these groups were fan clubs with e-zines, and continued in the 1990s as Usenet groups on the Internet such as alt.music.<name or type>, alt. Rock-n-roll.<name or type>, alt.fan.<name>, rec.music.<type or name>, and rec.video.releases. Some of these are listed and linked to at the meta-site, Record Collectors Resources at http://www.moremusic.co.uk/links/uk_res.htm. John Gibbs's meta-site of recorded sound links, <http://www.lib.washington.edu/music/records.html> titled Early or Historical Sound Recordings Collections and other 78 & Cylinder Sites of Interest, was started in 1995, as <http://www.lib.washington.edu/music/preservation.html>, Audio Preservation and Restoration. In 1996, the Heritage of Military Bands site was started and is now at <http://www.worldmilitarybands.com/>. While it's intent is about military music, it brings record collectors of this genre together with links at <http://www.worldmilitarybands.com/recordgs.html>.

In just under 10 years (1993–2003), we have seen an explosion of collector activity and publishing on the Internet by recorded sound collectors and organizations on almost every conceivable aspect of collecting, such as album art, label discographies, meta-sites and Webrings linking collectors, dealers, auctions, collector organizations and library/archives. Some of these organizational sites and Webrings, particularly the one

sponsored by the Record Collector's Guild (see listing below), are remarkable and bring into easy access recordings information that might otherwise be unknown to the wider world of research. A few of these not cited earlier should be noted.

Meta-sites:

Record Collecting Resources by T. P. Uschanov
<http://www.helsinki.fi/~tuschano/records/>
 Vinyl Record Collectors Resources
<http://www.kixsoftware.com/vinylresources.html>
 RecordCollecting.com
<http://www.recordcollecting.com/index.html>

Organizations:

The Record Collector's Guild:
<http://members.tripod.com/~theRCGuild/>
 Association of Vogue Picture Record Collectors
<http://www.voguepicturerecords.org/avprc.htm>
 Wolverine Antique Music Society
<http://www.shellac.org/wams/>

Webrings/Message Boards:

<http://t.webring.com/webring?ring=vrcring;list>

This ring is comprised of international collectors and dealers of records and record related materials. To find a specific member site, use the above Webring search engine, or visit this Webrings website for a complete listing of all our members. This ring is sponsored by the Record Collectors Guild, founded on 08/30/1998, 116 site(s)

http://lp2cd.com/webrg_r.htm

The above could be called a meta-site of Webrings related to recordings including the Phonograph Webring, the eight-track Webring; the record collectors Webring, and others.

Collectors Universe <http://www.goodrockintonight.com/>

http://www.goodrockintonight.com/message_board.s.html

[For details on titles cited *see* the Bibliography.]

See also Archives of Traditional Music; Chicago Public Library; Criticism; Discography; Institute of Jazz Studies; Library of Congress; National Sound Archive (NSA); Rodgers and Hammerstein Archives of Recorded Sound; Sound Recording Periodicals; Sound Recordings and the Library; Stanford Archive of Recorded Sound (STARS); Syracuse Audio Archives; Yale Collection of Historical Sound Recordings

PAUL T. JACKSON

**COLLECTORS CHOICE MUSIC
(LABEL)**

CCM was begun in 1993 as a catalog source for vintage and out-of-print recordings, particularly focusing

on big band and nostalgia items. It now licenses material from the major labels for direct sale only through its website, issuing about 60 new releases a year. Most of this material is drawn from recordings of dance bands, vocalists, and pop stars of the 1930s–1950s, although they also reissue early rock and other pop material.

**COLLINS, ARTHUR
(7 FEB 1864–3 AUG 1933)**

American dialect singer, born in Philadelphia. His recording of "The Preacher and the Bear," made for Victor in May 1905 (#4431) and repeated on numerous labels, sold steadily for 20 years and may have been the all-time best-selling acoustic record. (Its Negro speech required an explanatory leaflet with its British issues.) Collins was one of the greatest performers of coon songs, and "one of the half dozen most popular singers on record" (Walsh). As a young man he studied voice in Philadelphia and sang with a touring opera group; then he appeared with the St. Louis Summer Opera. He began recording for Edison cylinders in 1898, and did most of his work for that firm, though he also made Berliner, Victor, Columbia, and Zonophone discs. In addition to a vast solo repertoire, Collins made more than 80 records in duet with Byron Harlan after 1900, creating what Walsh calls "the most popular team of comedians in the history of the phonograph."

Collins was one of the Eight Famous Victor Artists and for 10 years he sang with the Peerless Quartet. He and Harlan were among those chosen to do Edison tone tests, and during one of them (in 1921), he walked into an open trapdoor on stage as he was slipping away in the dark; even after a two-year recovery he was never the same performer. He did return to the recording horn for Edison with Harlan duets and some solo work in 1923–1924. Collins died in Tice, Florida. [Walsh 1942/11–12, 1943/1.]

COLLINS, JUDY (1 MAY 1939–)

American folk and popular singer, born in Seattle. A prodigy on the piano, she moved to the guitar at age 16 and began playing in clubs. On 21 Mar 1964 she gave a Town Hall concert that brought her great acclaim; an Elektra LP of it was a best seller. Her major single, a Grammy winner, was "Both Sides Now" (Elektra 45639; 1968). A major participant in the war-protest movement and the folk music revivals of the 1960s, she was highly popular on college campuses as well as in conventional club and concert settings. Her repertoire included hard rock as well as folk music, and she offered a notable interpretation of

COLLINS, PHIL

"Send in the Clowns" in 1975 (Elektra 46253) that was on the charts nine weeks, then another 17 weeks in 1977.

COLLINS, PHIL (31 JAN 1951–)

London native Phil Collins path to stardom was an unlikely one. Nevertheless, his expressive pop-rock vocal style dominated the charts in the 1980s, including 13 consecutive Top 10 singles in the U.S. alone.

From a child actor who appeared in the Beatles's film *A Hard Day's Night* and the London production of *Oliver!* in 1964, Collins shifted his focus to music when selected as replacement drummer for the progressive rock band, Genesis, in 1970. In addition to fronting a jazz-fusion ensemble, Brand X, he became lead singer for Genesis when Peter Gabriel opted for a solo career in 1974. In order to accommodate his smoother vocal approach, Genesis veered closer to the rock mainstream, achieving bestseller status.

A solo career was inevitable given the key role played by Collins in making Genesis a commercial force. His debut LP, *Face Value* (Atlantic 16029; 1981; #7; 4 million copies sold), driven by the hit songs "I Missed Again" (Atlantic 3790; 1981; #19), and "In the Air Tonight" (Atlantic 3824; 1981; #19), outsold all previously released Genesis albums. Aided by a succession of promotional video clips that portrayed Collins as an amiable, hard-working performer, Collins enjoyed substantial success with 21 Top 40 singles (seven of them million sellers) — including the Grammy-winning film title song, "Against All Odds" (Atlantic 89700; 1984; #1), "One More Night" (Atlantic 89588; 1985; #1), "Sussudio" (Atlantic 89560; 1985; #1), "Separate Lives" (Atlantic 89498; 1985; #1; with Marilyn Martin), "Groovy Kind of Love" (Atlantic 89017; 1988; #1), "Two Hearts" (Atlantic 88980; 1988; #1), and "Another Day in Paradise" (Atlantic 88774; 1989; #1) — as well as the LPs *Hello, I Must Be Going!* (Atlantic 80035; 1982; #8; double-platinum status), *No Jacket Required* (Atlantic 81240; 1985; #1; 7 million copies sold), *...But Seriously* (Atlantic 82050; 1989; #1; triple-platinum status), and *Serious Hits...Live!* (Atlantic 82157; 1990; #11; platinum status).

Collins's popularity dropped off to a considerable degree in the 1990s, with *Both Sides* (Atlantic 82550; 1993; #13), *Dance into the Light* (Atlantic 16000; 1996; #23), and *Hot Night in Paris* (WEA 83198; 1999) — which featured his hits performed live with a 20-piece big band — all failing to achieve platinum sales. Although departing Genesis in 1996, he has also continued singing and composing for film soundtracks, winning an Oscar for best original song with "You'll Be in My Heart" (WEA 860025; 1999; #21)

from *Tarzan: An Original Walt Disney Records Soundtrack* (Universal/Walt Disney; 1999).

FRANK HOFFMANN

COLONIAL (LABEL)

A disc distributed in Britain only, by Lockwood's of London, trademark registered November 1910. Matrices were from the Homophone Co.

COLONIAL QUARTET

Another name for the Rambler Minstrel Co.

COLORADO AND UTAH PHONOGRAPH CO.

A Denver firm, in 1890 one of the North American Phonograph Co. affiliates. S.W. Cantrill was manager, John Barber was assistant manager.

COLORATION

In a sound system, the change in frequency response occasioned by resonance peaks; subtle variations of intensity or quality of tone.

COLTRANE, JOHN WILLIAM (23 SEP 1926–17 JULY 1967)

American tenor and soprano jazz saxophonist, born in Hamlet, North Carolina. He studied in Philadelphia, then played in a band while serving in the U.S. Navy (1945–1946). After the war he worked with various groups, including those of Dizzy Gillespie, Johnny Hodges, and Thelonious Monk. Upon joining the Miles Davis Quintet in 1955 he became recognized for his innovative artistry. The album *Blue Trane* (Blue Note #1577; 1957), demonstrated his ideas of the late 1950s.

Coltrane formed his own quartet in 1960, and made a notable record, *My Favorite Things* (Atlantic #1361; 1960). During the 1960s he was one of the most influential leaders of avant-garde jazz, incorporating elements of African and Asian traditional music in his performances. "A Love Supreme" (Impulse #77; 1964), marked a peak in his creativity. He was a winner in the *Down Beat* polls of 1961 and 1964–1966. He died in New York of liver cancer. Coltrane won no Grammys while he was alive, but received a posthumous award for the Pablo album of reissues in 1981, *Bye Bye Blackbird*. Most of his work is now available on CDs. [Jepsen 1969.]

COLUMBIA (LABEL)

The story of Columbia, most recently Sony/CBS Records, is a tangle of similar company names. It seems useful to begin this account with a list of those companies, with abbreviations that will be employed in the article:

AGC-American Graphophone Co. Established 28 Mar 1887 in Washington, D.C. A merger with Columbia Phonograph Co., ca. 1894, left the two firms with separate corporate identities. AGC and CPC combined to form CPCG in May 1894.

CBS-Columbia Broadcasting System. Established July 1927 by CPC, acting for its parent firm, CGraphCL; originally named the Columbia Phonograph Broadcasting System.

CGraphC-Columbia Graphophone Co. A renaming, in January 1913, of CPCG. Liquidated 1924. Reorganized as part of the second CPC in March 1924.

CGraphCL-Columbia Graphophone Co., Ltd. Incorporated as a British company in February 1917. Acquired the second CPC on 31 March 1925. Became an EMI subsidiary in 1931.

CGraphMC-Columbia Graphophone Manufacturing Co. Established 1918 as the manufacturing division of CGraphC; in fact, it did what AGC had been doing. Yet AGC persisted; in *TMW* of February 1922, H.L. Willson is named as president of both firms. In receivership until 1 March 1924, reorganized as part of CPC.

CI-Columbia (International) Ltd. Established 3 Oct 1925 as a holding company to control the second CPC, ColGraphCL, and all Columbia business throughout the world. It also controlled several European firms (Lindström, Transoceanic Co., Parlophone, and finally the record business of French Pathé). On 13 Apr 1931 CPC became independent of CI. The other CI operations merged with EMI, Ltd. on 20 Apr 1931.

CPC-Columbia Phonograph Co. Established 1888, incorporated as Columbia Phonograph Co., Inc. on 15 Jan 1889 in Washington, D.C., by Edward D. Easton and Roland F. Cromelin. Merged interests with AGC ca. 1894. Combined with AGC to form CPCG in May 1894, but retained its corporate identity. Succeeded by CGraphC in 1913. Name revived in 1924, as a second CPC was established February 1924 by a group of American investors as a reorganization of the assets of CGraphC and CGraphMC. Acquired by CGraphCL (Louis Sterling) on 31 Mar 1925. Became part of CI on 3 Oct 1925, then gained independence from CI on 13 Apr 1931, a week before the formation of EMI, Ltd., which acquired the rest of CI.

Acquired by Grigsby-Grunow in May 1931. In 1933 Grigsby-Grunow failed, and CPC was acquired by the American Record Corp. When CBS acquired American Record Corp. in 1938, the second CPC

The Talking Machine World, New York, February 15, 1926



The advertisement shows a Columbia record at the top with the label "Columbia" and "Song of the Vagabonds". Below the record is a list of branch dealers in various cities, including New York, Chicago, and London. The text reads: "Write the Columbia branch or distributor in your vicinity for full information on the new Columbia line".

Columbia
NEW PROCESS Records

Advertisement for "New Process" Columbia Records, showing the label's various branch dealers, from *Talking Machine World*, February 15, 1926. From the Collections of the Library of Congress

became a subsidiary of the firm that had once been a subsidiary of the first CPC.

CPCG-Columbia Phonograph Co., General. Established 14 May 1894 in Bridgeport, Connecticut, as worldwide recording and sales agent of AGC and CPC, except for Washington, D.C., Maryland, and Delaware. (Each of the three firms retained its corporate identity.) President was A.B. Cromelin. In 1913 it became part of the new CGraphC. Public documentation of CPCG often omitted the "General" in its name, leading to confusion with CPC, which continued to exist separately after the merger of interests.

CPCG-L-Columbia Phonograph Co., General-London Branch. Established 1900. In January 1913 it was renamed Columbia Graphophone Co., with the renaming of the American firm. It was succeeded by CGraphCL in February 1917.

CRC-Columbia Recording Co. New name for CPC in 1938, when it was acquired by CBS from American Record Co.

COLUMBIA (LABEL)

CRI-Columbia Records, Inc. New name for CRC, when it became the record unit within CBS. Sold to Sony in 1988.

The North American Phonograph Co., established 14 July 1888 by Jesse H. Lippincott, included among its 33 regional semi-independent subsidiaries the CPC, which had already been operating in 1888 and was formally incorporated in January 1889. CPC was located earliest at 5th Street and Louisiana Avenue, moving that summer to 627 E Street, NW, Washington, D.C. (the building is still there), with a territory including Maryland and Delaware as well as the District of Columbia. In 1892 the firm moved to 919 Pennsylvania Avenue. Although Columbia was supposed to sell and service graphophones (dictating machines, cylinder format) made by AGC and the similar Edison phonograph to government offices—and it was successful enough to turn a profit in its first year—it soon branched out. Under president Edward D. Easton, CPC pioneered in the area of entertainment recording. John Yorke AtLee, a whistler, began to make records for CPC in 1889, and Easton then signed John Philip Sousa and his United States Marine Band to an exclusive contract. In 1890 the world saw its first ancestor of the *Schwann Catalog*, in a one-page list of cylinders on sale by CPC—a combination of Edison recordings and Columbia's originals. The price per cylinder was between \$1 and \$2. The rapid growth of the company is demonstrated by the size of its June 1891 sales list—it was 10 pages long. Among the items available were 27 marches; 13 polkas; 10 waltzes; 34 miscellaneous hymns and anthems; various solos with piano for clarinet, cornet, and voice; “comic,” “negro,” “Irish” and like material; 20 spoken records; and 36 of AtLee's specialties accompanied by one “Prof. Gaisberg”—better known later without his (pseudo) academic title as Fred Gaisberg, one of the great impresarios of the industry.

Another CPC list, in November 1891, included the first records by the Brilliant Quartette. The 1893 catalog grew to 32 pages, with such novelties as foreign language instruction and Shakespeare recitations. The first female singer to be identified, Susie Davenport, made her only catalog appearance; and George Diamond, the ever-popular tenor, made his first of many. Other famous names of the time included Pat Brady and Russell Hunting, comic monologists. The company was selling 300–500 cylinders a day, mostly by mail. Sales were essentially confined to commercial coin-ops (the early jukeboxes), since cylinder machines were still too costly (at \$150 or more) for most home buyers. Easton opened a phonograph parlor at 919 Pennsylvania Avenue, moving his office there. By November 1891 Columbia was operating 140 coin-ops in the Washington-Baltimore area.

Easton was at this time the general manager of another Washington company in the cylinder machine business, AGC. By May 1893 he had acquired enough stock in AGC to assume control. When in 1894 the entire North American group collapsed, Easton arranged to merge his two firms, CPC and AGC; Columbia Phonograph Co., General, was established on 14 May 1894 to consolidate those interests and to handle worldwide operations (outside of Washington, D.C., Maryland, and Delaware). Thereafter AGC confined itself to development and manufacturing, while Columbia was devoted to sales and distribution. Both AGC and CPC retained their legal identities and continued to operate in the Washington, D.C., Maryland, and Delaware region. Calvin Child was hired in 1894 to direct the CPCG music department. He was a recording expert with experience in the New England Phonograph Co.

Success of CPCG was demonstrated in 1895 by expansion to other cities: a New York office opened at 1159 Broadway, and another office and phonograph parlor opened on the boardwalk in Atlantic City, New Jersey. Sale price dropped to \$0.60 per cylinder, for the 575 titles in the 1895 catalog. New artists of 1895 included Sousa's own Grand Concert Band and the famous trombonist Arthur Pryor. In the next year's catalog “the great and only” Jules Levy appeared with 13 cornet numbers.

Brooks (1978) describes 1897 as “the first true boom year for the recording industry.” Economic conditions in the U.S. were improved, and a lower price line of cylinder machines had become available. Disc sales were rising rapidly. A half million cylinder and disc records were produced, a number that tripled the following year and rose to 2.8 million in 1899. Columbia was comfortably ahead of its competition, and reduced its cylinder price to \$0.50. In 1897 Easton moved the headquarters and studios to Broadway and 27th Street, New York. Other offices were opened, between 1896 and 1898, in St. Louis, Philadelphia, Chicago, Buffalo (New York), and San Francisco. The first overseas address was 34 Boulevard des Italiens, Paris (1897); others followed in Berlin (1899), and London (1900). The London Branch was renamed Columbia Phonograph Co. General — London in 1900.

Record companies exploited the short Spanish-American War of 1898, issuing topical and patriotic items. Columbia produced at least two lists of “music of the war”; among the selections there was one by the Rough Riders's bugler, playing all the bugle calls relating to the battle of San Juan Hill. The other novelty of 1898 was ragtime, well covered on Columbia cylinders. And in that year the firm offered its first recording by an opera singer, Bernard Bégué of Paris, doing short excerpts.



A selection of Columbia wax cylinders. Courtesy Frank Hoffmann

Over the next few years the industry began to accept the practical superiority of discs over cylinders. Columbia produced a finger-wound toy disc player in 1899, invented by Thomas H. Macdonald, with a stock of nursery rhymes and other pieces. In 1901 Columbia began to issue disc records, made by the Globe Record Co., using the label name Climax. Eldridge Johnson bought Globe on 15 Jan 1902, and used the acquisition as leverage in negotiating a seminal deal between his Victor Talking Machine Co. and Columbia. In that settlement the two firms agreed to share their patents, effectively closing out other competition in the U.S. Columbia retrieved Climax, but dropped the name and issued discs with the Columbia name during late summer or fall of 1902.

Cylinders were still made for the Graphophone Grand and other Columbia players — among them the five-inch Grand that gave a louder playback than the standard size — and were selling at 300–550 per day — but attention focused on the new seven-inch and 10-inch records, and in 1903 a 14-inch disc. All were single-sided, with announcements. The cylinder phonograph began fading from the scene (Columbia discontinued cylinder production in 1908). In 1913 the term “phonograph” was dropped from the company name, and the Columbia Graphophone Co. succeeded CPCG. In Britain CGraphC was also established as the new corporate name for the Columbia Phonograph Co., General — London Branch.

Columbia's 1902 catalog displayed a great variety of music: love ballads, sacred songs, comedy discs, wind, brass, and string solos. A red label opera series was offered in 1903 to counter the Victor Red Seal series; stars of the Metropolitan Opera were recorded on discs with their autographs on the labels and their own voices doing announcements. But sales of red labels were unsatisfactory; Victor was doing better both in recruitment of artists (such as Enrico Caruso), and in recording technique. Easton pulled back from

opera, and Victor took a lead they never relinquished in the classical repertoire.

Columbia pioneered in 1904 with the two-sided disc — all their discs were double-sided after September 1908 — and in 1907 they marketed an “indestructible” Velvet Tone record that was developed by inventor Guglielmo Marconi. The Columbia Indestructible Cylinder was also available in late 1908, CPC having taken over the output of the Indestructible Phonographic Record Co. of Albany. In 1909 the cylinders were on the U.K. market as well. As a manufacturer of playback machines, Columbia claimed preeminence: an advertisement for CPCG in *TMW* in 1906 claimed the status of “largest talking machine manufacturers in the world.” In 1906 Columbia Phonograph Co., General had offices in London (89 Great Eastern Street), Glasgow (50 Union Street), Manchester (54 Market Street), Cardiff (96 St. Mary Street), and Sydney (Paling's Buildings). There were also a hundred Columbia shops throughout the world, and “dealers everywhere.” One product advertised in 1906 was the Home Premier “sound-magnifying” cylinder player, selling in U.K. at £16 16 sh. A 1907 graphophone had an aluminum tone arm “to eliminate all false vibrations”; it sold for \$30. For discs, CPCG was making a \$50 Grafonola Favorite in 1911 — the object of one of the first testimonial advertisements, by Mary Garden, in *Leslie's Weekly*.

Between 1908 and 1910 the company reissued operatic performances made by Fonotipia and Odeon. None of these initiatives proved to be market sensations, but success was achieved with fine recordings of instrumentalists like Josef Hofmann, Leopold Godowsky, Vladimir de Pachmann, Percy Grainger, Eugen Ysaÿe, and Pablo Casals. And Columbia was very strong on the popular side, with dance music, ragtime, and in 1917 one of the earliest jazz records ever made, by the Original Dixieland Jass Band: “Darktown Strutters' Ball.”

The U.K. branch of the firm had been Columbia Phonograph Co., General — London until January 1913, when it was renamed (with the American firm) Columbia Graphophone Co. It had been working under the direction of the American company since its establishment in May 1900. Louis Sterling became chief executive in October 1909. Under his direction, the company began to record symphonic music from 1915, conducted by Thomas Beecham or Henry Wood, and chamber music by the Lener String Quartet or the London String Quartet. This move to the orchestral repertoire had been as early as 1905 by other labels, but Edward Easton of U.S. Columbia had been reluctant to follow them. With his death in 1915, CGraphC contracted to make recordings of major American orchestras, such as those of Chicago and New York.

COLUMBIA (LABEL)

Several years of prosperity followed. The firm moved to the Woolworth Building in 1913, evidence of its rise in the industry. In February 1917 the British company became Columbia Graphophone Co., Ltd., but remained under U.S. ownership.

Sales boomed into the 1920s, then began to fall as the radio appeared on the scene and won the hearts of American consumers. As an economy move, the studios and offices were moved from the Woolworth Building to 1819 Broadway, on 4 Apr 1921. But American Columbia — like so many record companies at that time — was headed for bankruptcy.

In 1924 both CGraphC and CGraphMC were liquidated. But a group of American investors reorganized the assets under the name Columbia Phonograph Co. There was by that time acceptance of the term “phonograph” as the designation of a disc player. Meanwhile, in Britain, Louis Sterling had acquired the shares of CGraphL from American stockholders (23 Apr 1923). He wanted to acquire a license from Western Electric for the new electrical recording process, and saw his opportunity in late 1924, when Western Electric licensed the reorganized CPC. He sailed for New York on 26 Dec 1924, and succeeded in purchasing CPC (31 Mar 1925) with the options it already had from Western Electric.

Columbia (International) Ltd. was formed on 3 Oct 1925, embracing all the British and U.S. interests. Thus the pioneer U.S. firm became a subsidiary of its former British subsidiary. But Sterling did preserve the venerable name, Columbia Phonograph Co. A new trademark and label design was introduced by Sterling, who brought in fresh management and equipment, and got ready for the electrical age. (Columbia in the U.K. had already been involved with electrical recording as early as 11 Nov 1920, by processing the recording made in Westminster Abbey by two Canadians — in a project undertaken for themselves and for the abbey — setting down a memorial service quite unsuccessfully.)

Electrical recording made a discreet entrance, with Columbia and Victor (which also had a license to use the Western Electric process) agreeing not to publicize the method. They feared that the enormous stocks of acoustic records would be considered obsolete, and economic disaster (already presaged by the radio) would swiftly follow. The strategy was a good one. The public noted the improved quality of records, and had begun to be aware of the advantages that discs provided over radio; and economic conditions in the mid- to late-1920s favored wider purchasing of entertainment products. Acoustic recordings were gradually replaced in the catalogs by electrics. The famous Columbia Masterworks label was introduced, and great energy was poured into the recording of complete symphonies

and other large works. American Columbia was also vigorous in the popular field: Bing Crosby's first record was theirs (1926), and Paul Whiteman was stolen from Victor in 1928. (He went back to Victor in two years, but first gave Columbia a few more Bing Crosby items, and Roy Barge playing the Gershwin *Concerto in F.*) In September 1925 CPC offered a new low-price label (\$0.50 instead of the \$0.75 for regular Columbias): Harmony. These were acoustics, featuring dance and popular material. John S. Macdonald became new manager of the recording department in November 1925.

Up to the beginning of the Depression sales were remarkably good in both the U.K. and U.S. During the month of December 1925, 1,750,000 Columbia discs were sold in Britain alone. Okeh records was acquired by CI in 1926, Nipponophone (Japan) in May 1927, Homophon GmbH (Germany) in May 1928, and Pathé (France) ca. October 1928. There were factories in Turkey and Greece. CBS was incorporated as a subsidiary in 1927, with 16 stations across America. CPC profits in 1926 were \$270,000 net; for 1927, \$760,000. An exclusive contract to record performances at Bayreuth was announced in March 1928; selections were recorded from *Parsifal*, *Siegfried*, *Rheingold*, and *Walküre*. Columbia's answer to the Victor Orthophonic phonograph was its Viva-Tonal, introduced in 1925, heavily promoted from 1927. Intended for playback of the new electrical recordings, it was however, a windup and fully acoustic in its technology. It did not match Victor's model in the market.

With the Wall Street collapse of 1929 the phonograph industry was nearly destroyed. Consolidation of interests was inevitable as a survival move. In April 1931 the conglomerate EMI, Ltd. (Electric and Musical Industries, Ltd.) was built up from the assets of Columbia (which already owned Parlophone), and the Gramophone Co. (which owned Marconiphone Co., Ltd.). EMI acquired 50 factories in 19 countries. It did not acquire CPC, however, since the American firm had gained independence from CI on 13 Apr 1931, a week before EMI was formed. Control of CPC passed to Warner Brothers, the motion picture giant, who then sold it to radio manufacturer Grigsby-Grunow.

With the collapse of Grigsby-Grunow in 1933, U.S. Columbia was taken over by the American Record Corp. at a sale price of \$70,000. The Columbia label survived these sad maneuvers, and discs under that name continued to appear. (Brunswick was the key label of American Record Corp.). John Hammond, as recording director from 1933 to 1948, brought many great jazz stars to the label.

A final bizarre turn occurred in 1938–1939, as CBS, once a subsidiary of CPC, acquired the American Record Corp. and CPC along with it. On the initiative of Edward Wallerstein of RCA, CBS presi-

dent William S. Paley made the purchase with a view toward reviving the glory of the Columbia label. Wallerstein moved over to become Columbia's new general manager, and the renaissance began. More new company names emerged: Columbia Recording Co. (for manufacture), and Columbia Phonograph Corp. (for sales) — the latter then changing to Columbia Records, Inc.

So the two veteran giants of the industry, Victor and Columbia, faced off once again. Columbia signed up great names in the classical field, making up for lost time: The All-American [Youth] Orchestra under Leopold Stokowski; Salvatore Baccaloni; John Barbirolli; Thomas Beecham, the Budapest Quartet, the Busch Quartet, the Chicago Symphony, the Cleveland Orchestra, the Concertgebouw Orchestra, the Don Cossack Chorus, Nelson Eddy, Walter Gieseking, Roland Hayes, Myra Hess, Jan Kiepura, Andre Kostelanetz, Lotte Lehmann, the London Philharmonic, Lauritz Melchior, Nathan Milstein, Dimitri Mitropoulos, Claudia Muzio, Guiomar Novaes, Egon Petri, the Philharmonic-Symphony Orchestra of New York, Gregor Piatigorsky, Lily Pons, Fritz Reiner, Paul Robeson, Artur Rodzinski, Bidú Sayão, La Scala, Albert Schweitzer, Rudolf Serkin, Risë Stevens, Joseph Szigeti, Astrid Varnay, the Vienna Philharmonic, Bruno Walter, and Felix Weingartner — all these appeared in the catalogs of the next few years. Among the popular stars were harmonicist Larry Adler, Louis Armstrong, Mildred Bailey, Count Basie, Frankie Carle, Eddy Duchin, Duke Ellington, Benny Goodman, Horace Heidt, Fletcher Henderson, Harry James, Gene Krupa, Kay Kyser, Ted Lewis, Ray Noble, Kate Smith, Jack Teagarden, Claude Thornhill, Orrin Tucker, and Teddy Wilson. Twenty-six complete grand operas were available in 1943, along with the entire standard concert repertoire of the time.

Columbia's last confrontation with Victor took place in 1949–1950, in the “war of the speeds.” Both companies had experimented in the early 1930s with discs that rotated 33 1/3 rpm, for cinema, sound effects, and other uses. Both had encountered technical problems. Research and development work was hampered first by the Depression and then by the World War II. Even so, in 1948 Columbia Records introduced its long-playing record (LP), revolutionizing the industry. Victor's first response was the 45 in 1949; it was not as useful as the LP for classical music, and served to delay the advent of Victor's 33 1/3 rpm record until 1950. By that time Columbia and several other LP labels had taken over the classical music area. Columbia stood for the first time as the dominant rival in the half-century struggle with Victor.

Starting in 1951, Columbia made 45s as well as LPs, using the small format for popular singles. Victor



Mid-'80s Columbia record label. Courtesy Frank Hoffmann

used the LP for classical recordings. Columbia rode the crest of an ever-growing wave of disc sales in the U.S., joining (if late) in the rock music craze and taking a larger share of that market than any of the major labels. The 1960s were equally strong. *West Side Story* with the original cast was a great multi-million seller; the soundtrack album was even more popular, on the charts for three years. In the mid-1960s Columbia was one of the five giants of the industry, a place that it held through the 1970s.

A curious decision in 1979 led to the dropping of the venerable label name Columbia, in favor of “CBS.” The late 1970s marked the peak of the record market in America, followed by a sharp decline in the 1980s. In 1986 Laurence A. Tisch was named chief executive of CBS Inc. He sold the magazine and recording divisions of the firm; CBS Records went to Sony Corp. in January 1988 for \$2 billion. Sales had been \$1.5 billion for CBS records in 1986, with a large share of the growing CD market. [Andrews 1985/1; Ault 1986; Brooks; Brooks 1978; Bryan 1982; Isom; Lorenz 1981.]

See also Columbia Record Players; Orchestra Recording

COLUMBIA BAND

One of the names given to the house band for Columbia; heard on the earliest 1904 double-sided discs (matrix 946 was their *Faust* Ballet Music). In 1906 the band performed on one of the first records to

COLUMBIA BROADCASTING SYSTEM (CBS)

commemorate a disaster: "The Destruction of San Francisco." There were few listings for the band after 1909, as later house recordings were identified with the Charles A. Prince Orchestra.

COLUMBIA BROADCASTING SYSTEM (CBS)

A firm incorporated in 1927, originally the Columbia Phonograph Broadcasting System, a subsidiary of the Columbia Phonograph Co., Inc. William S. Paley acquired control in 1928. In addition to great broadcasting innovations and successes, Paley wished to return the firm to recording activities, and purchased the Columbia Phonograph Co., which had become a subsidiary of the American Record Corp., in 1938. He renamed it the Columbia Recording Co. (for manufacture), and Columbia Phonograph Corp. (for sales) — the latter then named Columbia Records, Inc. — and engaged Edward Wallerstein to manage it and revive the old quality of the label.

CBS Inc., as it is currently identified, became the leading entertainment firm of the 1950s and 1960s, and diversified widely. In 1989 CBS had about 7,000 employees and sales of nearly \$3 billion. It owned five television stations and had 212 affiliated stations. The firm also provided radio programming to 574 independent stations and owned 19 radio stations. CBS has extensive interests in film production, but has sold its educational and professional publishing division and its magazine division. Laurence Tisch gradually became the largest stockholder, and was elected chief executive officer in 1986. In 1988 Columbia Records, Inc., was sold to Sony.

See also Columbia

COLUMBIA DOUBLE QUARTET

An octet that recorded for Columbia in 1915. The members were not identified, but Walsh surmises that they were the Columbia Stellar Quartet and the Peerless Quartet. [Walsh 1962/10.]

COLUMBIA INDESTRUCTIBLE RECORDS

SEE INDESTRUCTIBLE PHONOGRAPHIC RECORD CO.

COLUMBIA LADIES QUARTET

A group that made Columbia records in 1913. It consisted of Grace Kerns, Louise MacMahon, Mildred Potter, and Clara Moister. [Walsh 1962/10.]

COLUMBIA MALE QUARTET

A group active from the 1890s to 1912. Although it was renamed as the Peerless Quartet in 1906, it kept the old name for Columbia records until 1912. [Walsh 1962/10.]

COLUMBIA MANTEL CO.

A Brooklyn firm, established in 1914; in 1916 it was located at Leonard and Devoe Streets. It manufactured and sold the Recordion disc player, in eight models.

COLUMBIA MIXED QUARTET

A group active in 1913, consisting of Grace Kerns, Mildred Potter, Charles Harrison, and Frank Croxton.

COLUMBIA OCTETTE

SEE COLUMBIA DOUBLE QUARTET

COLUMBIA ORCHESTRA

A house orchestra for Columbia in 1896–1909, replacing Issler's Orchestra in that capacity. Directors were Fred Hager (from the late 1890s to about 1902–03), Charles Adam Prince (ca. 1902–1905, when he established his own Prince's Orchestra), and Tom Clark. They had more than 100 cylinders in Columbia's 1897 catalog. The first disc record issued with a Columbia label, in 1902, was made by this group; they played "In a Clock Store." Waltz recordings were among their favorites.

COLUMBIA RECORD PLAYERS

The various Columbia firms manufactured a great many models of cylinder and disc players. Cylinder machines, known as Graphophones, are taken up first. All types that have been reported in the literature are listed here.

Chichester A. Bell and Charles Sumner Tainter invented the Graphophone in 1885 (patent issued 1886) while at work in the Volta Laboratory in Washington, D.C. It was primarily a dictation machine, differing from the Edison tinfoil phonograph by incising the sound signal on the wax-coated surface of a cardboard cylinder. The cylinder was stationary, and the reproducer moved along it. (This first Graphophone is illustrated in Chew 1981, p. 10, and in Jewell 1977, p. 11. Power to the machine was provided by hand cranking, a foot treadle (illustrated in Ault 1987), a battery, or a spring motor — the last-named

COLUMBIA RECORD PLAYERS

Year/Model	Type	Trademark	Comments
1897	C	Universal	For office use and home entertainment. It played six-inch solid wax cylinders with a triple spring motor, turn speed of 120 rpm. Price was \$50. Illustration in Marty 1979, p. 29.
1898 ca. 1898	BS BX	Eagle Eagle	A coin-op, encased in glass or wood. Illustration in Marty 1979, p. 27. A \$12 version, with oak cabinet, spring motor, and a 10-inch horn. Illustrations in Jewell 1977, p. 65; Read 1976, plate XI.
1898	AT		The first Graphophone with an ornate case; it had a double-spring motor. Some 90,000 were produced. Illustrations in Hazelcorn 1976, p. 10; Jewell 1977, pp. 45, 65; TMR 41 (1976), p. 765.
1898	Q		The lowest price model (\$5.00), designed by Macdonald. Single-spring motor. Illustrations in Chew 1981, p. 52; Jewell 1977, p. 47; Read 1976, plate XI.
1898	QQ		An elaborate version of Q, with a wood cabinet and clockwork motor; sold for \$10. Illustration in Read 1976, plate XI.
1898	GG	Graphophone Grand	Designed by Macdonald to play the new 5-inch diameter "grand" cylinders; it was comparable to the Edison Concert Phonograph. Mandrel was 4 1/2 inches long, and the horn was 56 inches. Despite the much greater volume achieved by the machine, and improvements in the higher frequency response, the Grand was not successful. The original price was \$300, soon reduced to \$150. Illustrations in Hazelcorn 1976, p. 12; NAG 53 (1985), pp. 10, 12.
1899	HG	Home Grand	A compact version of the GG, selling for \$100. Edison's Concert machine was selling at \$125, and Columbia was trying to stay in competition. Illustration in NAG 53 (1985), p. 10.
1899	AG	Columbia Grand	Said to be of "less expensive construction" than the GG and HG, "but embodying the same principles" (an advertisement of September 1900, reproduced in Paul 1985), this model was offered in reply to Edison's further price drop on the Concert machine, down to \$100. Price of the AG was \$75, then reduced to \$50. Illustrations in Marty 1979, p. 27; Paul 1985, pp. 10, 12.
1899	SG	Slot Grand	A coin-op version of the Grand, selling for \$100.
1900	MG	Multiplex Grand	A Macdonald design, shown at the Paris Exposition of 1900. It was a massive machine, run by a six-spring motor, having three tracks and three reproducers. Each track could handle one part of a trio performance, thus providing the elements of a stereophonic system. Price was \$1,000, suitable for the shah of Iran, who bought one. Illustrations in Chew 1981, p. 62; Jewell 1977, p. 19.
1901	AA		The smallest size cabinet Graphophone, measuring only 10.4 by 7.4 by 9.4 inches, selling for \$18. It was crank wound. Illustrations in Hazelcorn 1976, p. 16; Jewell 1977, p. 64; Marty 1979, p. 33.
1901	AB	Double Eagle (in Europe)	A Macdonald machine in an ornate oak cabinet, with a five-inch telescoping mandrel. The motor was weak. It sold for \$25. Illustrations in Hazelcorn 1976, p. 18; Marty 1979, p. 31.
1901	AD		Like the AB, a machine with telescoping mandrel; it had a six-spring motor. Price was \$75. Illustration in Hazelcorn 1976, p. 14.
1901	AF		A combination of the AD type with an AG cabinet; two-spring motor.
1902	AO		A \$30 model in an ornate cabinet, with a three-spring motor. Illustration in Hazelcorn 1976, p. 20.
1903	AP		Lyrophone (in Europe) A cast-iron machine, based on the Lyrophone prototype of 1897. Illustration in TMR 41 (1976), p. 765.
1903	AQ		An inexpensive (\$3.00) version of the AP, having an aluminum diaphragm. Playing head movement was controlled by a fork resting on an endless screw. In the Sears catalog this was sold as the Oxford Junior. Illustrations in Hazelcorn 1976, p. 22; Marty 1979, p. 30; TMR 41 (1976), p. 765.
1903	AT		Same as the 1898 AT, but designed for the reproducer to be horizontal when playing. Illustrations in Chew 1981, p. 52; Jewell 1977, p. 45.
1903	Q		Languagephone or Mignon (in Europe) Equivalent to the 1898 Q except for trim. The Languagephone version was used for Rosenthal instructional cylinders. Price was \$7.50. Illustration in Jewell 1977, p. 79.
1904	AW		Same as the AO but with a simpler cabinet and a new reproducer.

Year/Model	Type	Trademark	Comments
1904	AZ		Same as the AT, except had the new Lyric reproducer which pressed the stylus against the cylinder by spring pressure. It was popular at \$25, with some 20,000 produced. Illustrations in Chew 1981, p. 52; Hazelcorn 1976, p. 24; Jewell 1977, p. 45.
1905	BC	Twentieth Century Premier	A very large machine with a six-inch mandrel and a large (4.3 inch diameter) diaphragm, meant to play the Twentieth Century three-minute cylinder. The Higham Amplifier was offered. Price was \$100. Illustrations in Chew 1981, p. 66; Hazelcorn 1976, p. 26; Marty 1979, p. 29; Read 1976, pp. 99, 159, and plate XI.
1906	BE	Leader	A triple-spring machine in a dark oak case, with the Lyric reproducer; it sold for \$30. Illustration in Read 1976, plate XI.
1906	BF	Peerless	Similar to the BE, but with a four-spring motor that could be wound while playing. It handled six-inch cylinders. Price was \$40, with an aluminum horn. Illustration in Read 1976, p. 163 and plate XII.
1906	BG	Sovereign	Same as the BF except for trim; price \$50.
1906	BCG	Twentieth Century Grand	A type BC redesigned to play the five-inch Grand cylinder; never advertised.
1906	BK	Jewel	Similar to the AZ, with an aluminum horn and support crane, double spring-motor, and Lyric reproducer. It sold for \$20. Illustrations in Jewell 1977, p. 148; Marty 1979, p. 31; and Read 1976, plate XII.
1906	BM		Home Premier or Home (in Britain) A smaller version of the BC, selling for \$75.
1907	BO	Invincible	The first cylinder player to have a rear mounted tone arm assembly, similar to those on disc players. It had a six-inch mandrel, triple-spring motor, and a price of \$45. Illustration in Hazelcorn 1976, p. 28.
1907	BQ	Crown in Britain	Similar to BK, but with tone arm and the BO type horizontal reproducer; sold for \$30. Illustrations in Chew 1981, p. 52; Jewell 1977, p. 46.
1907	BV		Home Queen (by mail order) A single-spring motor model in a small oak cabinet, selling for \$15.95. Illustration in Hazelcorn 1976, p. 32.
1907	BET	New Invincible	Similar to BE, but with the rear mounted bracket. The heavy duty motor played two-minute or four-minute cylinders. Illustration in Read 1976, plate XII.
1907	BFT	New Peerless	A \$55 machine, similar to the BF but with a rear-mounted assembly. Illustration in Hazelcorn 1976, p. 30.
1907	BGT	New Sovereign	Same as the BG except for the rear mounted assembly; sold for \$70.
1907	BKT	New Leader	Same as the BK, except for the rear-mounted bracket and the aluminum tone arm; it played two-minute or four-minute cylinders. Price was \$35–40. Illustration in Read 1976, plate XII.
1908	BVT	Oxford Talking Machine	A rear-mounted BV, sold by Sears, Roebuck, and Co. in its 1908 catalog under the Oxford name at \$14.95.

These same machines are listed now by type name (first) and then by type letter.

up and carried with an attached handle (illustrated in Marty 1979, p. 34). The 1907 Symphony Grand was the first concealed horn model; in fact, it concealed its very nature, being made to look like an upright piano (illustrated in Chew 1981, p. 53). Chew 1981, Jewell 1977, and Marty 1979 illustrate some of the other types sold before 1908. One of them, the open horn machine of ca. 1907, represented a high point of technology for 10 years; but the change to internal horn design did not improve the sonic results. The internal horn did allow designer fancy to roam wildly; one of Columbia's players was made to look like a desk (the Regent) and another to look like a round table (the Colonial); both are illustrated in Jewell 1977, pp. 41 and 44.

Columbia's 1907 disc player, the Grafonola, was the firm's answer to the Victrola, selling at the same price, \$200. It was audibly inferior to the Victor machine. In 1909 a concealed horn Elite model was introduced at \$100. An electric motor version was available in 1915, and in 1920 the "only non-set automatic stop" was advertised. Elaborate cases brought the cost of certain Grafonolas up to \$1,000. Illustrations of the 1915 windup console Grafonola are in Hoover 1971, pp. 58–59. [Hazelcorn 1976 is the source for most of the information in this entry.]

See also Cylinder

COLUMBIA SEXTETTE

COLUMBIA SEXTETTE

A group active in 1902 on Columbia cylinders; they did not carry over to discs. Members were Byron Harlan, Joe Belmont, Frank Stanley, and three unnamed females. [Walsh 1962/10.]

COLUMBIA STELLAR QUARTETTE

A group active on Columbia discs in 1914–1917. Members were Charles Harrison, John Barnes Wells (replaced later by Henry Burr, then by Reed Miller), Andrea Sarto, and Frank Croxton. They were also known as the Broadway Quartet (on Columbia), and as the Stellar Quartet (on Aeolian-Vocalion in the 1920s).

COLUMBIA-RENA (LABEL)

SEE *RENA MANUFACTURING Co., LTD.*

COLUMBO, RUSS

(14 JAN 1908–2 SEPT 1934)

Born Eugenio Ruggerio in Philadelphia, Columbo was one of the most popular singers of the 1920s and early 1930s. He was first heard as a violinist and vocalist with Gus Arnheim in 1928–1930. He recorded for Okeh and Victor, and formed his own band in 1932. “Prisoner of Love,” his own composition, brought him great fame (Victor #22867; 1931). Columbo continued with Victor to 1932, then went to other labels. He died in a gun accident in Los Angeles.

COMB FILTERING, ACOUSTIC

The result of two audio signals interacting in such a way that their combined outputs cause the global frequency response to become more irregular and choppy appearing, like the teeth of a comb. This can happen when the outputs of two speaker systems (or even speaker drivers within the same system that have overlapping responses) reach the listener’s ears at slightly different times. The effect is rarely detrimental, unless the alternating peaks and dips are widely spaced. Wall reflections combining with the signals from the speakers also cause comb filtering, and the result is sometimes a pleasant enhancement of spaciousness.

During recording, the comb-filtering effects of spaced microphones can be measurably similar to what is reproduced by speakers, but the result may be subjectively more disturbing. Microphone comb filtering is similar to what is sometimes intentionally applied electrically to a monophonic signal to create a pseudo-stereo effect.

HOWARD FERSTLER

COMBINATION PHONOGRAPH

With the 1908 introduction of four-minute cylinders, the Edison Amberols, gearing of new phonographs (by Edison and others) was modified so that either the new records or the older two-minute cylinders could be played. (See table below.)

Type/Name	Letter/Year	Letter/Year	Name
Baby Grand	G 1894	A 1896, 1897	Columbia
Bijou	N 1895	AA 1901	
Bijou	AN 1897	AB 1901	Double Eagle
Columbia	A 1896, 1897	AD 1901	
Columbia Grand	AG 1899	AF 1901	
Crown	BQ 1907	AG 1899	Columbia Grand
Domestic	B 1897	AN 1897	Bijou
Double Eagle	AB 1901	AO 1902	
Eagle	BX ca. 1898	AP 1903	Lyrophone
Eagle	B 1897	AQ 1903	Oxford Junior
Eagle	BS 1898	AS 1897	
Grand	GG 1898	AT 1903	
Grand	SG 1899	AT 1898	
Grand	AG 1899	AW 1904	
Grand	BCG 1906	AZ 1904	
Grand	MG 1900	B 1897	Eagle; Domestic
Graphophone Grand	GG 1898	BC 1905	Twentieth Century Premier
Home	BM 1906	BCG 1906	Twentieth Century Grand
Home Grand	HG 1899	BE 1906	Leader
Home Premier	BM 1906	BET 1907	New Invincible
Home Queen	BV 1907	BF 1906	Peerless
Invincible	BO 1907	BFT 1907	New Peerless
Jewel	BK 1906	BG 1906	Sovereign
Languagephone	Q 1903	BGT 1907	New Sovereign
		BK 1906	Jewel

Type/Name	Letter/Year	Letter/Year	Name
Leader	BE 1906	BKT 1907	New Leader
Lyrophone	AP 1903	BM 1906	Home Premier; Home
Mignon	Q 1903	BO 1907	Invincible
Mignon	QQ 1898	BQ 1907	Crown
Multiplex Grand	MG 1900	BS 1898	Eagle in wood cabinet
New Invincible	BET 1907	BV 1907	Home Queen
New Leader	BKT 1907	BVT 1908	Oxford Talking Machine
New Peerless	BFT 1907	BX ca. 1898	Eagle in oak cabinet
New Sovereign	BGT 1907	C 1897	Universal
Oxford Junior	AQ 1903	F 1895	Perfected Graphophone
Oxford Talking Machine	BVT 1908	F 1894	Spring Motor Graphophone
Peerless	BF 1906	G 1894	Baby Grand
Perfected Graphophone	F 1895	GG 1898	Graphophone Grand
Premier	BC 1905	HG 1899	Home Grand
Premier	BM 1906	K 1895	Standard
Slot Grand	SG 1899	MG 1900	Multiplex Grand
Sovereign	BG 1906	N 1895	Bijou
Spring Motor Graphophone	F 1894	Q 1903	Languagephone; Mignon
Standard	K 1895	Q 1898	
Twentieth Century Premier	BC 1905	QQ 1898	Mignon
Universal	C 1897	SG 1899	Slot Grand

The machines thus designed were the Combination Phonographs. Owners of the older type players were given the opportunity to upgrade their equipment with the purchase of Combination Attachments. [Frow 1978.]

COMBS, SEAN "PUFFY" (AKA PUFF DADDY; P. DIDDY), B. (4 NOV 1970—)

Rapper, hip-hop impresario, founder of Bad Boy Entertainment. As difficult as it might be to keep track of Puff Daddy's many name changes, it could be more daunting to trace his multifaceted career as creator and promoter of mid-1990s urban music. Like many other successful rap entrepreneurs, Combs was born to a middle-class family in suburban Mt. Vernon, New York, despite his bad-boy image. He began working as an A&R intern at Uptown Records in the early 1990s, but quickly showed himself to be a talented producer of rap and hip-hop recordings, launching the career of Mary J. Bilge. In 1993, he founded his own Bad Boy Entertainment company, in association with Clive Davis's Arista label, a part of the Bertelsmann media conglomerate. (In early 2003, the relationship with Arista was ended; Combs is looking for a new distributor as of this writing.) Through the 1990s, he became a successful producer, working with top rap artists including The Notorious B.I.G., Faith Evans, and Total. In 1997, he launched his own career with the album *No Way Out*, which eventually sold more than 5 million copies; it won the Grammy for best rap album in 1998. However, his follow-up album, *Forever*, released in 1999, sold less than 1.5 million. Despite his prolific track record, or perhaps because of it, Puff Daddy came under some criticism for his heavy reliance on sampling rather than creating his own backing tracks.

Combs's career has been dogged by controversies. Through the mid-1990s, a more dire controversy

stemmed from the bi-coastal rivalry between Bad Boy and Death Row Records, spotlighted notoriously by the deaths of Tupac Shakur and Notorious B.I.G., and the jailing of Death Row's founder Suge Knight. Further violence occurred in 1999 when Combs was charged with beating Steve Stoute, the head of Interscope Records, in Stoute's New York offices, in an apparent disagreement over a video in which Combs appeared in a Christ-like pose, wearing a crown of thorns. In 2000-early 2001, Combs was embroiled in a trial over his alleged involvement with a shooting that occurred in December 1999 at a New York club that he was attending with his then-girlfriend, singer/actress Jennifer Lopez; he was found not guilty in March 2001, although rap artist Shayne (a Combs protégé) was found guilty of being the triggerman. Thereafter, he changed his moniker from Puff Daddy to P. Diddy. In summer 2001, he released his third album, *The Saga Continues...*, which for the first time did not feature samples of earlier material; the album addressed his breakup with Lopez and charges that Combs was not an original or talented MC. [Official website: <http://www.p-diddy.com/pd/index.html>.]

BRAD HILL

COMEDY RECORDINGS

The sound recording industry emerged at a time when vaudeville (in the U.S.) and the music hall (in the U.K.) were at their height of popularity. So it was natural that

COMEDY RECORDINGS

the vaudeville genres — sentimental songs and “comic turns” — should become staples of the recorded repertoire. As early as 1892, Edison’s North American Phonograph Co. made cylinder records of Ben R. Cook, baritone, in comic songs like “When Hogan Pays His Rent” and “Get Your Whiskers Cut.” Cal Stewart was a greatly popular comic monologist, recording from ca. 1897 for Edison and Berliner, then many other labels. He made numerous records of his “Uncle Josh” character (there were 57 of them in the 1912 Edison catalog). Negro dialect material, thought to be extremely humorous, was a popular genre; it was highly developed by Arthur Collins, whose 1905 rendition “The Preacher and the Bear” — available on Edison 9000; Victor 4431, and a number of other labels — may have been the all time best-selling acoustic recording. Collins also teamed with Byron Harlan, making about 80 comic dialogs; they were perhaps the most popular comic team ever to record. Harry Lauder recorded his routines from 1902 to 1940, making some of the most popular acoustic discs; Lauder was the only comedian to appear on Victor Red Seal records. Other early comedians on record included Florrie Forde, Billy Golden, Murry K. Hill, Ada Jones, Billy Murray, Joe Natus, Dan Quinn, Josie Sadler, Burt Shepard, Len Spencer, Billy Williams (the American), Billy Williams (the Australian), and Nat Wills (“The Happy Tramp”). Minstrel recordings were primarily comical in intent.

During the late acoustic period, popular comedians included the Avon Comedy Four, Gallagher and Shean, and Monroe Silver. Silver was one of the many dialect comedians, whose humor was based on ethnic speech and on the supposed ethnic characteristics of various immigrant groups. But the end of vaudeville also marked the decline of comedy recording.

Gracie Fields was one of the few outstanding humorists on record in the 1930s, presenting comic songs. Radio was the medium for comedy before and during World War II. Radio stars like Jack Benny, Eddie Cantor, Bob Hope, and Red Skelton did not make records of their skits and monologs. Indeed, the category of comedy records does not appear at all in the catalogs of Columbia, Decca, and Victor during the 1940s. There were big band novelty numbers that provided some comic relief from love ballads; Spike Jones was a popular practitioner of novelty songs.

Comic recording revived after World War II, primarily in the form of solo monologs. Shelley Berman and Bob Newhart made popular albums in the late 1950s and early 1960s. Vaughn Meader’s *First Family*, a spoof of President John F. Kennedy and his wife, was on the charts for 19 weeks in 1962. Myron Cohen carried the tradition of Jewish dialect humor to sophisticated heights. Bill Cosby initiated a series of 15 chart albums with *I Started Out as a Child* in 1964.



The Smothers Brothers, one of the best-selling comedy acts of the '60s. Courtesy Frank Hoffmann

His greatest hit was *Why Is There Air?* in 1965, 77 weeks on the charts. Anna Russell made albums in the 1950s that spoofed opera and sopranos. Pianist Victor Borge recorded comic monologs and humorous musical performances.

Comedy teams flourished again in the 1960s. Mike Nichols and Elaine May recorded timely dialogs beginning in 1961. Mel Brooks and Carl Reiner made a series of successes on the concept of the “2,000-year-old man,” in 1961. Bob Elliott and Ray Goulding (“Bob and Ray”) created gentle parodies of radio and television. Post-war British humor was represented by Flanders and Swann, whose wit was expressed in music. Allan Sherman sang parodies of popular songs with a Jewish ethnic twist. Stan Freberg presented large-cast parodies of radio and television shows in the 1950s and 1960s. The Hoffnung Music Festival and PDQ Bach made fun of composers and concerts. Tom Lehrer wrote and performed satiric songs with great effect, highlighting political and social material. Almost all of Mort Sahl’s comedy was politically oriented. Lenny Bruce was known for “sick humor.” Jo Stafford and Paul Weston, recording as Jonathan Edwards and Darlene Paul, made brilliant parodies of pop music performances in the 1970s.

In addition to Cosby, a number of distinctive Black comedians recorded in the 1960s and 1970s: Red Foxx, Dick Gregory, and Richard Pryor. Eddie Murphy’s *Comedian* album (Columbia FC 39005; 1983), was on the charts for 42 weeks. Chris Rock inherited this tradition in the 1990s.

In the late 1960s, Firesign Theater was popular among a new comedy audience drawn from the hippie

subculture; Cheech and Chong and George Carlin also appealed to this audience. Britain's Bonzo Dog Band was a rare example of a 1960s-era group satirizing rock groups; founding member Neil Innes was later a key player in the Beatles group parody, The Rutles, in the later 1970s. Also in the 1970s, the broadcast of the Monty Python BBC television series on U.S. public television led to the release of some of their comedy albums in the U.S., although they remained most popular as television and film performers. Martin Mull began his career as a musical satirist, signing with the Capricorn label in 1972, and achieving some success with his musical parodies, most notably 1973's "Dueling Tubas" (Capricorn 0117), a note-for-note copy of the bluegrass instrumental "Dueling Banjos" that itself was a novelty hit, thanks to its use in the film *Deliverance* that year. In 1977, Steve Martin had a major hit single with his parody "King Tut" (Warner 8577), which reached #17 on the pop charts. The Blues Brothers (aka John Belushi and Dan Aykroyd), were both a parody and homage to Chicago-style blues performers; they had minor hits with covers of R&B classics, most notably Sam & Dave's "Soul Man" (Atlantic 3545), which reached #14 on the charts in 1979.

The 1980s and 1990s saw the rise of a number of comedians, including "shock" comedian Andrew Dice Clay and his followers, like Sam Kinnison. Southern monologist Jeff Foxworthy was a major success, whose 1993 album, *You Might Be a Red Neck* (Laughing Hyena 11; reissued Warner 45314), is said to be the best-selling comedy album ever released; the follow-up, 1995's *Games Rednecks Play* (Warners 45856), sold over 2 million copies. Song parodist "Weird" Al Yankovic built a major career out of mocking popular rock and pop hits on disc and video, most notably "Eat It" (Rock 'n' Roll 04374), a parody of Michael Jackson's "Beat It," which reached #12 on the pop charts in 1984.

In the 1980s and 1990s, rap inspired comedians as well. Comic rappers who achieved popularity included the Fat Boys and Biz Markie. Arsenio Hall also issued a rap-parody album under the name "Chunky A." The Jerky Boys became a major phenomenon in 1993 with their best-selling album of crank phone calls; a subsequent film tanked, although the duo continued to release new recordings through the decade. [Debenham 1988.]

REV. CARL BENSON

COMMODORE MUSIC SHOP/ COMMODORE (LABEL)

The original store was a radio and record store located at 146 E. 42nd Street, New York, specializing in jazz material, which was opened in 1924 by Julius Gabler. The shop became a gathering place for the jazz community,



Commodore record produced by the Commodore Music Shop. Courtesy David A. Jasen.

due to the energy and enthusiasm of Gabler's son, Milt. He sponsored Sunday afternoon jam sessions beginning in 1933–1934, apparently the first informal jazz concerts in New York; these took place in various locations, finally at Jimmy Ryan's Club, 53 W. 52nd Street. Milt Gabler became interested in the reissue of unavailable records (he was the first to reissue jazz discs), and eventually established the United Hot Clubs of America collectors series. Beginning in 1938, the shop released 10-inch and 12-inch discs of jazz artists, featuring Dixieland; it became the first jazz independent label with any longevity, a model for Blue Note, Keynote, and similar pre-war competitors of the major firms. Milt Gabler produced the discs. He was the first to list performers and recording dates on record labels. A principal early performer was Eddie Condon, guitarist; the roster eventually included such giants as Billie Holiday, Lester Young, Coleman Hawkins, and Fats Waller. Recording ceased in 1954, and the shop closed four years later, unable to compete with larger chains like Sam Goody's. Many items were reissued on the Mainstream label (in "phony stereo" as Gabler once described it) in the 1960s; then by Atlantic and Columbia; and in the U.K. on Decca LPs. "The Complete Commodore Jazz Recordings" began to appear in 1988, a digitally remastered product of Mosaic Records. [Fox 1988; Rust 1978.]

COMO, PERRY

(18 MAY 1912–12 MAY 2001)

American popular singer and television star, born Pierino Como in Canonsburg, Pennsylvania. While

COMPACT DISC

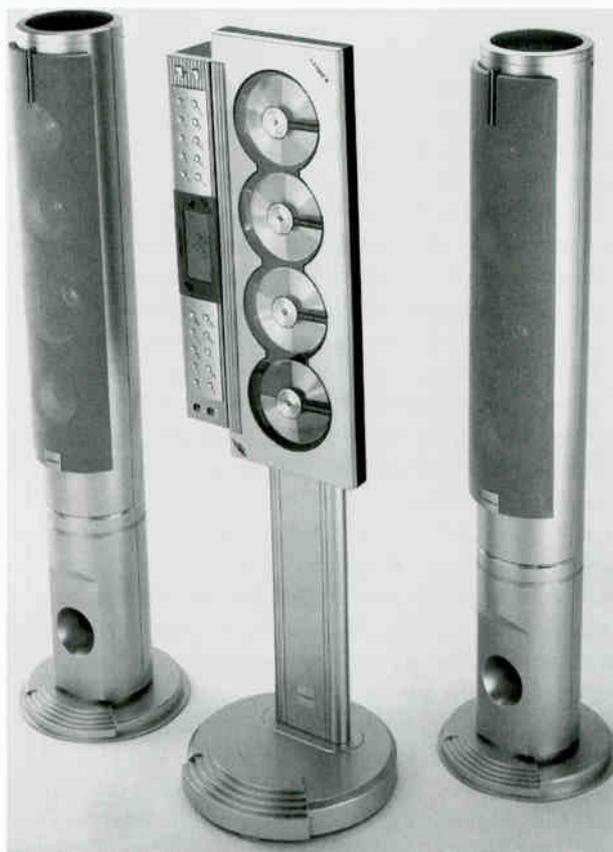
operating a barber shop in his home town he auditioned successfully with Freddie Carlone's band and went on the road with them. He was vocalist with Ted Weems from 1937 to 1942, then sang in clubs, theaters, and films. While with Weems he made records for Decca, starting with "Lazy Weather" (#822; 1936). On his own he signed with Victor in 1942, and initiated a series of million-selling discs, including "Till the End of Time" (Victor 20-1709; 1945), "If I Loved You" (Victor 20-1676; 1945), "A Hubba-hubba-hubba" (1945), "Temptation" (1945; Victor 20-1919; 1945), "Prisoner of Love" (Victor 20-1814; 1946), "Because" (Victor 20-2653). By 1969 he had sold 50 million discs. His last great hit record was "It's Impossible" (1970). He won the Emmy for male singer of 1954 and 1955; and a Grammy in 1958 for best male vocal, "Catch a Falling Star" (Victor #7128). Como's voice was distinctive and immediately recognizable, having a markedly casual character; though classed as a crooner, he did not indulge in the mannerisms associated with that group. He died at his home in Florida after spending several decades in retirement.

COMPACT DISC

Commonly known as the CD. A recording made with digital technology instead of the analog recording method that was employed from Edison's time through the LP era. The disc and the machine required to play it were offered first by Philips and Sony in 1983, producing a general sense in the industry that a true revolution had occurred — one that was comparable to the introduction of electrical recording in 1925.

In making a CD, the signal is taped first, just as in analog recording. Then it is sampled electronically: measured 44,100 times a second. The measurements are expressed as strings of digits (zeroes and ones) in binary code. These binary strings are interpreted by a laser beam that cuts millions of corresponding pits into a master disc; from the master a stamper is made; and from the stamper the final CD is pressed. The playing surface of the disc is of molded plastic — a tough, scratch-resistant polycarbonate that covers an internal aluminum-film coating that carries the pits. While the playing surface is fairly durable, the reverse side of the disc is simply coated with lacquer and labeling paint. This makes that surface of the disc rather fragile, and so a reasonable amount of care has to be taken during handling. Contrary to early advertising copy, a CD is not indestructible, or even close to it.

During playback, a laser beam follows the spiral signal path — from the inner circumference to the edge, as the disc spins and the pits alternately reflect and scatter the light beam. The CD is a constant linear velocity device, which means that the rotational speed



Fisher CD Tower Audio System. Courtesy Sanyo Electronics

varies as the laser tracks different parts of the surface, thereby keeping the linear speed constant. To achieve this linearity, the rotational speed varies from 200 to 500 rpm. Pulses of light reflect off the mirror to an optical sensor, which reads the pits in binary code into a microprocessor. At that stage the digital signal is changed back to analog by a DAC (digital-to-analog converter), and it can then be perceived as "sound" once again after being amplified in the traditional manner and routed to speaker systems.

A standard CD is 4 3/4 inches (11.9 centimeters) in diameter. "Mini CDs" of three-inch diameter came into production in the late 1980s as 20-minute counterparts to 45s, but did not gain lasting success in the USA. This was in part to the fact that early CD players required a plastic ring-shaped adapter, which snapped on to the outer rim of the disc, in order to play them.

CD technology offers a number of advantages over its analog predecessors. (1) A standard CD holds a specification-defined maximum of 74 minutes on its single side, but variations can increase the playing time to about 80 minutes. That length will not be affected by program loudness levels or bandwidth. (2) A dynamic range of up to 96 dB-or more, if noise shaping is employed. (3) An extremely good signal-to-noise ratio,

with obnoxious background-noise levels very low, compared to the LP system or analog cassette; often as much as 30 or 40 dB better. (4) Playback speed that is digitally controlled by an internal clock mechanism, meaning that there is no audible wow or flutter. (5) A subjectively flat frequency response is achieved across the entire audio frequency range, from well below 20 Hz, on out to 20 kHz. (6) Finally, since the surface of the disc is never touched by a stylus or other mechanical part, it does not wear with use.

All CD decently designed players on the market by the early 1990s produced subjectively near-perfect playback, so the only meaningful differences to be noted in the output signal from the whole system came from characteristics of the amplifier and loudspeakers (particularly the latter), and, of course, from the microphones, mixers, and techniques involved with making the recordings themselves.

During its formative years, a system of codes was used to indicate how a CD was recorded. DDD meant that digital equipment was used in the original tape recording, and in the mixing, editing, and mastering of the music. ADD indicated that the signal was tape recorded on analog equipment, but mixed and mastered digitally. AAD indicated that only the final master was digitally produced. Since the middle of the 1990s, these terms have been used less and less, as nearly all new digital recordings are produced with the DDD technique.

In spite of its huge commercial success and acceptance by the audio-engineering community, some critics and musicians still believe that digital recording is cold, or that it lacks depth and spaciousness. That such doubts still exist among a vocal minority is more a sign of their inability to understand what digital recording and playback does, than their ability to hear advantages with an analog LP record technology that has hundreds, if not thousands, of times the distortion of even the most basic and low-priced compact-disc playback systems.

A lingering doubt about CDs pertains to their longevity. The fact must be faced that there is no long-term research to determine what may happen to the CD signals over time, particularly under adverse conditions of storage. However, there is little doubt that if repeated and regular playback is contemplated, the CD will easily outlast any LP or tape system.

The LP record has ceased being a mainstream, or even a solidly alternative playback format in the USA. Some small outfits produce items for those who are still enamored of the format, but very few record stores sell new LP recordings at all. Many equipment catalogs do not offer LP turntables, either, and even some hi-fi shops no longer offer them. CD players are practically standard equipment in many automobiles, and there are portable models for joggers that sell for under \$100. Changers that can handle dozens of CDs are now available to those

who do not care to fool with single-disc players, and even automobiles offer multi-disc changers as options.

Interactive compact discs (CD-I) were introduced in 1987, opening yet another technological door. CD-I is an application of the CD-ROM format. It allows simultaneous storage of audio, video, graphics, text, and data that can be displayed on a screen and played through CD audio systems. An advance on this technology is the DVD-ROM.

In terms of state-of-the-art audio performance, the CD itself is now about to be superseded by the DVD-A and/or SACD formats, and even Dolby Digital and DTS audio releases are appearing that surpass the sound quality of the CD, if only because they offer more channels. However, given the low price and convenience of the CD, it is likely that it will remain the mainstream consumer's playback format of choice for some time to come. [Ault 1987; Borwick 1987/3; 1989; Pohlmann 1989.]

See also Automobile Sound Systems; Digital Recording; Minidisc (MD); Preservation of Sound Recordings; Record Condition; Surface Speed

REV. HOWARD FERSTLER

COMPAGNIE AMERICAINE DU PHONOGRAPH EDISON

Also referred to as the Compagnie du Phonograph Edison. The French branch of Thomas Edison's National Phonograph Co., located in Paris, organized to manufacture and distribute his cylinders. It opened around 1898.

COMPAGNIE FRANÇAISE DU GRAMOPHONE

A branch of the Gramophone Co., established in Paris by Alfred Clark in 1899. It sold Zonophone records, among them the one-minute Baby.

COMPAGNIE GÉNÉRALE DES PHONOGRAPHES

A firm noted for its involvement in landmark litigation in Brussels, Belgium, during 1906. The court supported the right of talking machine companies to make records without paying royalties to the composers, based on a strict interpretation of the Bern Convention.

See also Copyright

COMPANDING

A term derived from the phrase "compressing and expanding," indicating an action upon the signal in a

COMPATIBLE (I)

sound system that alternately reduces and increases its amplitude.

COMPATIBLE (II)

In relation to sound recordings, a term that refers to the stereophonic discs or cassettes that can be played without damage on monophonic playback equipment, or to quadrasonic discs playable on stereo equipment.

COMPATIBLE (III)

A term applied to elements of a sound system that can be used efficiently together. For practical purposes all parts of a modern analog sound system, regardless of manufacturer, will have enough compatibility (e.g., in voltage levels and impedance) to avoid distortion. Problems of noncompatibility may arise in digital systems, if an element departs from the original Sony/Philips digital-interface standard. [Hirsch 1988.]

COMPENSATION

An adjustment of responses in a sound system to rectify deficiencies in balance of frequencies or loudness.

See also **Equalization (EQ)**

COMPENSATOR

An electronic circuit in a sound system that modifies the frequency response in a predetermined manner.

COMPLIANCE (I)

The capability of a loud-speaker diaphragm to yield or flex in accord with the power of the incoming signal.

COMPLIANCE (II)

In a cartridge, the capability to respond freely to the groove undulations. High compliance, combined with low tip mass in the stylus, is the preferred condition for reducing groove wear. However, excessive compliance can introduce distortion. The electrical property that corresponds to compliance is capacitance.

See also **Mechanical Electrical Analogies**

COMPO COMPANY LTD.

A Canadian firm, established in the Montreal suburb of Lachine by Herbert S. Berliner on 2 Nov 1921. Berliner (son of Emile Berliner) had been president of Berliner Gramophone Co. of Montreal, the Canadian Victor affiliate, but he resigned in April 1921 in a policy dispute with Victor. The Compo label, Apex, provided steady competition for Canadian Victor; it was

among the earliest to issue electrical recordings (in late 1925; identified first as "New Process" records, then as "Electrographic"), and was instrumental in driving down prices of the major firms by lowering its own. From 1923 to 1925 Compo issued race records in the U.S. under the label name Ajax. MCA, Inc. acquired Compo in 1964. [Robertson 1983.]

COMPOSER RECORDINGS

In 1889 Johannes Brahms became the first major composer to perform his music on record; he played (in Vienna) his "Hungarian Dance Number 1" for an Edison cylinder, using the Perfected Phonograph. Jules Massenet recorded a scene from his *Sappho* in 1903, with soprano Georgette Leblanc Maeterlinck. Camille Saint-Saens was recorded in 1904 and 1919, doing original piano works and transcriptions.

Welte-Mignon's reproducing piano rolls included performances by numerous composer-pianists.

Composers of later generations appear frequently in the catalogs, performing on disc and tape. Moore 1964 has a useful list of composers, grouped by country, with records (excluding rolls) of their own music. The list gives only material in the Yale Historical Collection. [Griffiths 1976.]

COMPOSER RECORDINGS INC.

A record company established in 1954 by Otto Luening, Douglas Moore, and Oliver Daniel to concentrate on contemporary music. Support was given



CRI label. Courtesy Frank Hoffmann

by the American Composers Alliance, the Martha Baird Rockefeller Fund for Music, Inc., and other foundations. The company was able to release one or two records per month, and (as of 2002) has issued more than 700 recordings. All formats have been marketed, LP, cassette, and CD. The company incorporated as a nonprofit corporation in 1976, the first record label to do so. In 1994, a 40th Anniversary Concert was held in NY. [Website: www.Composersrecording.com; Harman 1974.]

COMPRESSED FILES

Sound files that have been reduced in size using any one of a variety of available digital codec (compression/decompression algorithm) schemes. Compression of audio files is widely used to reduce the time and bandwidth required to download or play sound files over the Internet. To compress files, a codec converts certain parts of the original audio signal, such as silence, into more compact code. The file is then decompressed upon playback to restore the original signal elements.

The MPEG Layer 3 codec, introduced in 1997 and now known as MP3, reduces an audio signal by as much as 90 percent. This allows the digital storage of hi-fi quality sound files in one-tenth of the space required by uncompressed audio files. MP3 is currently one of the most widely used audio compression schemes.

The growth of the Internet has led to the widespread development of competing audio compression schemes. In addition to MP3, the most prevalent are RealAudio, QuickTime, and Win Media-Player. Unlike MP3, some of these other schemes can also compress video signals.

Audio compression and decompression can result in the loss of fidelity of the original signal. There are currently no industry standards governing the quality of compressed audio signals. Results can vary from codec to codec for different kinds of audio content such as classical music, spoken word, rock music, folk music, and combinations of spoken word and music.

THOM HOLMES

COMPRESSION

In radio transmissions, the process of making the louder passages a bit quieter and the quiet passages possibly a bit louder, in order to reduce background noise and make the signals more audible, particularly when listened to in moving automobiles. In analog tape recording, compression is used to mask background noise during the recording process. During playback, the signals would be given expansion back to

live-music dynamic range, without the background noise being brought back to previous levels.

See also **Data Compression; DBX Corporation; Dolby Surround Sound**

REV. HOWARD FERSTLER

COMPRESSION MOLDING

The process of forming a disc by compressing a quantity of suitable plastic in a cavity.

See also **Disc**

COMPTON-PRICE CO.

A firm located in Coshocton, Ohio. It made the Stradivara disc player in 1916–1918.

CONCENTRIC GROOVE

The closed circular groove on a disc that follows the lead-out groove; it is also called the finishing groove.

CONCERT

A term applied to wide (five-inch) diameter cylinders produced by various manufacturers beginning in late 1898, and to the machines used to play them.

See also **Cylinder**

CONCERT (LABEL) (I)

A disc sold by Leeds & Catlin in 1906, a sister to the company's Imperial label.

CONCERT (LABEL) (II)

A product of the Concert Record Manufacturing Co., of New York. Only one series of 69 discs has been located, all issued in 1920. Henry Burr and the Peerless Quartet were among the artists, but the overall offering was not distinguished. Some of the material was taken from Lyric records. Priced higher than Victor and Columbia records, and having no special features, the label was not successful, and surviving examples are very rare. [Rust 1978.]

CONCERT HALL (LABEL)

One of the early LP labels, issued by the Concert Hall Society (New York) from 1949 to 1958, and listed in the first Schwann Catalog. The first LPs, sold by subscription, were of violinist Louis Kaufman performing Vivaldi and Khachaturian. Later, the records were sold in shops. Popular and international material was also recorded.

CONCERTGEBOUW ORCHESTRA

CONCERTGEBOUW ORCHESTRA

SEE ROYAL CONCERTGEBOUW ORCHESTRA AMSTERDAM

CONCERTOPHONE

SEE SKELLY MANUFACTURING CO.

CONCORD RECORDS (LABEL)

A family of record labels focusing primarily on jazz music. The original Concord Jazz label was founded in 1973 by businessman Carl E. Jefferson as an outgrowth of an annual jazz festival that he sponsored in Concord, California. His first release was a live concert recording from the festival made by Herb Ellis and Joe Pass. The label originally focused primarily on California-region jazz performers who had first come to prominence in the 1950s like Pass and Ellis. Eventually, other imprints were formed, included Concord Picante for Latin-Jazz, Concord Vista for new jazz, and Concord Records for pop and blues. The company has also formed partnerships with various artists over the years, including Marian McPartland for release of her popular NPR radio show, "Piano Jazz," on disc (under the Jazz Alliance imprint); Stretch Records, formed in 1996 with pianist Chick Corea; Peak Records, in partnership with soul-jazz singer Russ Freeman of the Rippingtons in 2000; Michael Feinstein's "Feinery" label, founded to highlight classics of American pop songs; and Playboy Jazz, formed in association with the popular magazine in 2001. Notable acts on the Concord labels include Rosemary Clooney, Gary Burton, and Eddie Palmieri. When Jefferson became ill in the early 1990s, he sought a buyer for the firm, eventually selling to Alliance Entertainment Corporation in 1994, a record distribution firm. Alliance hired Glen Barros, who had been a consultant in arranging for its purchase, to run the label. [Website: www.concordrecords.com.]

CARL BENSON

CONDENSITE

A plastic coating material for discs, developed by Jonas Aylsworth and his associates in the Edison laboratories around 1910. It was a thermosetting pheno resin, virtually the same as Bakelite, which was being developed by Leo Baekeland at the General Bakelite Co. These inventions marked the beginnings of the modern plastics industry.

CONDON-AUTOSTOP CO.

A firm located in New York. It was maker and distributor of the Autostop — a device that stopped rotation of the turntable when a disc had played its final

groove. The first advertising appeared in 1911. The Autostop worked by means of a circular weight placed on the center of the record, with a steel pointer extending from it; the pointer had to be adjusted to coincide with the last groove. A tripper attached to the side of the machine would catch the pointer. In 1913 the company announced its Noset device, referred to in the advertising as an "autostartstop."

CONE

SEE LOUDSPEAKER

CONFÉDÉRATION INTERNATIONALE DE SOCIÉTÉS D'AUTEURS ET COMPOSITEURS (CISAC)

An international association of collecting societies, founded in 1926, located in Paris, with branch offices in Buenos Aires and Singapore. Member associations are those in each country that are concerned with copyright protection and collection of royalties in the area of performance rights and the arts. Originally consisting of 18 members, as of 2002, the organization represented 199 authors' societies in 103 countries. Although it represents all types of creative artists, income from music represents 90 percent of all revenue collected by its members, which, as of 2000 was cumulatively nearly 6 million Euros. [Website: www.cisac.org.]

CONFREY, ZEZ

(3 APR 1895–22 NOV 1971)

American composer and ragtime pianist, born Edward Elezear Confrey in Peru, Illinois, noted for his virtuoso novelty numbers. He recorded on piano rolls, and made highly popular discs of his own: "Kitten on the Keys" (Emerson 10486; Victor 18900; Brunswick 2082; 1921), "Dizzy Fingers" (Victor 20777; 1927), and many others. He began as a student of classical piano at the Chicago Musical College; and he appeared in the "Experiment in Modern Music," the Paul Whiteman concert of 1924 in which Gershwin's *Rhapsody in Blue* had its premiere. Confrey died in Lakewood, New Jersey. [Jasen 1971.]

CONIFF, RAY (6 NOV 1916–12 OCT 2002)

Ray Conniff was born a New Englander in Attleboro, Massachusetts. His first musical memories were listening to his father play the family piano. His dad taught him to play the trombone, and by his junior year of high school he had become a fine trombone player. His first musical venture was in a high school extracurricular dance band known as Van Rounseville and his Hollangers. After high school he went to

Boston to be in Dan Murphey's Musical Skippers and a society orchestra where he learned about the intricacies of writing and playing dance music.

In 1935, Conniff was hired to play trombone, arrange, and compose for Bunny Berrigan's orchestra. Three years later he joined Bob Crosby's (Bing's brother) Bob Cats. While in New York, he studied at the Julliard School of Music. During the latter half of the 1940s he studied musical elements that helped create hit records. He considered rhythms, harmonies, tempos, lyrics, moods, and instrumental/vocal combinations. The use of voices as instruments became a feature of his style. Columbia record executives heard of Conniff's expertise and invited him in 1954 to arrange and conduct for singers Johnny Ray, Rosemary Clooney, Guy Mitchell, and Marty Robbins, and later for orchestras. After Conniff's arrangement of Don Cherry's million seller, "Band of Gold," producer Mitch Miller invited Conniff to make a vocal/instrumental album using his exciting stylizations. The result, *'S Wonderful* (Columbia 925; 1956), utilized a mixture of neutral syllables, familiar song lyrics and instrumental/vocal sounds.

In 1969 Conniff's album *His Orchestra, His Chorus, His Singers, His Sound* made it to number one in the U.K. album charts. In 1974, he took a group to Russia, becoming the first Americans to record there. That album was *Ray Conniff in Moscow*. Throughout his long career, Conniff produced 70 albums plus seven compilations. With Norman Luboff and Johnny Mann, Conniff ranks as one of Hollywood's three key pop choral groups. Conniff died in Escondido, California.

VAL HICKS

CONJUNTO

Conjunto, like American country music, possesses rural roots and deals with traditional barroom subjects such as drinking and cheating. The most notable feature of the style is its danceable, 2/4 polka beat. However, many other stylistic elements can be discerned within the mix, including Mexican forms like ranchera and mariachi (the latter built around a classical instrumental ensemble — e.g., several winds, violins, guitarrons; the Germans contributed accordions, whose versatility made them comparable to today's synthesizers). Also influential on Conjunto styles are German, Polish, and Czech immigrant dances, as well as other European and Mexican styles (e.g., vals, schottische, huapango, jaranas, the Spanish bolero).

The earliest recordings of accordion-based music of this type were made by Bruno Villarreal in 1928. The real pioneers of the style, however, were Narciso Martinez and Santiago Jimenez. Tony De La Rosa, who began his career in the late 1950s, was the next big influence on the genre. Utilizing a choppy, staccato style, his accordion playing was melodic and intricate.

His legacy included establishing the use of drums in the conjunto ensemble, amplifying the bajo sexto (a large-bodied, 12-string guitar), and introducing the electric bass. Other important 1960s conjunto performers included Steve Jordan and El Conjunto Bernal.

By the 1970s, virtuoso accordion player Flaco Jimenez (one of Santiago's performing sons) had introduced a rock style, along with pronounced country features, to the genre. Brought to fame accompanying Ry Cooder in the later 1970s, Jimenez has led his own group and played sessions for pop and folk performers. He was also a founding member of the Tex-Mex "supergroup," the Texas Tornados, which included Tex-Mex singer Freddy Fender and two alumni of the Sir Douglas quintet, guitarist Doug Sahm and keyboardist Augie Meyers.

Conjunto has retained a flexible, continuously evolving core up to the present day. Modern practitioners play a wide range of styles and rhythms. The most notable styles include:

Ranchera— Songs idealizing hacienda and rural life. A Mexican form of country music, its variants include norteno (northern Mexican music), whose most successful interpreter is the Los Angeles-based Los Lobos.

Corridos— Essentially ballads, they are the mainstay of most Tex-Mex bands. Usually played at a slow or moderate pace, the genre is largely comprised sad or poignant stories of struggle or controversy.

Cumbias— Part of the Tex-Mex family, they represent a simpler working-class variant of the original Colombian dance form. The genre is characterized by aggressive syncopation, percussion, and the sound of flutes and saxophones. The subject matter includes historical incidents, life stories of notorious criminals, and — like rancheras — lyrical songs about bad women, alcohol, lost love, and other struggles reflecting the social conditions of the time.

Tejano — A newer, urban-based offshoot of conjunto, the genre incorporates instruments identified with rock such as electric guitars and synthesizers. The artists tend to have a glitzy appearance, with leather, big hair, and choreographed stage shows. Their repertoire includes rock, country, and pop material in addition to the traditional, polka-based, accordion-laced conjunto style (complete with a German oompah beat). Among the more popular artists have been Selena (Corpus Christi), Los Palominos (Los Angeles), La Mafia (Houston), and Mazz (Brownsville).

FRANK HOFFMANN

CONNELLAN, BEN (12 SEP 1967–)

Born in Canterbury and graduating in 1990 from the BMus Tonmeister course at the University of Surrey, in England, where he won the prize for the best final-year recording portfolio, Connellan had already spent one

CONNOLLY, DOLLY

year of the school's four-year course working at Chandos Records, with responsibilities for engineering and editing. After graduating, he returned to work for Chandos full time, engineering more than 200 recordings and editing considerably more. In 1995, along with his wife, Annabel, he set up Giraffe Productions, and in 1997, he formally left Chandos and began doing freelance work for a number of different companies, including ASV, BIS, Chandos, Glissando, Guild, Hyperion, Mapa Mundi, Naxos, and Somm. During his career, Connellan has engineered and mastered a variety of musical recordings, with styles ranging from solo piano to grand opera. The ensembles, conductors, and performers he has worked with include the BBC National Orchestra of Wales, Czech Philharmonic, London Mozart Players, LPO, LSO, Philharmonia, Royal Concertgebouw Orchestra, RSNO, CM90, Fretwork, Purcell Quartet, Academy of St-Martin-in-the-Fields Chamber Ensemble, Chilingirian Quartet, Delme Quartet, Netherlands Wind Ensemble, Finzi Singers, Joyful Company of Singers, Matthias Bamert, Richard Hickox, Neeme Jarvi, Tadaaki Otaka, Gennady Rozhdestvensky, Brydon Thomson, Mark Wigglesworth, Lisa Beznosiuk, Rachel Brown, Della Jones, Emma Kirkby, John Lill, Louis Lortie, Catherine Macintosh, Anthony Robson, Joan Rodgers, and Howard Shelley.

HOWARD FERSTLER

CONNOLLY, DOLLY (16 DEC 1888–30 NOV 1965)

American popular singer, born in Chicago. She teamed with her husband, composer Percy Wenrich, to make several successful records for Columbia, beginning with "Hula Hula Love" and "Red Rose Rag" (#A1028; 1911). Her big hit was with Wenrich's song, "Moonlight Bay" (Columbia A1128; 1912). Her last Columbia was made in 1916, after which she was heard on Emerson. She made no records after 1920, but continued to perform on stage. [Walsh 1973/6.]

CONNORIZED MUSIC CO.

A New York firm that made the "Connorized music rolls," and in 1921–1922 a series of 10-inch lateral-cut discs bearing the Connorized label. About a hundred discs were issued, popular song and dance material, some from Gennett masters, others from Invicta Record Company's Guardsman Record masters.

FRANK ANDREWS

CONQUEROR (LABEL)

Originally one of the Plaza Music Co. subsidiaries, offering popular selections from 1926 to 1942. For a

time it was distributed by Sears, Roebuck, and Co. Eventually it became a CBS line, and is now part of the Sony Music Group's holdings. [Rust 1978.]

CONSOLIDATED RECORD CORP.

A firm located in Newark, New Jersey, incorporated to make records in July 1926.

CONSOLIDATED RECORDS INC.

A New York firm whose General Records Division produced the General label in the 1930s and 1940s. Popular and jazz material was offered. The catalog was acquired by Commodore.

CONSOLIDATED TALKING MACHINE CO. (I)

A firm established by Eldridge Johnson in 1900 to make disc records and players for them. The Nipper trademark was used on company products. On 3 Oct

June 15, 1926

THE TALKING MACHINE WORLD

97

The logo features the word "Okeh" in a large, stylized, cursive font. Below it, the word "TRUETONE" is written in a smaller, bold, sans-serif font inside an oval shape.

Now Okeh Has Brought Perfection to the Art of Recording—

*The outstanding feature of Okeh Records is
the utter satisfaction they give every customer*

Say "Good bye, poor sales," when you become a licensed Okeh Truetone Record Dealer. Write for details.

leased on the Odeon Label you will bring new and steady trade to your store.

Popular

There is a national demand for loud, full toned, lively dance records, played by the very best orchestras. Okeh meets this demand by releasing to you the biggest hits by a recording process that can't be beat — The Okeh Truetone.

Race

Okeh has scored a triumph for the dealer who sells to the Race. Our monthly release of Race records is unequalled. Record sales jump high when you can sell recordings by Butterbeans and Susie, Sara Martin, Louise Varr, Alberta Hunter, Lonnie Johnson, Eva Taylor, Virginia Liston, Sippie Wallace, Hociel Thomas, Bennie Moten's Kansas City Orchestra, Chas. Creath's Jazz-O-Maniacs and a host of other Exclusive Stars.

Vocal and Orchestral Classics

Native music is very dear to the hearts of our foreign born. By selling our classics that are re-

Consolidated Talking Machine Co.

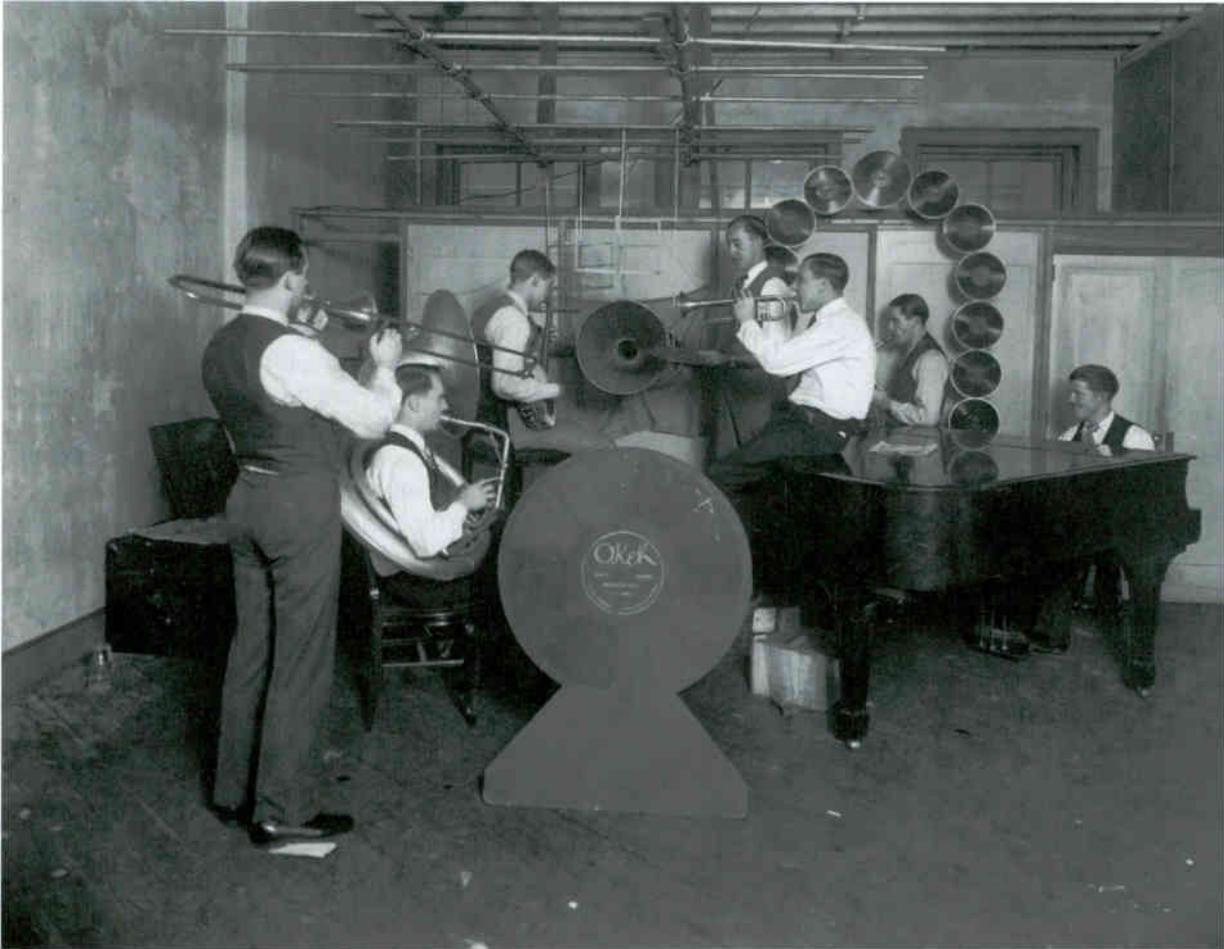
227 W. Washington St.

Chicago, Ill.

BRANCHES: 2957 Gratiot Ave., Detroit, Mich.

1121 Nicollet Ave., Minneapolis, Minn.

Advertisement for the Chicago-based Consolidated Talking Machine Co., trumpeting new Okeh "Truetone" records. From *Talking Machine World*, June 15, 1926. From the Collections of the Library of Congress



Jazz band recording for the Consolidated Talking Machine Company of Chicago, c. mid-1920s. © Underwood & Underwood/Corbis

1901 this organization became the Victor Talking Machine Co. [Fagan 1983 includes a label list.]

CONSOLIDATED TALKING MACHINE CO. (II)

A Chicago firm, established in January 1916. Consolidated sold 10-inch, double-sided discs under the labels Consolidated, Harmony, Standard, and United. It also handled record players and supplies. In September 1918 it advertised that it was the successor to the businesses of the Standard Talking Machine Co., United Talking Machine Co., Harmony Talking Machine Co., O'Neill James Co., and the Aretino Co. The final report from the firm appeared in 1930. [Fabrizio 1973.]

FRANK ANDREWS

CONSOLIDATED TALKING MACHINE CO. (III)

A Detroit firm.

CONSOLIDATED TALKING MACHINE CO. (IV)

A Minneapolis company.

CONSTANT AMPLITUDE

In disc recording, a characteristic of the stylus swing. There is no change in the amplitude of the swing regardless of frequency changes, and groove displacement is proportional to signal amplitude.

CONSTANT ANGULAR VELOCITY DISCS (CAV)

Audio or video discs that rotate at the same speed throughout their playing time. The most notable version still in use is the 33 1/3 LP recording. Some laservideo discs were also CAV items.

HOWARD FERSTLER

CONSTANT LINEAR VELOCITY DISCS (CLV)

CONSTANT LINEAR VELOCITY DISCS (CLV)

Audio or video discs that rotate at varying speeds, depending on the location of the tracking mechanism. By controlling speed smoothly in this manner, the linear speed read by the tracking mechanism remains the same, whether the disc is being tracked on its outer or inner circumference. The two most notable examples are the compact disc (CD) and the DVD.

HOWARD FERSTLER

CONTEMPORARY HITS RADIO (CHR)

A popular music broadcasting format on FM radio, comparable to Album Oriented Rock (AOR). The dominant disc jockey style of the 1980s and 1990s, it is basically Top 40 programming, with the greatest number of repetitions given to songs highest on the charts. The intended audience is the 18–34 age group. In contrast to AOR, the CHR format typically rejects material older than one year.

CONTEMPORARY RECORDS (LABEL)

A record issued by Contemporary Records, 8481 Melrose, Los Angeles, from 1953. The firm was among the pioneers in stereo. Jazz and classical material was offered. Grammy winning jazz albums by André Previn appeared in 1960 and 1961.

CONTOUR PULSE

In magnetic recording, a secondary pulse that occurs when a recorded tape passes over a gap in the read head. This gap results from edges in the core material.

CONTROL AMPLIFIER

SEE *PREAMPLIFIER*

CONTROL UNIT

The part of an amplifier that contains the controls; it is usually combined with a preamplifier.

CONTROLS

In home audio-playback systems, these are devices that allow the user to modify or direct the signal.

Early sound players did not have genuine controls. In order to have a loud or quiet performance with a turn-of-the-century disc, it was necessary to use a pickup stylus designed for one result or the other.

Later, the problem of volume was approached through size of speaker horn or by opening doors or louvers that affected the output of enclosed horns. The first volume controls appear to have been the so-called tone controls of the 1916 Pathéphone, or the Sonora “tone modifier.”

The need for measurement of and control over playing speed of disc recordings was recognized early, since there was wide variation in recording speeds and consequently in the pitch of the signal in playback. In 1907, a speed meter for disc-type machines was made available by the Phonographic Music Company, and phonographs with levers to adjust turntable speed were common into the 1940s. Although there had been an attempt by the U.S. sound industry to stabilize recording speed with the advent of electrical recording, 78s were in fact produced by major recording labels at speeds between 75 rpm and 80 rpm until the end of the 78 era. With the rise of LP and 45 rpm recordings after 1949, most disc players had a control that would allow the turntable rotate at either of those speeds, as well as at 78 rpm. However, intermediate speeds were no longer under control until the hi-fi period brought refined concern for pitch, and variable speed turntables.

In the late 1950s, with the number of hi-fi enthusiasm growing, an upscale sound system could have any number of controls. Those might include an input-source selector, an output switch (to direct the signal to the tape recorder or to auxiliary speakers), equalization switches (for the recording curves of various tape and analog-disc formats), treble and rumble filters, an A/B switch, treble and bass controls, a gain compensator, and, of course, a volume control. Tape recorders and tuners attached to the system would have additional controls of their own. On systems of modest cost, often the only controls were for volume and “tone,” which supplied bass or treble emphasis.

Controls on modern receivers and control amplifiers go well beyond what was available in the old days. For one thing, multichannel recordings have expanded the playback options immensely. A typical mid-level receiver, in addition to the usual volume, input selector, tape monitor, radio tuner, and speaker-output controls, will have controls to adjust the various channel levels and even the degree of ambiance generated by the various surround outputs. More upscale receivers and stand-alone A/V processors might also have controls to carefully fine tune assorted ambiance modes, compensate for the differing distances to each of the speakers, select different crossover points for the subwoofer hookup, and choose the kind of digital decoding desired. Modern digital disc players and recorders will have additional controls of their own,

and TV monitors interfaced with those systems will have additional controls, still.

See also Equalization (EQ); Tone Control

REV. HOWARD FERSTLER

COOK, EMORY (1915–2002)

Cook was well known for his independent research into improving the phonographic high-fidelity medium. In the 1940s, he was a proponent of commercializing the hill-and-dale method of stereo single-groove recording, and to that end, his Cook Labs organization released several early stereo disks prior to the massive introduction of the monaural compatible, 45/45 system eventually used by all the major labels. Columbia Records pioneered the move toward the development and introduction of stereo “mono compatible” disks in 1958, with everyone else in the industry joining in. This put an end to Cook’s hill-and-dale effort.

Mostly overlooked were Cook’s refinements of the LP record itself, including the use of thick, virgin vinyl, low-noise disks, special low-distortion cutting amplifiers, specially designed temperature controlled cutting heads, half-speed mastering, and other innovations, some of which would later become industry standards. From 1952 to 1966 Cook recorded, manufactured, and distributed some of the highest quality audio recordings in the world. Consequently, he paved the way for esoteric labels that came later, such as Mobile Fidelity Sound Labs (half-speed remastering), Sheffield (direct-to-disk), Telarc (first digital masters, using the Soundstream system), and others. Awarded an Audio Engineering Society silver medal in 1985, Cook donated all his disks to the Smithsonian in 1990, after he retired.

HOWARD FERSTLER

COOKE, RAYMOND EDGAR

(14 FEB 1925–19 MAR 1995)

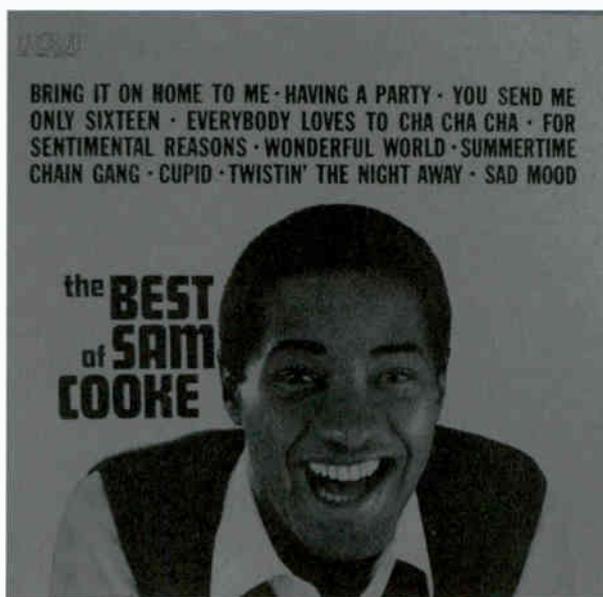
Cooke was born in Yorkshire, England. During World War II, he served as a radio operator on a British aircraft carrier, and after the war he obtained a B.S. in electrical engineering from the University of London. After a briefly-held job at Philips, he went to work at the British Broadcasting Corporation’s engineering designs department. In 1956, he joined Warfedale Wireless Works, where, among other things, he worked with Gilbert Briggs on a series of books on loudspeaker design, and also assisted Briggs with a series of live –vs. recorded concerts at Royal Festival Hall, in London. Cooke also joined the Audio Engineering Society in 1956, served for some years

on the AES British section committee, and was president of the AES Europe region in 1984. In 1961, he founded KEF Electronics, a highly regarded loudspeaker company that was noted for employing unconventional materials and innovative designs, as well as one of the best engineering staffs in the loudspeaker business. In 1979, Cooke was made an Officer of the Most Excellent Order of the British Empire by Queen Elizabeth II. In 1980, he won the AES bronze medal, and in 1993 he won the society’s silver medal.

HOWARD FERSTLER

COOKE, SAM (22 JAN 1931–11 DEC 1964)

Born Sam Cook in Clarksdale, Mississippi, Cooke was both a popular soul singer of the late 1950s and early 1960s and a record executive, forming his own SAR Records label. Beginning in the family gospel group as a youngster, Cooke and his siblings first toured as the Soul Children. After a stint with the Highway QCs, Cooke was invited to join the popular gospel group, the Soul Stirrers, in 1951, and remained with them for five years as their lead singer. The group’s label, Specialty Records, asked producer “Bumps” Blackwell to develop pop material for the singer, and the result was “You Send Me,” a secularized gospel song that sold more than 2 million copies on its release on the Keen label (#1 pop/R&B; Keen 34013). He had two follow-up hits, and then moved to RCA in 1960, scoring hits with “Chain Gang” (1960, #2 pop; RCA 7783), and



Sam Cooke “Best Of” collection from the ‘60s. Courtesy Frank Hoffmann

COOL JAZZ

"Twistin' the Night Away" (1962, #9 pop/#1 R&B; RCA 7983). Cooke also became popular on the lounge circuit, and his albums turned away from his soulful style to a more smooth-pop sound. He founded SAR/Derby Records to promote acts including the Valentinos and the Simms Twins, his own music publishing operation, Kags Music, and a management company. Cooke died in mysterious circumstances in a Los Angeles motel in 1964; he scored a posthumous hit with "Shake" coupled with the Civil Rights-era anthem, "A Change Is Gonna Come" (both RCA 8486), the later of which Cooke was said to have written after hearing Bob Dylan's "Blowin' in the Wind." Cooke was among the first inductees into the Rock and Roll Hall of Fame in 1986.

COOL JAZZ

An idiom popular in the 1950s and 1960s, said to be an outgrowth of bebop. Terms applied to the sound include crisp, unemotional, dry, relaxed, light, clean, lyrical, and soft. It was practiced by solo pianists and small combos, among them George Shearing, Dave Brubeck, the Modern Jazz Quartet, Gerry Mulligan, Miles Davis, and Stan Getz. Cool jazz is sometimes identified with "Coast Jazz" or "West Coast Jazz," as well as its variant, Third Stream; definitions are somewhat cloudy within this overall category.

COOMBS, FRANK

(26 JULY 1871–31 OCT 1941)

Coombs was an American countertenor, born in Bedford, Iowa, who was heard in vaudeville and on Broadway. He began recording in 1919, with Columbia #A835, "Silver Threads among the Gold" and "Nellie Was a Lady." This initial issue remained his most popular disc. By 1913 he had 20 solos in the Columbia catalog, plus five duets with William H. Thompson and two songs with quartets. In 1914 he made another famous disc: "Caroline." From 1910 to 1913 he also recorded for U-S Everlasting Records. After relocating to Seattle in the early 1920s, Coombs hosted a talent show on radio, "Uncle Frank's Children's Matinee," until his death in 1941. [Walsh 1951/5.]

COON SONGS

It is by this unfortunate designation that the record companies of the first generation referred to comic songs in African-American dialect. Many of the singers were in fact white men and women; the popularity of such material reflected the widespread

fascination with African-American music (and culture) on the part of mainstream America as manifested by the minstrelsy craze — and later ragtime vogue — of the 19th century. The Victor 1917 catalog states that "the humor of many of these songs cannot be called refined, and for that reason we have distinguished them from old-fashioned darky humor, those songs being listed under 'Negro Songs'...." Artists listed in that catalog as coon singers were the American Quartet, Arthur Collins, Byron G. Harlan, Billy Golden, May Irwin, Ada Jones, Billy Murray, Len Spencer, Peerless Quartet, and Clarice Vance. By 1927 Victor had deleted this heading from its catalog.

REV. FRANK HOFFMANN

COON-SANDERS HESTRA

One of the earliest American big bands, organized in Kansas City around 1920, named for Carlton A. Coon (1894–1932), and Joe Sanders (1894–1965). The band was the first to broadcast on commercial radio, on WOAF in Kansas City, 5 Dec 1922. They had already begun to make records — in 1921 for Columbia — and in 1924 they started an association with Victor. Two of their hit records were "Here Comes My Ball and Chain" (Victor 21812; 1928), and "Slue Foot" (Victor 21305; 1927). [Schwartz 1984.]

COOPER, ALICE (4 FEB 1948–)

Alice Cooper — a moniker applied both to Detroit-born vocalist Vincent Furnier and his backing band — came across as a straight-ahead hard rock outfit on record. Onstage, the group helped pioneer the American variant of glitter rock, with Furnier projecting a ghoulish, androgynous demeanor accented by theatrical ploys such as simulated hangings, the destruction of dolls and other props, and playing with a live snake.

The band formed as the Earwigs in 1965; comprised of lead guitarist Glen Buxton, rhythm guitarist/keyboardist Michael Bruce, bassist Dennis Dunaway, drummer Neal Smith, and Furnier (aka Cooper), they moved from Phoenix to Los Angeles, releasing a couple of singles as the Spiders on the Santa Cruz label in 1967. A couple of name changes later, they settled on Alice Cooper (allegedly a 17th-century witch), and signed with Frank Zappa's Straight Records. Following the release of two rather mediocre post-psychedelic LPs — *Pretties for You* (Straight 1051; 1969), and *Easy Action* (Straight 1061; 1970) — Alice Cooper moved on to Warner Brothers. Assisted by producer Bob Ezrin and exhibiting markedly improved songwriting skills, the band

produced a string of proto-metal masterpieces leavened with adolescent-punk attitude: *Love It to Death* (Warner Bros. 1881; 1971; #35), *Killer* (Warner Bros. 2567; 1971; #21), *School's Out* (Warner Bros. 7596; 1972; #2), *Billion Dollar Babies* (Warner Bros. 2685; 1973; #1), and *Muscle of Love* (Warner Bros. 2748; 1973; #10).

Feeling they had hit a creative dead end, Cooper fired his band in mid-1974, replacing them with Lou Reed's former supporting musicians. Cooper's first solo album, *Welcome to My Nightmare* (Atlantic 18139; 1975; #5) — featuring Vincent Price as narrator and the AM radio staple, "Only Women Bleed" (Atlantic 3254; 1975; #12) — solidified his stature within the music industry. Evidently quite comfortable with celebrity life (hosting a TV show, hanging out with mainstream Hollywood stars, etc.), his retro releases remained a fixture on the lower reaches of the pop charts through the 1990s.

FRANK HOFFMANN

COOPER, DUANE H. (1923–4 APR 1995)

Born in Gibson City, Illinois. During World War II Cooper served with the U.S. Army in Italy as a radar specialist, and later on earned both B.S. and Ph.D. degrees, with honors in physics, from the California Institute of Technology. In 1954, he joined the faculty at the University of Illinois as a professor and research associate, working on statistical detection theory and noise analysis, and also contributed to developments in computer-based instruction.

In the early 1960s, he became interested in problems in audio engineering, and eventually published extensively in that field. He investigated the intricate geometry of the phonograph stylus in relation to the LP record disc surface, and developed a unified treatment of phonograph-stylus tracking and tracing distortion by utilizing a skew transformation. This resulted in the establishment of the stylus tracking angle that became the industry standard. In 1971, he built the first prototype of an echo-free acoustic delay device, later manufactured as the Cooper Time Cube, which was widely used in recording studios before affordable digital versions appeared. In the later 1960s and early 1970s he contributed to the theory of surround-sound stereo, inventing the first working version of the surround-sound system that led to Ambisonic surround. Dr. Cooper held more than 40 patents, and was a consultant to numerous organizations, including Consumer's Union, Shure Brothers, and Magnavox. He was a fellow of the Institute of Electrical and Electronics Engineers and the Acoustical Society of America, and was president of the Audio Engineering

Society in 1975–1976. He was named a fellow of the society in 1966, won the Emile Berliner Award (now known as the silver medal), in 1968, and won the society's gold medal in 1982.

HOWARD FERSTLER

COPY MASTER (I)

An identical copy of a master tape.

COPY MASTER (II)

A metal negative disc produced from the positive, for use as a replacement master.

COPYCODE

A system developed by CBS in 1987 to filter out a narrow band ("notch") of musical frequencies in a master recording. The purpose was to give a cue to a decoder device installed by manufacturers of DAT recorders; the decoder's response to the notch was to shut down the recorder. Thus unauthorized copying of a CD onto a DAT blank tape would be prevented. The notch itself was taken from the upper-middle range at 3.838 kHz; it was 112 Hz wide at the 3dB point and 90dB deep. Removing this tiny slice of the frequency band did not, according to CBS, affect the quality of the music, but certain specialists claimed to notice differences when the notch was activated. Controversy over the use of Copycode was crystallized in a London conference of the International Federation of Producers of Phonograms and Videograms (IFPI) in May 1987; the producers supported legislation by the European Economic Community and the U.S. Congress to require the Copycode device on all machines imported from Japan; but the Electronic Industry Association of Japan, representing the principal DAT manufacturers, opposed such regulation. Congress asked for an assessment from the National Bureau of Standards (NBS), which reported that "there are some selections for which the subjects detected differences between notched and unnotched material." The NBS conclusion was that the Copycode system "audibly degrades music, and can easily be bypassed." No action was taken by Congress to prohibit import of DAT, or to require Copycode protection.

A pair of anti-copying devices have since been developed by Philips to prevent making more than one DAT copy of a CD; but these pose problems. One system, Solo, has met with disfavor by the record companies because it permits multiple copying of analog

COPYRIGHT

material. The other, Solo Plus, is unacceptable to audio users because it permits no copying of analog material at all. Finally, a system was created that appeared to find favor among all parties concerned: Serial Copy Management System (SCMS). The acquisition of Columbia Records by Sony also tended to mute the controversy.

COPYRIGHT

Intellectual and creative productions are given legal protection in most countries; this protection ensuring that the exclusive rights to distribution, reproduction, display, performance, or any commercial use of a work rests with its author, composer, or artist. Copyright is the equivalent, for intangible property, of the patent.

Problems in the interpretation of copyright issues, particularly when more than one nation is involved, are substantial. The Bern Convention of 1886 has formed a basis for international cooperation; the effectiveness of that agreement was enhanced in 1988 when the U.S. finally signed into it. The most recent international effort to deal with these matters resulted in the Universal Copyright Convention (UCC) of 1955, signed by all major countries except the People's Republic of China. UCC has for a basic principle the acceptance of each country's copyright legalities by all other countries. In most countries this protection extends 50 years after the death of the author. Types of works protected include literary and musical compositions, all forms of graphic art, motion pictures, sound recordings, and other kinds of audiovisual production.

In the U.K. a record company retains copyright for 50 years; legislation passed in 1925 protects artists against unauthorized reproduction of their performances.

In the U.S. the Copyright Act of 1976 (superseding one dating from 1909) became effective 1 Jan 1976. In 1988 Congress passed the Bern Convention Implementation Act, as an amendment of the 1976 legislation, to account for principles in the Bern agreement. The life-plus-50 years term of protection applies to works created after 1977, but for earlier works there is a complex system of terms and renewals. Indeed, there are numerous complexities, e.g., in the area of transfers and licenses, which are not appropriate for discussion here. In 1998, Congress passed the Sonny Bono Copyright Act, which extended ownership of copyright material for another 20 years, as big conglomerates like the Walt Disney Company worried that such icons as Mickey Mouse were about to fall out of copyright protection.

But one aspect of U.S. law is of special interest to those who are involved with recorded sound: the "fair use" principle. Essentially, fair use means that all or part of a copyrighted work may be copied legally without permission of the copyright holder if the use to be

made of the copy is noncommercial and does not interfere with the author's own profits or exploitation of the work. Thus a teacher may photocopy a periodical article or section of a book for class distribution (not for sale), and anyone may copy a broadcast program for personal use. Libraries have certain additional privileges in the making of archival copies.

It is also permitted, under the 1976 Act, to copy commercial discs, audiotapes, and videotapes — always for private noncommercial purposes only — and this element of the law has caused great concern among producers of those media. While one may question the magnitude of financial loss to a record company when someone makes a cassette tape copy of a disc borrowed from the public library — the copy, as often as not, standing in place of nonownership rather than in place of a personally purchased record — there is little basis for disputing the claim of great losses to record companies resulting from making copies for sale. The making of counterfeit records and tapes, an act usually called "pirating" or "bootlegging," is illegal when the copies are sold, but the practice has been carried on in a brazen manner. Some bootleg records have appeared with distinctive labels, such as Rubber Dubber, and gained legitimacy by being listed among authorized labels in discographies and lists of new releases.

A special problem exists in the case of so-called parallel imports, imported versions of works copyrighted by U.S. firms. When the American firm holding the copyright does not actually release the material on record, or does release it but allows the record to go out of print, imports of the material are still prohibited under section 602(a) of the 1976 Copyright Act. Record dealers, supported by buyer groups, have held that what is not available in the U.S. should be exempt from import restrictions.

With the advent of digital recording it became possible for manufacturers to prevent or limit copying by means of protective codes imbedded in the disc or tape. On the other hand, widespread public use of the Internet beginning in the 1990s spurred the rise of music file sharing — both real audio and compressed data formats (e.g., MP3) — via the websites of individual collectors as well as exchange services such as Napster and Gnutella. The universal availability of CD burners has further threatened the economic viability of the record industry, which has responded by pressuring federal legislators to enact stricter protective measures in addition to experimenting with lower pricing policies. [Stover 1990; Wallman 1989.]

See also **Copycode; Pirated Recordings; Recording Industries Association of America (RIAA); Serial Copy Management System (SCMS)**



Coral Records label and sleeve for Buddy Hackett's recording of "The Chinese Laundry." Courtesy David A. Jasen

CORAL (LABEL)

An American record issued from 1948, by Coral Records, Inc., New York, a Decca subsidiary. It was also sold in the U.K. Milt Gabler was one of the A&R men. The label's output covered popular, country, rhythm and blues, jazz, gospel, and spoken material. Coral merged with the new MCA label in 1973.

COREA, CHICK (12 JUNE 1941–)

Armando Anthony "Chick" Corea has been one of the most influential jazz pianists to emerge since 1960. Like the pianist with whom he has been most frequently compared, Herbie Hancock, Corea has exhibited the ability to negotiate a wide range of styles and group settings without compromising his extraordinary virtuosity.

Born in Chelsea, Massachusetts, Corea first attracted attention in a succession of Latin-oriented bands led by Mongo Santamaria, Willie Bobo, and Herbie Mann in the early 1960s, followed by a stint absorbing funk/R&B influences with Blue Mitchell. His early solo work — most notably, *Jazz for a Sunday Afternoon* (Blue Note; 1967), and *Now He Sings, Now He Sobs* (Blue Note; 1968) — exhibited his familiarity with the European art-music tradition and free-form improvisation. In 1968, he joined the fusion band led by Miles Davis, concentrating on electric piano for the first time in such classic albums as *Filles de Kilimanjaro* (Columbia; 1968), *In a Silent Way* (Columbia 9875; 1969; #134), *Bitches Brew*

(Columbia 26; 1970; #35), and *Miles Davis at the Fillmore* (Columbia 30038; 1970; #123).

During the 1970s, Corea's musical directions became increasingly harder to predict. After returning to the acoustic piano with the avant-garde quartet, Circle — heard to best effect in the adventurous *Circle Paris-Concert* (ECM; 1971) — he anticipated the vogue for solo piano recitals with *Piano Improvisations, Vol. 1* (ECM; 1971), and *Piano Improvisations, Vol. 2* (ECM; 1971). On electric piano, he worked with Stan Getz, and then formed the fusion supergroup, Return to Forever. RTF quickly evolved from the samba-inflected *Return to Forever* (ECM; 1972), to a more technically flashy, guitar-centered approach modeled after John McLaughlin's Mahavishnu Orchestra, beginning with *Hymn of the Seventh Galaxy* (Polydor 5536; 1973; #124). Throughout this period, Corea continued to record solo LPs; *The Leprechaun* (Polydor 6062; 1976; #42), was not only his most commercially successful release, but an encyclopedic display — spanning classical suites, rock, free-form jamming, and lyric vignettes — of his talents as a musician, composer, and arranger.

After RTF disbanded in the late 1970s, Corea recorded in a diverse array of contexts, including classical music ensembles. He has continued to experiment into the 21st century; his more notable configurations have included the fusion-steeped Elektric Band and the more traditional Akoustic Trio. Much of his work in recent decades, however, has focused on refining the innovations of his early career. In 1996, Corea formed Stretch Records in partnership with the Concord label.

FRANK HOFFMANN

CORNER HORN

A loudspeaker enclosure that utilizes a corner of the room as part of the horn.

CORNET RECORDINGS (HISTORIC)

The cornet recorded well with early equipment, and music for the instrument was in all the label catalogs around the turn of the century. John Mittauer recorded 11 pieces for Edison on 28 May 1889; the first was the "Amusement Polka." On 8 June 1889 Theodore Hoch made his first five records; Mittauer returned for nine more sessions and Hoch for four more. Other cornetists heard on Edison cylinders during 1889–1892 were Tom Clark, D.B. Dana (who was also in the 1893 catalog of the New Jersey Phonograph Co.), "Mr. Henke," Alvin Jaeger, J. Schmitt, and Frederico Sonty. Later Edison artists were John Hazel, M. Schlossberg, and W.

CORRS, THE

Bartow. W. Paris Chambers was the earliest artist to record the cornet on disc, for Berliner in 1895–1897. Frank Martin performed 10 numbers for Bettini in 1898. Herbert L. Clarke was heard on Berliner seven-inch discs of 1899–1900, on Victor records in 1900–1906, and on Columbia and Brunswick discs; he also made cylinders for Edison. Jules Levy was the most famous concert cornetist of the 1890s. [Koenigsberg 1987.]

CORRS, THE

Descendants of the rich Irish music tradition, the band — comprised of siblings Jim, Sharon, Caroline, and Andrea Corr — ranked second in U.K. album sales between 1998–2003, moving 5.8 million units, second only to former teen idol Robbie Williams. Although the quartet's photogenic looks played a role in opening doors within the music industry, success ultimately owed more to their unique music — a bittersweet, melodic sound blending modern rhythms and technology with traditional modes and acoustic instruments, most notably, violin, tin whistle, and vocal harmonies.

Hailing from Dundalk, County Louth, Ireland, the Corrs were formed by Jim in 1990. He had spent the previous decade or so doing session work and playing in various bands, most notably the Fountainheads, who failed to achieve commercial success with a series of pop-rock albums. An early breakthrough came with the June 1990 audition for the motion picture *The Commitments*; they not only secured small parts in the film, but were linked up with a manager, John Hughes, who promptly set them on a path to eventual stardom. After years of development in Ireland's local pub circuit, they landed a recording contract with Atlantic Records in 1994, producing a debut release, *Forgiven Not Forgotten* (143/Lava/Atlantic; 1995; #2 UK), the following year. An eclectic affair, the album began and ended with "Erin Shore" — featuring Sharon's elegiac violin work — while ranging from gossamer ballads ("Love to Love You"), to the mainstream rock of "Secret Life" and "Someday," both built around Jim's raw guitar phrasing.

Jim's hard-edged guitar became more of a focal point in the follow-up LP, *Talk On Corners* (143/Lava/Atlantic; 1997), which reached the Top 10 in Great Britain and number one in Ireland. The popularity of their rendition of "Dreams," included on the Fleetwood Mac tribute album, *Legacy, Rumours Revisited* (1998), led to its inclusion on *Talk On Corners Special Edition* (133/Lava/Atlantic; 1998), a remixed version of the songs from the 1997 album. It would cement the Corrs's growing international popularity as well as residing in the British Top 10 through late 1999, climbing to the top rung of the charts on four different occasions. *Unplugged* (133/Lava/Atlantic; 1999; #7 UK; platinum record), culled from

MTV's high-profile acoustic concert series, reverted to more traditional treatments of old hits, previously unreleased material, and covers such as Phil Lynot's "Old Town," R.E.M.'s "Everybody Hurts," and "No Frontiers" (a Jimmy McCarthy composition that had been an Irish hit for Mary Black).

Whereas the earlier LPs were done in American studios, *In Blue* (133/Lava/Atlantic 83352; 2000), was recorded entirely in Ireland; it produced the U.S. hit, "Breathless," which garnered much radio and video exposure for the group. (BMI stated that the song had more than a million plays on U.S. radio alone during the first 15 months following its release.) It was followed by a greatest hits compilation in 1991 and *VHI Presents the Corrs Live In Dublin* (133/Lava/Atlantic 83533; 2002), which featured the duet "Summer Wine" with Andrea and U2 lead singer Bono (a song originally recorded by Lee Hazlewood and Nancy Sinatra), which was given heavy video play. Never a prolific band in terms of original output, in recent years their productivity has been compromised somewhat by steady touring, collaborations with artists such as Luciano Pavarotti and Celine Dion, and Andrea's various film projects (e.g., *Evita*, *The Quest for Camelot*, *The Great Ceili War*).

FRANK HOFFMANN

CORT (LABEL)

An American issue of the 1910–1920 period, of which only one specimen has surfaced. Cort Sales Co. of



Rare Cort label issue, c. 1910. Courtesy Kurt Nauck/Nauck's Vintage Records

New York was the producer. It appears that Columbia masters were used. The extant item is a male quartet rendition of "Oh, You Million Dollar Doll," backed by baritone Ed Morton singing "What Do You Mean, You Lost Your Dog?" [Brooks; Kendziora 1952/11 (reprinted in *RR* 211/212, July 1985).]

CORTINA ACADEMY OF LANGUAGES

A New York firm, established to give language instruction by Rafael Diaz de la Cortina, in 1882. The firm was the first to record language instruction courses, beginning in 1889 with *Spanish in Twenty Lessons*, on Edison cylinders. Later records appeared on Columbia Graphophone records and U-S Phonograph Co. cylinders, as well as Edison cylinders. Discs were used instead of cylinders after 1913.

CORTOT, ALFRED

(26 SEP 1877–15 JUNE 1962)

Swiss pianist and conductor, born in Nyon. He studied with one of Chopin's pupils, and became known as an interpreter of that master's works. He was also a conductor in Paris and Lille, specializing in Wagner. And he was part of the famous Casals-Thibaud-Cortot trio from 1905. Cortot wrote a number of books, edited a Chopin edition, and was director of the École Normale de Musique in Paris.

Cortot's recordings span 50 years. He was heard on the first Victor Red Seal electrical recording, playing the Chopin "Impromptu No. 2" (#6502; recorded 21 Mar 1925, released June 1925). Many of his finest interpretations have been reissued by EMI/Pathé-Marconi: #153-03090/96 includes seven discs of his Chopin performances recorded in 1933–1949; and #153-03490/92 has three discs of Schumann works. Cortot died in Lausanne.

COSMO (LABEL)

A product of Cosmopolitan Records, Inc., of New York, organized in 1945 by Harry W. Bank. The first album issued, *Tubby the Tuba*, became the first best seller on vinyl. Among Cosmo's artists were Tony Pastor and Larry Clinton. The final releases were in 1947.

COSTELLO, ELVIS (25 AUG 1955–)

Although initially identified with the punk movement due to the caustic tone of his songs and affiliation with the London-based Stiff label, Elvis Costello owed as much to the Tin Pan Alley tradition of songcraft as

to the energy and social consciousness typifying rock music. He has emerged as one of the finest pop songwriters of the late 20th century, as well as a superb interpreter of outside material spanning a wide range of styles, including country (e.g., Patsy Cline's "Sweet Dreams," Hank Williams's "Why Don't You Love Me Like You Used To Do"), soul (Sam and Dave's "I Can't Stand Up for Falling Down," Smokey Robinson's "From Head To Toe"), classic rock 'n' roll (Little Richard's "Bama Lama Bama Loo"), British Invasion rock (the Beatles' "You're Got to Hide Your Love Away"), the singer/songwriter tradition (Randy Newman's "I've Been Wrong Before"), and big band (Ray Noble's "The Very Thought of You").

Born Declan McManus in Liverpool, the son of a jazz bandleader, he started out playing in night clubs — including a stint as leader of the country-rock group Flip City — and circulating his demos to record companies while employed as a computer operator by day. Signing with Stiff in early 1977 — and Columbia for U.S. distribution shortly thereafter — his stage name representing both a challenge to the rock establishment ("Elvis"), and a tribute to his mother ("Costello" being her maiden name). Although recorded hastily in 24 hours, the debut album, *My Aim Is True* (Columbia 35037; 1977; #32), reflected the years spent honing his songwriting skills. Produced by Nick Lowe and featuring the backing of the Shamrocks (aka Clover), it was cited as album of the year in the annual *Rolling Stone* poll. Putting together his own band, the Attractions — including keyboardist Steve Nieve, bassist Bruce Thomas, and drummer Pete Thomas — he went on release two more punk-inspired LPs, *This Year's Model* (Columbia 35331; 1978; #30), and *Armed Forces* (Columbia 35709; 1979; #10).

While continuing to use the Attractions until opting for a more eclectic approach on the darkly comic *Spike* (Warner Bros. 25848; 1989; #32), Costello played stylistic hopscotch during the 1980s, coming up with his own idiosyncratic take on Motown soul in *Get Happy!!* (Columbia 36347; 1980; #11), vintage Nashville Sound covers in *Almost Blue* (Columbia 37562; 1981; #50), post-punk in the muddled *Goodbye Cruel World* (Columbia 39429; 1984; #35), and the roots folk, country, and rockabilly touches in *King Of America* (Columbia 40173; 1986; #39). His attempts at recasting his image climaxed with *The Juliet Letters* (Warner Bros. 45180; 1993; #18 UK), which successfully merged a pop sensibility with chamber music. While continuing to explore a wide range of side projects such as film soundtrack music (e.g., the Coen Brothers' *The Big Lebowski*) and duets with George Jones, Costello reunited with the Attractions on *Brutal Youth* (Warner Bros. 45535;

COUNTRY JOE (MCDONALD) AND THE FISH

1994; #34; the band billed as the “Distractions”), and *All This Useless Beauty* (Warner Bros. 46198; 1996; #53). He has remained impossible to pigeonhole in recent years, collaborating with the likes of jazz fusion guitarist Bill Frisell on *Deep Dead Blue* (Nonesuch 46073; 1995), and middle-of-the-road balladmeister Burt Bacharach on *Painted from Memory* (Mercury 538002; 1998; #78).

FRANK HOFFMANN

COUNTRY JOE (MCDONALD) AND THE FISH

Country Joe and the Fish were the most overtly political band identified with the San Francisco Sound of the late 1960s. The band also blended the populist folk music tradition (band leader Country Joe McDonald would release a Woody Guthrie memorial LP in the 1970s), with pronounced dada leanings.

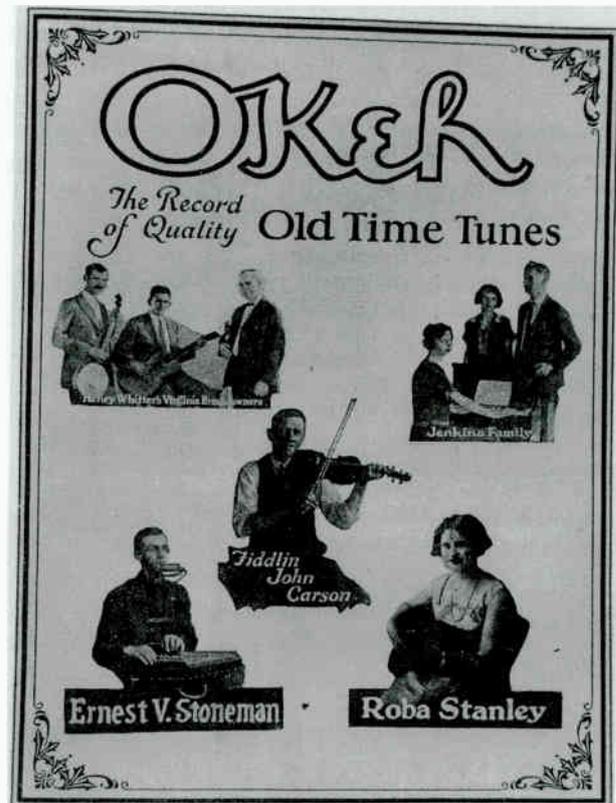
Allegedly named after Joseph Stalin by his leftist parents, McDonald began recording in the mid-1960s, most notably three “Rag Baby” EPs which were sold on the streets in Berkeley. He then formed a folk duo with Barry Melton (aka “the Fish”) in 1965. The act soon expanded into an electric band, including Bruce Barthol, David Cohen, and Chicken Hirsh. Their debut release, *Electric Music for the Mind and Body* (Vanguard 79244; 1967), was immediately hailed as a rock classic, featuring satirical lyrics and acid rock dominated by Melton’s swirling organ lines. Amid continued personnel changes, the band released four more studio albums before disbanding: *I-Feel-Like-I’m-Fixin’-to-Die* (Vanguard 79266; 1967), *Together* (Vanguard 79277; 1968), *Here We Are Again* (Vanguard 79299; 1969), and *C.J. Fish* (Vanguard 6555; 1970).

McDonald decided to embark on a solo career at the outset of the 1970s. He would go on to release more than 20 LPs and contribute music to several Hollywood films. Signing with Fantasy Records in the mid-1970s, he briefly reunited with the original Fish to produce an album. Many of his best recordings in the 1980s were distributed primarily in Europe, where he had toured regularly since 1967. Melton was also active for many years as a performer and recording artist. After participating in a succession of club dates with the Dinosaurs in 1982, he completed a law degree the following year. Cohen went on to produce an instruction album for Kicking Mule that demonstrated the playing techniques of Carlos Santana, Duane Allman, Chuck Berry, Bo Diddley, B.B. King, Jerry Garcia, and other seminal guitarists. [McDonough. 1985.]

FRANK HOFFMANN

COUNTRY MUSIC RECORDINGS

Country music developed out of the folk traditions brought to North America by Anglo-Celtic immigrants and gradually absorbed influences from other musical sources until it emerged as a force strong enough to survive — and ultimately thrive — in an urban-industrial-oriented society. However, to explain the genre solely in terms of its British background would be a limited and incomplete approach. Settlers of prerevolutionary America, throughout the 13 colonies, came out of essentially the same ethnic and social backgrounds. Malone points out that southern history must be studied in order to explain how the area east of the Mississippi River and below the Mason-Dixon Line produced a diversity of musical styles — both Black and white — which later would coalesce into viable commercial entities. Historical study reveals that because of a complex variety of influences, involving geographical and climatological determinism and cultural preconditioning, southerners became committed very early to an agricultural economy and the rural way of life. Traditions that had once been the common property of Americans therefore endured in the South long after they had ceased to be important elsewhere.



The cover of the Okeh Records Old Time Country Music catalog, c. mid-'20s, showing many of the label's stars. Courtesy BenCar Archives

Although British ballads and folksongs were perpetuated in all areas of early America, only in the South did they contribute to the creation of a lasting regional music. (Malone 1968, p. 4.)

Two forces that have played a prominent role in shaping modern country music — cultural pride and the cross-fertilization of musical styles — can be traced back to the earliest days of colonization in the deep South. The extreme pride typifying the region was in large part a result of a cultural inferiority complex which, in turn, arose out of the censure of the civilized world with respect to the institution of slavery and the lagging pace of urbanization and industrialization. This situation undoubtedly heightened the cultural isolationism already based on geographical and climatological factors. However, reference to the cultural isolationism of the South perhaps should not be overemphasized. The South provided the setting for the melding of many cultures — particularly British, French, Spanish, and African elements — as well as the impetus for the settlement of much of the West. The steadfastly conservative stance adopted by southerners to ward off potentially disruptive external influences was concentrated largely within the socioeconomic sphere (particularly with respect to the influx of influences from the north); in the face of the region's prejudices relatively few barriers existed to impede the exchange of musical ideas between cultures. While this musical cross-fertilization changed all of the genres concerned, country music continued to maintain its own sense of identity. Malone succinctly outlines the development of this phenomenon:

Not only are certain songs transmitted from generation to generation, but the manner of performing them, both vocally and instrumentally, is also passed on through the years. A folk style, created by the interchange of musical ideas and techniques among folk musicians and singers, proves to be a very tenacious factor. A folk style will persist long after the folk songs are forgotten. With the coming of urbanization the old rustic-based songs are discarded and the new ones become largely devoid of rural settings; however, in the style of its performance and in its basic construction the song is, in point of origin, rural in nature. A rural inhabitant or an urban dweller who has formerly lived in the country will likely render a song in a country manner even though the words of the song describe an urban scene or event. This is significant in view of the fact that migration from southern rural areas to southern and northern urban centers has been a steady factor in southern life. Southern cities have been populated largely by individuals of rural origin who carry with them their musical appreciation and tastes. These cities, then, to a great extent continue to be affected by rural attitudes and values. This in great measure

explains why country music has endured in an urbanizing south, and why its lyric content has changed to fit the needs of a rural people who no longer live in rural surroundings. That music which thrives in a honky-tonk atmosphere or depicts the problems inherent in an urban existence can accurately be termed country music since it sprang from a rural origin. (Malone 1968, p. 10.)

The spread of country music in an era devoid of mass media outlets such as radio and television was rendered possible by territorial mobility, cultural exchange, and other forces set into motion by the socioeconomic climate of the late 19th and early 20th centuries. The process involved the slow but steady evolution of the country genre via the assimilation of minor traits and styles.

When southern people moved into new areas, their music acquired new characteristics from the cultures with which they came in contact. Still, a distinct southern backwoods style predominated and provided the basis for other styles that ultimately arose. It is for this reason that such urban-oriented styles as "western swing" and "honky-tonk" music developed when rural people adapted their older music to new environments. Western swing, specifically, is the product of the change that took place when southerners moved to Texas and Oklahoma and adapted the rural- or mountain-based music to new developments and surroundings. (Malone 1968, p. 11.)

The rise of radio and the record industry were of inestimable importance in broadening the audience for country music. Long before country headliners began criss-crossing the nation in customized buses, these media brought the performers into the living rooms of fans in the large northern cities. However, the genre was long known by the somewhat derogatory term "hillbilly music." The cultural pride of the antebellum South was updated in the campaign of leading apologists for the genre to have the more dignified heading "country and western" employed (see 1949 below). Others sought mainstream acceptance via the aesthetically misguided strategy of diluting country recordings with pop orchestral arrangements.

A Country Chronology:

June 30, 1922. "Uncle" Eck Robertson and Henry Gilliland record two fiddle tunes — "Sallie Goodin" and "The Arkansas Traveller" for Victor in New York. Scholars are largely in agreement that these were the first country recordings.

August 14, 1922. The Jankins Family, a gospel group from Georgia, becomes the first "old time" performers to be heard on the radio (WSB, Atlanta).

January 4, 1923. WBAP, Forth Worth, Texas, broadcasts the first radio "barn dance" program.

COUNTRY MUSIC RECORDINGS

June 14, 1923. Ralph Peer records Fiddlin' John Carson's "Little Old Log Cabin in the Lane," considered to be country's earliest hit. The Carson recording proved that country records could sell.

April 19, 1924. The debut of the *Chicago Barn Dance* (WLS), which went on to become the highly successful *National Barn Dance*. The program ran continuously until 1970 and launched such stars as Gene Autry, Red Foley, George Gobel, Grandpa and Ramona Jones, and Bradley Kincaid.

August 13, 1924. Vernon Dalhart records "The Prisoner's Song," backed with "The Wreck of the Old 97," the first country record to sell a million copies. Technically, Dalhart was the first singer to change from pop to country, having specialized in light opera and parlor songs prior to recording "The Prisoner's Song."

November 28, 1925. The *WSM Barn Dance*, later renamed the *Grand Ole Opry*, first broadcast from WSM's Studio A in Nashville. Uncle Dave Macon, credited with being the *Opry's* initial star, began appearing during the first year.

August 1927. The Carter Family and Jimmie Rodgers cut their first records for Ralph Peer of Victor, in Bristol, Tennessee/Virginia. These sessions mark the beginning of commercial country music.

September 28, 1928. Technically, the first record ever made in Nashville is a Victor field recording of early *Opry* string bands. The real start of regular recording in Nashville did not begin until 1945.

October 9, 1929. Gene Autry, who would become America's most popular "Singing Cowboy," makes his first record. His first movie role was a cameo in Ken Maynard's *In Old Santa Fe*. Later that same year Autry starred in *The Phantom Empire*.

1929. *The Singing Brakeman*, a 15-minute short starring Jimmie Rodgers, is made; it is probably the earliest country music movie.

1930. Ken Maynard, starring in *Song of the Saddle*, becomes Hollywood's first singing cowboy.

1930. Dr. J.R. Brinkley, the infamous "goat gland doctor," begins broadcasting country music from radio station XERA in Villa Acuna, Mexico, just across the border from Del Rio, Texas. XERA was instrumental in establishing country music on the West Coast via the migrants who left Oklahoma's dust bowl for California.

1933. Bob Wills forms his Texas Playboys, the definitive western swing band in America.

1933. WLS's *National Barn Dance* joins NBC's Blue Network, the first country barn dance show to be aired nationally.

August 16, 1935. Patsy Montana records "I Want to Be a Cowboy's Sweetheart," the earliest country release by a female singer to sell a million copies.

1935. Jukeboxes are introduced to truck stops and restaurants in the South. The jukebox had a profound effect on the kinds of music that country performers recorded, and helped influence the development of the honky-tonk style.

May 1939. Red River Dave sings his composition "The Ballad of Amelia Earhart" on television, from the RCA Pavilion at the 1939 World's Fair in New York, and proclaims himself to be "the world's first television star."

October 1939. Bill Monroe makes his initial appearance on the *Opry* stage, singing "Muleskinner Blues," thereby giving birth to bluegrass music.

1940. Clell Summey, of Pee Wee King's Golden West Cowboys, plays the electric guitar on the *Opry* stage, claiming to be the first musician to do so; however, the priority is also claimed by Sam McGee and Paul Howard.

1941. Bing Crosby records "You Are My Sunshine" and "New San Antonio Rose." These were probably the first country "crossover" hits — that is, they were popular with a national, not merely country, audience.

1941. An electric guitar is used for the first time on a country music record. According to the story, jukebox operators complained to Ernest Tubb that his records could not be heard over the din of their noisy honky-tonks. Tubb proceeded to employ Fay (Smitty) Smith, staff guitarist for KGKO in Fort Worth, to play electric guitar on one of his recording sessions.

1943. Elton Britt's "There's a Star-Spangled Banner Waving Somewhere," a song about a crippled boy who wants to help with the war effort, becomes country music's first gold record (awarded by his label).

1943. Fred Rose and Roy Acuff form Acuff-Rose, the first song publishing firm located in Nashville. Acuff-Rose became an outlet for country songwriters like Hank Williams, who probably could not have obtained songwriting contracts in northern urban centers.

1944. *Billboard*, the music industry's leading trade publication, introduces the first country music popularity charts, under the heading "Most Played Juke Box Folk Records," thereby further legitimizing the country music business.

March/April 1945. Red Foley records at WSM's Studio B; he is considered to be the first performer to record officially in Nashville, aside from the 1928 Victor field recordings.

September 11, 1945. Ernest Tubb makes "It Just Don't Matter Now," and "When Love Turns to Hate," under the direction of Decca's Paul Cohen, Nashville's first major producer; many date the real start of commercial recording in Nashville to this session. By 1960, less than 15 years after the first recording studio

had been built, most of the major recording companies were doing all of their country recording in Nashville, and by 1963 Nashville had 10 studios, 10 talent agencies, four recording-pressing plants, 26 record companies, and nearly 2,000 musicians and writers.

September 18/19, 1947. Ernest Tubb and Ray Acuff headline New York's Carnegie Hall, the first country music show ever presented in that venue; people had to be turned away from the doors.

1947. Harold "Sticks" McDonald, of Pee Wee King's Golden West Cowboys, plays drums on the stage of the *Grand Ole Opry*. His claim to have been the first to do so is disputed by Smokey Dacus, of Bob Wills and his Texas Playboys, who says that he played drums at the *Opry* in 1946 — behind the curtains. Even today, nothing more than a simple set of snare drums is allowed on the *Opry* stage.

January 13, 1948. *Midwestern Hayride*, the first country music show to be broadcast regularly on television, debuts on WLW, Cincinnati.

1949. *Billboard* changes the name of its country music charts from "Most Played Juke Box Folk Records" to "Country and Western," thereby legitimizing the term in the business.

September 30, 1950. The *Opry* is broadcast by television for the first time.

1951. Patti Page and Tony Bennett record "Tennessee Waltz," and "Cold, Cold Heart," respectively, and achieve mass popularity for country songs for the first time since 1941. The Bennett recording is Hank Williams's first crossover hit and does much to make the latter's name known nationally.

1952. Eddy Arnold becomes the first country star to host a network television show when he is chosen to be Perry Como's summer replacement on NBC-TV.

1954. The pedal steel guitar is first used on record, played by Bud Isaacs on Webb Pierce's "Slowly."

1955. George Jones has his first hit, "Why Baby Why?" Johnny Cash makes his earliest recordings (on the Sun label).

1957. The Country Music Association, the oldest country music trade organization, is formed.

1958. The Kingston Trio's "Tom Dooley" wins the initial country music Grammy award. The group's growing popularity was an early signal that rockabilly was already entering a decline; "Tom Dooley" helped spark the folk music revival of the early 1960s.

July 19, 1960. Loretta Lynn's first hit, "Honky-Tonk Girl," enters the *Cash Box* country music charts.

November 3, 1961. Fred Rose, Hank Williams, and Jimmie Rodgers are installed as the first members of the Country Music Hall of Fame.

December 13, 1961. Jimmy Dean's album, *Big Bad John*, becomes the first country music record to receive the gold certification (signifying sales of a mil-

lion dollars) from the Recording Industry Association of America.

1964. Johnny Cash records "It Ain't Me, Babe," becoming the first country singer to cut a Bob Dylan song.

1966. Bob Dylan becomes the first of the new generation of rock singers to make a major album in Nashville, *Blonde on Blonde*.

October 1967. The first Country Music Association awards show is held.

1967. The first country rock album — *Safe at Home* by the International Submarine Band, featuring Gram Parsons — is released. One year later, Parsons joins the Byrds and the group produces *Sweetheart of the Rodeo*, a milestone in that genre.

1969. *Hee Haw*, the highly popular syndicated country television show, makes its debut.

1971. The first annual Fan Fair is held in Nashville's Municipal Auditorium.

March 1972. The first Dripping Springs, Texas, "Picnic" is held; the three-day redneck-meets-hippie festival includes Willie Nelson, who began sponsoring the event the following year. Thus begins outlaw music's dominance of the genre.

1972. Loretta Lynn is elected the Country Music Association's "Entertainer of the Year," the first woman to be so honored.

1973. The Opryland amusement park opens for business.

March 19, 1974. The *Grand Ole Opry*'s first show at the new Opry House, on the grounds of Opryland, U.S.A., takes place.

1974. George Hamilton IV becomes the first country performer to tour the U.S.S.R.

1976. *Wanted: The Outlaws* (RCA), featuring Waylon Jennings, Willie Nelson, Jessi Colter, and Tompall Glaser, becomes the first country music record to be awarded the platinum designation (signifying sales of 1 million copies of an album) by the RIAA.

1980. The Mandrell sisters — Barbara, Louise, and Irlene — become the first female country singers to host a regularly scheduled network television show.

1980. Paramount releases the film, *Urban Cowboy*, starring John Travolta. The movie is largely responsible for making country music a bankable commodity with Middle America in the early 1980s. Prime growth areas include honky-tonks (particularly Gilley's, a bar in Pasadena, Texas, where part of *Urban Cowboy* was filmed), country dress fashions and crossover hits, most notably by Mickey Gilley, Juice Newton, Dolly Parton, Kenny Rogers, Ronnie Milsap, and Eddie Rabbitt.

George Strait hits the Country Top 10 with "Unwound" (MCA 51104); his follow-up hits help

provide the impetus — along with artists such as the Judds, Rick Skaggs, and Randy Travis — for the hard country revival. Based upon the musical values of honky-tonk, bluegrass, and other classic retro styles, hard country was a reaction to the country pop sound then ascendant in Nashville. Strait's career alone would guarantee the long-range viability of traditional country; as of late 2003, his album, *Honkytonkville* (MCA Nashville 000114), which entered the *Billboard 200* at number five earlier in the summer, remained high on the charts.

September 1981. The rise of MTV proves the viability of music within a video context. The Nashville Network and Country Music Television appear in short order as cable TV alternatives for fans interested in C&W video clips, concerts, interviews, and news. September 28, 1991. Garth Brooks's *Ropin' the Wind* (Capitol Nashville 96330) reaches number one on the pop album charts (and remain there a total of 18 weeks). Brooks would credit the implementation of the soundScan by *Billboard* for enabling country artists to compete with pop and R&B performers on a level playing field. During the 1990s, Billy Ray Cyrus (his *Some Gave All* [Mercury 510635] topped the *Billboard 200* for 17 weeks in 1992), LeAnn Rimes (her cover of "How Do I Live" [Curb 73022; 1997; #2] set a record for length of time — 61 weeks — on the *Billboard Hot 100*), and many other country stars would find mainstream success.

Early 1990s. "Black Hat Acts" such as Brooks, Clint Black, John Michael Montgomery, and Tim McGraw (his 2002 LP release, *Tim McGraw and the Dancehall Doctors* [Curb 78746; #2 pop], would achieve double platinum sales the following year) dominate the country charts. No Depression music — a combination of roots-oriented C&W, the folk mythology of Woody Guthrie, and alternative rock attitude — is widely recognized as a commercially viable genre. Notable artists include Son Volt, Wilco, and the Old '97s.

Late 1990s. Nashville discovers that sex sells. Photogenic stars — particularly youthful females such as Faith Hill, Shania Twain, and the Dixie Chicks — become hot commodities. *Cry* (Warner Bros. 48001; 2002; #1 pop) achieved double-platinum sales in 2003. Assisted by cutting-edge promotional videos and rock press coverage, Twain released a string of best-selling albums, most notably, *Up!* (Mercury 170314; 2002; #1 pop). Despite alienating a portion of their core audience due to public criticism of President George W. Bush's war policy, the Dixie Chicks sold more than 6 million copies of the LP, *Home* (Monument/Columbia 86840; 2002; #1), through mid-2003.

Late 2001. Mining an ages-old subgenre, country musicians lead the charge in flooding the marketplace

with patriotic recordings. Toby Keith enjoyed the greatest success with such material in the wake of the 9–11 tragedy, achieving triple platinum sales for *Unleashed* (Dreamworks 450254; 2002; #1 pop).

The drive within the country field for respectability in the eyes of the music business establishment as well as the population at large has been the overriding theme in the genre's development during the 20th century. The major record labels were content to allow the independents to dominate the field until after World War II. Radio was somewhat more responsive; however, the modest rise of barn dances and other live country music performances represented a relatively small dent in an overall picture dominated by big-time network programming. Much has been made of the appearance of WSM's *Grand Ole Opry* broadcasts in 1925. In reality, the event's short-term impact was largely symbolic in nature; many other clear-channel radio stations (e.g., WLS, Chicago; WBAP, Ft. Worth; WWVA, Wheeling), had successful barn dance programs. In the long-term, though, the *Opry* acted as a magnet for the country music industry, providing a central focus for recording, promotional, recreational and archival activities (see "September 11, 1945" above). The "Nashville Sound," under the leadership of Chet Atkins, projected the aura of urban sophistication combined with a proper respect for stylistic roots needed to render country music a powerful commercial force within the entertainment business beginning in the mid-1960s. Despite recent challenges to its hegemony, Nashville remains the commercial center and artistic soul of country music, thereby endowing the field with a solidarity and unified posture missing in all other spheres of American popular music. Still, underneath this seemingly homogenous exterior can be found the diversified array of styles that have endowed country music with its present-day character. An awareness of these styles is central to an understanding of the broader entity. The leading subgenres (derived from Hume 1982, Malone 1968, and Stambler 1969) include:

1. *The Bakersfield Sound*. Music performed by musicians centered in Bakersfield, California, in the late 1950s and early 1960s; for example, Buck Owens, Merle Haggard, and Wynn Stewart. The style is rawer and more rhythmic than the Nashville Sound. The first time country music produced in California achieved popularity on a national level, marking the beginning of the end of Nashville's domination of country music recording.
2. *Bluegrass*. A comparatively modern style; the chief difference between bluegrass and the string band music of the Appalachian region that

- preceded it is the emphasis the former places on rhythm and on instrumental virtuosity. Two major schools exist: the instrumental style, often compared to jazz, most frequently associated with Bill Monroe, the father of bluegrass music, and "the high lonesome sound" (vocal music), best exemplified by the Stanley Brothers's output. Flatt and Scruggs, via the *Beverly Hillbillies* and the college concert circuit, stimulated a revival of the style in the 1960s; many rock artists (e.g., the Grateful Dead, Gram Parsons) incorporated it into their work.
3. *Cajun*. Music made by French colonials who eventually settled in southern Louisiana. It incorporates many elements of the French culture of the region: (a) it is usually sung in the local patois, which is a corrupt form of the French language; (b) many bands include both an accordion player and a fiddler; and (c) most songs are played in three-quarter waltz time. No performer adhering to a pure Cajun style has ever been commercially successful in the country field; however, many Cajun-influenced musicians such as Moon Mullican, Jimmy C. Newman, and Doug and Rusty Kershaw have had country hits.
 4. *Conjunto*. A style of music popular along the border between Mexico and the U.S., incorporating elements of both Cajun and German music. Conjunto bands usually employ an accordion player, while the music is played in either waltz or polka time. Doug Sahm, Augie Meyer, and Freddy Fender have all been heavily influenced by the sound.
 5. *Country Blues*. Often used as a code phrase to refer to music made by white singers who have incorporated Black elements into their style; for example, Jimmie Rodgers, Hank Williams, Bill Monroe, and Ronnie Milsap.
 6. *Country Rock*. Amorphous genre including anything from country songs sung with rock instrumentation to rock songs sung by country singers, to country songs sung by rock singers, to country music sung by anyone who is not from the country. Classic country is generally acknowledged to have been the creation of Gram Parsons; he brought country to the attention of many rock artists, helped stimulate the singer/songwriter movement beginning in the early 1970 and, in the South, encouraged country-based performers to fuse that genre with rock.
 7. *Folk Music*. Refers to two major strains:
 - (a) Country folk, which includes songs that have been passed down orally from generation to generation, usually originating with European material. Noteworthy exponents have been Bradley Kincaid and the Carter Family.
 - (b) Urban folk differs in that the music is generally employed to achieve a political end. Chief practitioners have included Woody Guthrie, Pete Seeger, Joan Baez, and Bob Dylan.
 8. *Gospel Music*. Also divided into two styles: while Black gospel is the more energetic and rhythmic of the two, white gospel has exerted a greater influence on country music. Because the genre features a more emotional, exhortative singing style than is the case with country, gospel-influenced singers like Roy Acuff, Wilma Lee, and Stoney Cooper have changed country vocalizing completely and helped to place the solo singer in the foreground, thereby leading to the creation of a star system.
 9. *Hard Country*. Generally means making no concessions to fad or fashion, using classic country instruments (usually amplified), and featuring the singer rather than the accompaniment or the song. Sometimes used as a synonym for "classic country"; that is, music not adulterated by rock or blues styles.
 10. *Honky-Tonk Music*. Originally referred to any music played in a honky-tonk. Later, it meant music amplified to be heard over crowd noise and addressing the patrons' real concerns — adultery, divorce, rootlessness, and drinking. A subgenre of hard country; leading practitioners have included Ernest Tubb, Lefty Frizzell, Hank Williams, George Jones, Hank Thompson, and Gary Stewart.
 11. *The Nashville Sound*. Technically the style played by a certain group of musicians working in Nashville in the late 1950s and early 1960s. Because record companies did not allow individual performers to use their own bands and producers while making a record, and because Chet Atkins, who headed the A&R division for RCA in Nashville, had such a large roster of talent to produce, the instrumental arrangements — which utilized the same group of session musicians — became both predictable and standardized. Compared to the country music that preceded it, the Nashville Sound is slick and sophisticated. Prime exponents include Jim Reeves, Webb Pierce, and Floyd Cramer.
 12. *Old Time Music*. Refers to either precommercial country music or the work of modern musicians who play in the old styles. Sometimes used interchangeably with the term "country folk music."

COUNTRY HARMONIZERS

13. *Outlaw Country*. Originally designated a loose-knit group of musicians — Waylon Jennings, Willie Nelson, Tompall Glaser, Billy Joe Shaver, Kris Kristofferson, for example — who objected to the common Nashville practice of awarding creative control of recording sessions to the record company's staff producers rather than to the artists themselves. These artists chose to work outside the existing system by pressuring the record labels to give them control over their own work. As a result, the outlaws produced some of the best work of their respective careers and sold equally well to the non-country market and the traditional country core audience. This success undermined the dominance of the Nashville Sound, thereby rendering the movement passé.
14. *Progressive Country*. A term coined in Texas during the early 1970s, when young, rock-influenced musicians began mixing with mainstream country musicians at places like the Armadillo World Headquarters in Austin. Ironically, the genre is often traditional in approach; for example, Asleep at the Wheel's revival of the classic western swing of the late 1930s. Frequently used interchangeably with "redneck rock."
15. *Rockabilly*. A hybrid formed out of the intermingling of R&B and country. The best-known practitioners began their careers with Sun Records in Memphis, including Elvis Presley, Jerry Lee Lewis, Carl Perkins, Johnny Cash, and Charlie Rich. Others such as the Everly Brothers, Eddie Cochran, Little Jimmy Dickens, and the Johnny Burnette Trio helped elevate rockabilly to a preeminent position in the 1950s.
16. *Singing Cowboy Music*. Refers to the film output of Gene Autry, Tex Ritter, the Sons of the Pioneers, and others in the 1930s and 1940s. Because many country performers adopted the dress of a movie cowboy, the "western" designation was added to "country" in the late 1940s.
17. *The Texas Sound*. This term is practically synonymous with progressive country and redneck rock. It has been used to mean any band from Texas; a futile categorization considering that the state has a variety of musical styles.
18. *Tex-Mex Country*. Nationally, the style is represented solely by Freddy Fender. On a local level, the sound thrives in cities like Austin and San Antonio, where bands employ accordions and six-string basses to produce a hybrid conjunto sound.

19. *Western Swing*. While the genre draws from country music for much of its instrumentation and lyrics, it differs with respect to its rhythms (derived mainly from New Orleans jazz of the 1920s and 1930s), and sophisticated dance orchestra arrangements. Chief exponents included Bob Wills and his Texas Playboys, Milton Brown and his Musical Brownies, and Spade Cooley. After a sharp decline in popularity in the 1950s and 1960s, western swing was revived by rock-influenced artists such as Asleep at the Wheel in the 1970s.

Although country music sales were not damaged in the industry declines of 1979, and indeed the category increased its market share to around 20 percent in the next few years, in 1985 country record sales began a dramatic fall, with star performers selling only near break-even points (about 80,000 sales). By the 1990s, however, the genre was hotter than ever, shrewdly positioning itself as the music of Middle America as alternative rock and rap artists came to be increasingly viewed as too radical for mainstream consumption. [Albert 1984; Hemphill 1970; Hume 1982; Malone 1968.]

See also **Disc; Folk Music Recordings**

FRANK HOFFMANN

COUNTRY HARMONIZERS

SEE *HARMONIZERS QUARTET*

COUNTRY MUSIC ASSOCIATION (CMA)

An organization established in Nashville in 1958 to promote the playing of country music on radio and television, achieving considerable success in this effort during the 1960s and 1970s. Originally having 233 members, as of 2000, the organization represented more than 6,000 individuals and groups in more than 43 countries. The group founded the Country Music Hall of Fame in 1961 and created the Country Music Foundation to administer it three years later. In 1967, it established the CMA awards for performers and, six years later, for disc jockeys; in 1968, it became the first nationally broadcast music awards ceremony. In 1981, the group established the Horizon Award for promising new acts, presented as part of the annual CMA awards ceremony. In 1982, the group opened its first office outside of the U.S. in London. [Website: www.cmaworld.com.]

COUNTRY MUSIC FOUNDATION (CMF)

An organization established in 1964, in Nashville. The purpose of the foundation is to promote interest in country music and the study of it. It has a press, a scholarly periodical (*Journal of Country Music*), a lecture-demonstration program, and a library open to scholars. The Country Music Hall of Fame and Museum, founded in 1961, is a major activity of the foundation. The foundation also operates Hatch Show Print, the last of the great woodblock printers specializing in posters for musical events. In 2001, the CMF opened a greatly enlarged museum and research facility in downtown Nashville. [Website: www.halloffame.org.]

COUNTRY ROCK

Country rock represented a merging of country instrumentation with rock's beat and socially conscious attitude. Its immediate precursors included rockabilly and the Nashville crossover pop of the 1960s exemplified by singers like Skeeter Davis ("End of the World," RCA 8098; 1963), Bobby Bare ("Detroit City," RCA 8183; 1963), Johnny Cash ("I Walk the Line," Sun 241; 1956), Marty Robbins ("El Paso," Columbia 41511; 1959-60), and Jim Reeves ("He'll Have to Go," RCA 7643; 1959-60). The Beatles helped bring new attention to country song thanks to Ringo Starr's love for the genre; he covered Buck Owens's "Act Naturally" effectively, and later recorded his own country-rock album, *Beaucoups of Blues* (Apple 3368, 1970).

Country rock was part of the back-to-the-roots movement instigated in the late 1960s by maturing baby boomers whose tastes were changing in favor of softer forms of pop music. Among the early pioneers was a Florida-born folksinger named Gram Parsons, who formed an early country-rock band, The International Submarine Band, in 1966. Parsons would later briefly join the Byrds, helping to shape their classic country-rock album, *Sweetheart of the Rodeo*, released on the Columbia label (9670) in mid-1968. Not particularly successful commercially, the album was highly influential on the next generation of country-rock performers. Parsons and Chris Hillman left the Byrds shortly after the album's release to form the legendary Flying Burrito Brothers, recording two albums before Parsons embarked on a short-lived solo career; he died, a casualty to drug and alcohol abuse, in 1973.

Rick Nelson, who had previously enjoyed years of hits as a teen pop star, was also an early convert to country-rock. His Stone Canyon Band gained a strong following in southern California during the late 1960s and early 1970s. Several band members formed the

nucleus for the next generation of country-rock bands, including bassist Randy Meisner (who played with Poco and the Eagles), and steel guitarist Tom Brumley. At the same time, another California-based band, the former bluegrass group, the Dillards, was also experimenting with country-rock; one band member, Bernie Leadon, would become one of the founding members of the Eagles.

Poco was formed out of the remnants of Buffalo Springfield by singer/guitarists Richie Furay and Jim Messina, and featured steel guitarist Rusty Young. Although not commercially as successful as the Eagles, the group recorded many albums over a decade from 1969 to 1978. But by far the most successful of all country-rock outfits was the Eagles. Formed around songwriters Glenn Frey and Don Henley — and featuring country-rock pioneers Bernie Leadon and Randy Meisner — the group scored initial hits in a countryish style, including "Take It Easy" (Asylum 11055; 1972), and "Peaceful Easy Feeling" (Asylum 11013; 1973). However, they gained their greatest success in the mid-1970s after Leadon left the group and the band adopted a more hard-rocking sound, thanks to the addition of guitarists Don Felder and Joe Walsh.

Country rock embraced a wide variety of other performers. Bob Dylan, always somewhat of an iconoclast, released his *Nashville Skyline* (Columbia 9825; 1969), which produced a Top 10 single, "Lay Lady Lay" (Columbia 44926). His country-styled vocals also attracted much attention, representing a sharp change in vocal style from his earlier, nasal "protest" voice. *Nashville Skyline* was also notable for its inclusion of a Dylan-Cash duet. By the 1970s, other country artists — particularly leaders of the "outlaw" movement such as Willie Nelson, Waylon Jennings, and Kris Kristofferson — began collaborating with rock performers.

Country rock was not embraced by the country music establishment during its heyday. The Byrds appeared on the *Grand Ole Opry* after releasing *Sweethearts of the Rodeo*, but were not well received. However, many of the biggest country stars of the 1980s and 1990s were influenced by the country-rock style. A tribute album to the Eagles was released in the mid-1990s featuring the group along with many new country stars, showing the link between them.

FRANK HOFFMANN

COUNTRY RECORDS

County Records was founded in New York in 1963 by old-time music enthusiast and record collector Dave Freeman. Initially he released thematic collections of

COURT, HUGH PETER

78 recordings of country artists, and then began issuing new records by traditional performers along with his reissues. He formed a mail order business to sell his records, and related products, in 1965 under the name County Sales. County helped popularize early stringband recordings by artists like Charlie Poole and the Skillet Lickers. The biggest “star” of the new old-time performers who recorded for County was fiddler Tommy Jarrell (often in partnership with banjo player Fred Cockerham); Jarrell’s recordings helped spark the old-time revival of the mid-’70s through the ’80s. Recognizing the popularity of country and bluegrass revivalists, Freeman formed a new label, Sugar Hill, in 1978, in partnership with Barry Poss; Poss would later buy him out. At about this same time, Freeman moved the business to Floyd, Virginia. In 1979, he added Rebel Records’ catalog to his holdings. County continues to reissue old-time recordings on CD, while Rebel has become the major outlet for both traditional and more progressive bluegrass artists. [Website: www.countysales.com.]

COURT, HUGH PETER (1920–1972)

Industry executive, born in Britain, founder (with his brothers) of the Rococo label in Toronto. He was instrumental in reissuing on LP many treasured recordings of the past. He and his brothers also produced *Record News* from 1957 to 1961.

COWBOY SONGS

SEE *COUNTRY MUSIC RECORDINGS*

COUZENS, RALPH (9 FEB 1957–)

Currently operations director and chief engineer and producer for Chandos Records, Couzens was born in Rochford, Essex, in England. He studied piano and clarinet as a youth, attended Saturday music school, and played in local amateur orchestras and wind bands. He went on to study electronics for five years at Colchester Technical Collage, and attended recording sessions in 1972 while still in school. In 1974, Couzens joined Chandos as an apprentice sound engineer, working mainly as a tape operator on sessions until 1978. He engineered and balanced his first recording for Chandos in 1978, and after that time he engineered numerous high-quality transcriptions, becoming one of the company’s in-house producers in 1987. Between 1978 and 1998, he also designed and built various mixing consoles for the company, and currently is involved with the engineering and production of numerous

Chandos releases, including those being transcribed for surround-sound release. Over the years, Couzens has won four *Gramophone Magazine* awards for engineering and production, and has been nominated twice for Grammy awards for engineering.

HOWARD FERSTLER

COVERING

A term in the popular record industry for the practice of having one performer record another performer’s hit material. It was straightforward in the 1940s; for example, Frank Sinatra did a Columbia issue of “Sunday, Monday, or Always” — a Bing Crosby movie hit, originally on Decca — and record buyers had a choice of renditions. There were more than 400 versions of “White Christmas,” following Bing Crosby’s. Then, in the 1950s — with rhythm and blues and country recordings denied access to mainstream pop radio — A&R staff at the major labels began recruiting middle-of-the-road performers to cover songs from other genres; for example, Tony Bennett offered “Cold, Cold Heart” in a bland style quite removed from the Hank Williams country original. Pat Boone and, to a lesser extent, Elvis Presley, jump-started their careers via this practice. Some rock numbers with racy lyrics were covered in a middle-of-the-road idiom with modified texts. African-American doo-wop artists, in particular, and their songs — e.g., the Chords’ “Sh-Boom” (covered by the Crewcuts), the Jewels’ “Hearts Of Stone” (Fontaine Sisters), the Gladiolas’ “Little Darlin’” (the Diamonds) — were regularly singled out for covering. Aside from the obvious loss of revenue (even in cases where the original performers were also the composers, songwriting revenues often ended up in the pockets of talent managers and record label executives), helped speed up the synthesis R&B, country, and pop that resulted in the emergence of rockabilly and classic rock ‘n’ roll.

See also *Crossover*

REV. FRANK HOFFMANN

COWELL, HENRY (11 MAR 1897–10 DEC 1965)

American composer, writer, and new music impresario. Cowell introduced the tone cluster — a mass of notes played on the piano with forearm or fist — into his piano compositions as early as 1911, making him a pioneer in adding “noise” elements into music. In 1925 Cowell founded the *New Music Quarterly*, which published works by Charles Ives, Anton Webern, Ruth Crawford Seeger, Edgard Varese, and others; a series of recordings followed, providing crucial exposure for

experimental music in America. In 1931 Cowell developed, with Leon Theremin, the rhythmicon, a machine capable of reproducing accurate cross-rhythms; this was a prototypical drum machine.

Arrested in 1936 on a morals charge, Cowell spent four years in San Quentin; after release his music became more conventional. Cowell served as an informal advisor to Moses Asch at Folkways Records from the early 1950s until his death, directing avant-garde composers like John Cage to the label and overseeing recordings of Charles Ives's string quartets, as well as some recordings of world music. Some of Cowell's later works incorporate Asian and Arabic music techniques (the result of global travel during the last decade of his life). He died of cancer in 1965.

Cowell composed nearly a thousand works; most recordings are of his piano music. Cowell recorded his early piano music for Folkways in 1963; the Smithsonian Folkways CD reissue (#40801), includes a bonus track in which he discusses each piece. More contemporary CD recordings give these works the full-bodied presence they deserve. *Sorrel Hays Plays the Piano Music of Henry Cowell* (Town Hall 47, 1997), and *New Music — Piano Compositions by Henry Cowell* (New Albion 103, 1999), each contain Cowell's best known "tone-cluster" compositions, along with extended-technique experiments such as "The Banshee." Richard Auldon Clark and the Manhattan Chamber Orchestra have recorded Cowell's *Persian Set*, as well as a selection of his more austere "Americana" pieces on a Koch International CD (#7220, 1993). Finally, there is a fine collection of Cowell's experimental chamber works, including the long-considered-unplayable *Quartet Romantic* and *Quartet Euphometric* (Mosaic, Mode 72, 1999).

KEVIN HOLM-HUDSON

COX, HENRY C. (1891–1 APR 1954)

American motion picture and recording industry executive. An officer with the Columbia Phonograph Co. in the 1920s, he was vice president and treasurer, then (1925) president. In 1927 he was president of the Columbia Broadcasting System. Cox was an associate of Charles P. Skouras in the operation of the latter's theater chain, and was vice president and a board member of National Theatres, Inc. He died in New York City.

CRAWFORD, JESSE

(2 DEC 1895–27 MAY 1962)

Born in Woodland, California, Crawford was an American theater and radio organist, the first

performer to record the instrument extensively. After his father died when he was a year old, Crawford was raised in an orphanage, where he learned piano and played cornet in the band. At age 14 he began touring California with a dance band, but soon tired of life on the road. He began playing piano at local nickelodeons, eventually ending up in Spokane, Washington, where he had the chance to play an Estey Theatre Organ. During the early 1910s, he met organist Oliver Wallace at the Liberty Theater in Seattle. Wallace introduced him to the newly installed electric theater organ there. Wallace also recommended him to San Francisco movie theater mogul David Grauman. Soon after, in 1917, Crawford was hired by Grauman's son, Sid, to play at his new movie palace in Los Angeles. In 1921, he was lured to Chicago to play the 21-rank Wurlitzer by owners Balaban and Katz, and then in 1926 moved to New York for a seven-year engagement at the famous Paramount Theater, playing the 36-rank Wurlitzer there, which established his reputation.

In 1924 Crawford was one of the artists to make the world's first commercial electric recordings, on the Autograph label of Marsh Laboratories. Most of his discs were made for Victor, but he also appeared on Decca and Bluebird. Probably his most popular record was "At Dawning"/"Roses of Picardy" (Victor #20110; 1927). During a tour of England in 1933, he made eight recordings for HMV. on the Empire Theater's Wurlitzer organ (he also made the first radio broadcast of this instrument, over the BBC, during this trip). All his recordings were in the popular vein. Crawford was active through the 1950s, recording primarily on the theater organ, but also playing the electric Hammond Organ on the road from about 1936. His wife, Helen (born Helen Anderson; d. 1943), was also a talented organist, and the two performed together and made a few organ duet recordings; Helen also recorded accompanying Bing Crosby, among others. From 1945 to 1949 Crawford taught in New York City with his son, and then returned to California, working as a teacher and Hammond organ demonstrator at a major music store in Los Angeles; he also recorded LPs for Decca on the Hammond organ, and returned to recording on the pipe organ in the mid-1950s. Crawford died in Sherman Oaks, California. The Organ Historical Society has issued a CD of Crawford's 1920s-1930s era recordings as *The Early Years* (Piping Hot 1008). The only currently available CD of his later Decca material is *Wedding Music* (Universal Special Products 20777; rel. 1999).

REV. CARL BENSON

CREAM

Cream began its life as a prototypical blues-rock power trio with a decided experimental bent; through such devices as free-form jamming and extended solos, the band laid the groundrock for the progressive rock era. All three members were well-known virtuosos prior to coming together in mid-1966 — drummer Ginger Baker was an alumnus of Graham Bond's Organization, bassist Jack Bruce had played with Bond and Manfred Mann, and guitarist Eric Clapton had gained a substantial following with the Yardbirds and John Mayall's Bluesbreakers.

During its brief existence, the band released four best-selling albums: *Fresh Cream* (Atco 206; 1967), *Disraeli Gears* (Atco 232; 1967), *Wheels of Fire* (Atco 700; 1968), and *Goodbye* (Atco 7001; 1969). The group also scored two U.S. major hits, the Top 10 "Sunshine of Your Love" (Atco 6544; 1968), and "White Room" (Atco 6127; 1968). Cream not only popularized the "power trio" format, they laid the basis for heavy metal groups, including Led Zeppelin. Thanks to their U.S. tours, they introduced guitarist Eric Clapton — previously a cult hero among British guitarists — to a far wider pop audience. The idea of bringing together the "cream" of rock musicians into one group influenced the forming of other so-called "supergroups," including Crosby, Stills, and Nash (although stylistically the two groups had little in common).

When Cream performed its farewell concert at London's Royal Albert Hall, 26 Nov 1968, they were perhaps the most popular performing aggregate in popular music. Despite universal praise from the rock press and high-art tastemakers such as composer/conductor Leonard Bernstein, the band had found it impossible to continue due to internal tensions. While Bruce embarked on a solo career and Clapton and Baker joined Blind Faith (before going solo as well), Atco (and, later RSO and Polydor) continued to release live albums and compilations of previously released material. The band was inducted into the Rock and Roll Hall of Fame in 1993.

FRANK HOFFMANN

CREEDENCE CLEARWATER REVIVAL

Creedence Clearwater Revival was in the vanguard of the back-to-the-roots trend of the late 1960s, which spurred a shift in pop music's center of gravity from the progressive-psychedelic experimentation of the 1966-1968 period to a predominance of rockabilly, country, and blues-based styles by 1969. Despite a career of relatively short duration, the band's record-

ings possess a timeless quality — with an emphasis on economical, well-crafted songs, a rock-steady rhythm section, and John Fogerty's incisive guitar riffing and soulful singing — that has helped them remain popular up to the present day.

All four band members — Fogerty, his brother, rhythm guitarist Tom Fogerty, bassist Stu Cook, and drummer Doug Clifford — were born in the early 1940s in the San Francisco Bay area. John formed a trio with Cook and Clifford while all were in junior high school; after playing at local parties and school functions for a time, John enlisted older brother Tom to fill out the lineup. Although both of the Fogerty brothers were multitalented instrumentalists, capable of playing harmonica, saxophone, and a variety of string, keyboard, and percussion instruments, they developed a country-blues-rock 'n' roll amalgam based on many hours of listening to the recordings of Chess blues masters and the 1950s Sun artists.

Several singles with the Scorpio (1965-1966) and Fantasy (1967) labels when the group was known as the Golliwogs went nowhere; they are included in the retrospective anthology, *Pre-Creedence* (Fantasy 9474; 1975). When Fantasy employee Saul Zaentz purchased the company in late 1967, however, he encouraged the band to try again, this time as Creedence Clearwater Revival. The funky, roots-oriented debut album, *Creedence Clearwater Revival* (Fantasy 8362; 1968; #52), released in mid-1968, seemed to run counter to the Baroque excesses of many leading rock artists of the day. The next four albums — *Bayou Country* (Fantasy 8387; 1969; #7), featuring the breakthrough pop hit, "Proud Mary" (Fantasy 619; 1969; #2), *Green River* (Fantasy 8393; 1969; #1), *Willie and the Poorboys* (Fantasy 8397; 1969; #3), and *Cosmo's Factory* (Fantasy 8402; 1970; #1) — were released in rapid succession, displaying little deviation from the band's trademark sound.

Ever mindful of critics carping that they were a singles act (with nine Top 10 hits in less than two-and-a-half years), that their sound was simplistic and one-dimensional, the band's next LP, *Pendulum* (Fantasy 8410; 1970; #5), featured expanded instrumentation (e.g., John Fogerty's organ in "Pagan Baby"), and song structures (most notably the chromatic interlude in "Rude Awakening #2"). Flat sales heightened disaffection within the group over John's dominant role in the songwriting, production, and performing areas.

However, interested in developing his own artistic identity, Tom Fogerty departed for a solo career. The remaining members pursued a tentative three-way split of creative control on the next album. *Mardi*

Gras (Fantasy 9404; 1972; #12), was an aesthetic and commercial disappointment, in part responsible for the band's breakup. John Fogerty pursued a moderately successful solo career before openly feuding with Fantasy owner Saul Zaentz over financial matters—who had expanded into the jazz field in a big way thanks largely to profits generated by Creedence albums. Fantasy issued a steady stream of live and recycled material — including *Creedence Gold* (Fantasy 9418; 1972; #15), *More Creedence Gold* (Fantasy 9430; 1973; #61), *Live in Europe* (Fantasy 88; 1973; #143), *Chronicle* (Fantasy 2; 1976; #100), and *The Royal Albert Hall Concert* (Fantasy 4501; 1980; #62), retitled *The Concert* when it was discovered that it took place at the Oakland Coliseum — thereby enabling Zaentz to acquire other labels and branch out into film production.

FRANK HOFFMANN

CRESCENT TALKING MACHINE CO.

A New York firm, established in 1914 to make discs and players. The Crescent Sales Co., Providence, Rhode Island, was distributing agent. The discs, eight-inch and 10 1/2 inch vertical cut, were mainly taken from Pathé masters, but — apparently through a misunderstanding — were not playable on the Crescent phonographs, which were designed to play lateral-cut records. This was one factor (the other was probably a



Rare Crescent label release; note the instructions on how to play the disc worked into the company's name around the upper label. Courtesy Kurt Nauck/Nauck's Vintage Records

lack of novel material) that contributed to the quick demise of the company; only 60 records were offered through 1917. The disc players were trade-named "Silvertone" and came in 14 different models. [Blacker 1969; Blacker 1970/7; Rust 1978.]

FRANK ANDREWS

CRESCENT TRIO

A group that recorded for Edison Diamond Discs in 1920–1922, and Victor in 1928. The members were Elliott Shaw, Charles Hart, and Lewis James. The same singers were also known as the Apollo Trio and Orpheus Trio when they worked for Pathé. [Walsh 1962/10.]

CRITERION QUARTET

A group established in 1905, and popular from 1916 to 1930. The original members were Robert R. Rainey, William A. Washburn, Reinald Werrenrath, and Walter A. Downie. There were many changes in the membership later. Their first record was for Edison: "Little Tommy Went a-Fishing" (#8866; 1905). They worked for Edison until 1928, their final Diamond Disc being "Shall I Crucify Him?" (#52254). The quartet also recorded for Columbia, Leeds & Catlin, Talk-O-Phone, and Zonophone. Other names used by the group were Aeolian Male Quartet and Broadway Quartet (for Vocalion), and Strand Quartet (for Brunswick). In the late 1920s they were regular performers at the Roxy Theatre in New York under the name Roxy Quartet.

CRITERION RECORDS INC.

A New York firm, active in 1920–1922. Arthur H. Cushman was vice president and general manager. Criterion Records were issued in May 1921, 10-inch, single- and double-sided; they included arias by Metropolitan Opera and Chicago Opera singers. The firm went into bankruptcy in February 1922.

FRANK ANDREWS

CRITICAL DISTANCE

The point at a given distance from a loudspeaker system playing in an enclosed space where the direct signals coming from the system and the boundary-reflected reverberation generated by that same system are perceived at equal levels. The critical distance will be controlled by both the directivity of the speaker and the reflectivity of the room. Because speaker systems usually have multiple drivers of different sizes,

CRITICISM

it can vary considerably over the operating range of the system.

See also **Direct Field; Reverberant Field**

REV. FRANK HOFFMANN

CRITICISM

It was the *Phonographische Zeitschrift* (Berlin) that carried, in 1906, the first serious criticism of sound recordings. *National Magazine* and *World of Today* both began to publish record reviews in 1909. In the 1920s *The New York Times* began weekly record reviews. Criticism of a high standard, examining both performance and technical aspects of new records, began in the U.K. with the establishment of the *Gramophone* in 1923. The first magazine devoted entirely to commentary on new records was the *Phonograph Monthly Review* (1926), which became (1935) the *American Record Guide*.

B.H. Haggin's *Music on Records* (1938) was the first book-length (albeit slim) survey of available discs with commentary. David Hall's *Record Book* (1940) was the earliest substantial collection of evaluations; it had several supplements and revised editions through 1950. Hall confronted virtually the entire classical repertoire on 78s (and LPs in the 1950 edition), offering comparisons and sensible critiques of performance. *A Guide to Recorded Music* by Irving Kolodin (1941) was a worthy rival to Hall's books, also running to three editions before abandoning the cause in the LP avalanche of 1950. Britain produced its own *Record Guide*, by Edward Sackville-West and Desmond Shawe-Taylor, in 1951, plus an annual summary of reviews by the same authors. There was also a multivolume *Stereo Record Guide* (1960) by Edward Greenfield, et al.

The LP era brought forth numerous journals in which expert reviewing was a principal feature: *High Fidelity* (1951) and *Stereo Review* (1958) were especially noteworthy. *Records in Review, 1955–1981* was a yearly collection of reviews from *High Fidelity*. To assist their readers in coping with the mushrooming review scene, *Notes* began in 1948 to cite the reviews of new classical and folk records that appeared in a group of journals. This "Index to Record Reviews," edited by Kurtz Myers, has had three cumulations.

In 1977 a new journal, *Fanfare*, entered the field and soon became the prime American source for serious reviewing; it now stands with *Gramophone* in offering the most thorough and intelligent evaluations of new classical recordings.

A useful genre of monographic publication is the selective collector's guide, in which an author lists preferred versions of compositions in certain categories.

For example, *A Basic Classical and Operatic Recordings Collection on Compact Discs* (1990), by Kenyon C. Rosenberg, is a valuable general guide.

In jazz, pop, and rock, reviewing has been concentrated in the leading journals of those fields; and all major newspapers have coverage of new releases by competent critics. Periodicals with important reviews of popular music include *Jazz Journal International* (1947), *Rolling Stone* (1967), *Cadence* (1976), *Joslin's Jazz Journal* (1982), and *Discoveries* (1988). The first major "record book" for popular music was the *Rolling Stone Record Guide* (1979), covering "almost 10,000 currently available rock, pop, soul, country, blues, jazz, and gospel albums" with ratings from Worthless to Indispensable; it has appeared in various revised editions since.

A new generation of record review books came in the 1980s and 1990s, including the Rough Guide series out of England, the *All Music Guide* (originally a print publication, it is best consulted on the web at www.allmusic.com), and the MusicHound series. All of these publications attempt to take a comprehensive look at thousands of recordings, and are published in volumes by genre.

CRITONA (LABEL)

About 100 discs, now extremely rare, were issued in 1920–1921 by Criterion Records, Inc., of New York. The first advertisement in *TMW*, May 1921, included opera, light classics, and standards, at a



Rare Critona label release, c. 1921–22. Courtesy Kurt Nauck/Nauck's Vintage Records

price of \$0.50. A huntsman design identified the label. Arthur H. Cushman was general manager of Criterion. The firm was bankrupt in 1922. [Kendziora 1967/9.]

CROMELIN, PAUL H.

(4 FEB 1870–23 FEB 1929)

American recording industry executive, born in Washington, D.C. He moved in 1904 to Hackensack, New Jersey, where he remained until his death on 22 Feb 1929. He graduated from the George Washington University Law School in 1891, and worked for the Lincoln Bank in Washington to 1896. Then he became secretary of the American Graphophone Co. From 1897 to 1899 he managed branches and stores of Columbia Phonograph Co. in Washington and St. Louis. In 1900 he went to Berlin to establish the Columbia business in Germany and manage the new company there. He was responsible also for the Columbia interests in Russia and Austria-Hungary.

Returning to New York in 1903 he became a vice president of Columbia Phonograph Co., General, directing the legal and recording departments. He also organized the Columbia office in Mexico. Cromelin resigned from Columbia in 1911 to become Thomas Edison's representative in the U.K., managing the National Phonograph Co., Ltd., and remained in Britain until 1914.

When he came back to the U.S. he turned to the motion picture field, organizing Cosmofotofilm Co., Inc. He was a recognized authority on copyright questions, serving as president of the American Musical Copyright League, and representing the mechanical reproducer industry at the Bern Convention of 1908 in Berlin. His testimony at U.S. Congressional hearings helped to shape the U.S. Copyright law of 1909. He was also influential in the design of the British Copyright Act of 1911.

Cromelin remained active in various motion picture ventures and associations, but did not return to the sound recording field.

See also Cromelin, R.F.

CROMELIN, R.F. (1857–?)

U.S. Supreme Court reporter, and later a record company executive, born in New York 1 Apr 1857. He served with the new Columbia Phonograph Co. from its establishment in 1889, being secretary and later vice president. He was elected secretary of the National Phonograph Association at its first meeting in May 1890. With his Columbia associate Edward Easton, Cromelin was a major force in shaping the

industry: they perceived that phonographs were not going to succeed on a grand scale as stenographic aides, but there was an unlimited potential for the devices as entertainment media. He became general manager of Columbia Graphophone in 1914. He also served for a time as secretary to the governor of Pennsylvania. *See also* PAUL H. CROMELIN. (Editor's note: the similarity between the industry activities of the two Cromelins is striking, and so is the fact that there is no indication of a family relationship between them. Information on Paul H. Cromelin comes from his obituaries in *The New York Times*, 23 Feb 1929, and the Hackensack (New Jersey) *Evening Record*, 23 Feb 1929, provided through the courtesy of Norman Horrocks and Seena Solomon. Information on R.F. Cromelin is almost nonexistent. The facts above came from *Phonogram*, vol. 1, no. 4 (April 1891), *Proceedings* 1974, and Read 1976. The possibility remains that there was only one Cromelin — Paul H. — and that his first name was somehow garbled in the references cited.)

CROONING

A soft, understated vocal style built around romantic ballads that was devised by American male popular singers in the 1920s and carried into the 1950s. It was suited to light voices (e.g., Frank Crumit, Gene Austin, "Whispering Jack" Smith, Rudy Vallee), which were in turn suited to the microphones in use for early radio and electronic recording. Features of the style included pitch slides and turns on accented notes (short trills with the note above). Other singers who helped usher in the shift in song delivery from belting to a more intimate style included Nick Lucas, Johnny Marvin, Cliff "Ukulele Ike" Edwards, Little Jack Little, Art Gillham, Russ Columbo, and Bing Crosby. Latter day crooners successful during the swing era and beyond include Nat "King" Cole, Perry Como, Dean Martin, and Frank Sinatra.

REV. FRANK HOFFMANN

CROS, CHARLES (1842–1888)

French poet (his poem "L'archet" was set to music by Claude Debussy in 1883) and amateur scientist. He experimented with sound recording and produced a seminal paper on 18 Apr 1877 that described a disc machine; sound waves were to be traced on lamp-black glass, then photoengraved into reliefs. Lacking the means to make a model, he did not immediately seek a patent, but merely deposited his paper with the Académie des Sciences. (He did obtain a French patent, #124.313, in May 1878). A popularizer of science,

CROSBY, BING

Abbé Lenoir, described the Cros machine — naming it “phonograph” — in an article of his own, published 10 Oct 1877. Although the Cros concept was similar to that of Thomas Edison (and even more similar to that of Emile Berliner), and Edison’s working model was not completed before 6 Dec 1877 (the first sketch dates from 29 Nov 1877), it is clear that the American knew nothing of Cros. Edison’s claim to the invention is firmly based on two points; he was first to demonstrate his idea with a working model, and first to patent it.

CROSBY, BING

(3 MAY 1903–14 OCT 1977)

American popular singer, born Harry Lillis Crosby in Tacoma, Washington. Crosby was a master of the crooning style, and one of the most successful recording artists of all time — with record sales possibly as high as 400 million copies. After nightclub engagements in California, signing and drumming to the piano of Al Rinker, he and Rinker were signed in 1926 by Paul Whiteman and performed with his orchestra on a Midwest tour. He was heard on disc for the first time in “I’ve Got the Girl” (Columbia 824–D; 18 Oct 1926), singing with Rinker, not with Whiteman, but with Don Clark and his orchestra. (Crosby’s name was not on the label, nor on any label until 1929.) Listeners who find Crosby’s voice unrecognizable on this disc are advised to play it back at 70 rpm instead of 78 rpm (Ault). He and Rinker were also the vocalists on “Wistful and Blue” (Victor 20418; 22 Dec 1926), with Whiteman. “Muddy Water” was his first solo vocal, also with Whiteman (Victor 20508; 7 Mar 1927).

After 1930 he left Whiteman for a spectacular radio career with CBS, using “When the Blue of the Night” (Brunswick 6226; 1931) as a theme song in a twice-weekly program. He had begun to record for Brunswick in 1931 — “Just One More Chance” (Brunswick 6120) exhibiting his developed crooning style to perfection — and remained with that company until 1934. “Temptation” (Brunswick 6695; 1934) was the most memorable issue. In 1932 he appeared in the motion picture *Big Broadcast*, his first starring film.

Moving to Decca in 1934, his famous loose and casual style emerged, and he began to produce million-selling records, the first of which was “Sweet Leilani” with Lani McIntire and His Hawaiians (Decca 1175; 1938). Altogether, Crosby had 22 golden discs. “White Christmas” (Decca 18429; 29 May 1942), became the largest selling single record in history, reaching 170 million sales (in all countries) by 1978. Another Christmas record, “Silent Night”/“Adeste Fidelis” (Decca 621; 1935) may have sold almost as many copies. (This was recorded earlier on a private record for a charity benefit; it was so

successful that the commercial disc followed.) Meanwhile, Crosby was pursuing his radio career, starring on the *Kraft Music Hall* from the fall of 1937.

He made numerous records with other top performers. The Andrews Sisters were his collaborators on “Pistol Packin’ Mama” (Decca 23277; 1943), a novelty song that became another golden disc. On the same day, Crosby and the Andrews Sisters recorded a second hit — destined to reach sale of 6 million: “Jingle Bells” (Decca 23281). In 1944 they made million-selling “Don’t Fence Me In” (Decca 23364); and there was another golden disc two years later: “South America, Take It Away.” “A Fine Romance” (Decca 907; 1936), with his first wife, Dixie Lee Crosby, had an easy charm. Various duets with Bob Hope had a fresh, improvised character; “Road to Morocco” (Decca 40000; 1942) is the best example. He teamed with his son Gary to make “Play a Simple Melody” (Decca 27112), and with Grace Kelly for “True Love” (1956).

Other outstanding discs include “Too Romantic,” sung to Dorothy Lamour in the film *Road to Singapore*, “Moonlight Becomes You” (Decca 18513; 1942); “Sunday, Monday, or Always” (Decca 18651; 1943), a golden disc; and “I’ll Be Home for Christmas” (Decca 18570; 1943), also a golden disc. Three songs from the film *Going My Way*, for which he won the Academy Award for acting, were highly successful: the title song backed by “Swinging on a Star” (Decca 18597; 1944), and “Too-Ra-Loo-Ra-Loo-Ral” (Decca 18621; 1945). In his career Crosby made more than 2,600 records, and his voice seemed to retain its quality and luster even in the 1970s. He died on 14 Oct 1977, on a golf course near Madrid.

Over the decades, there have been many compilations and reissues of Crosby’s recordings. One of the first remastered CDs was *The Classic Years in Digital Stereo 1927–1935* (BBC 648). In 1988, Columbia issued a three-CD set of recordings from this period, including alternate takes (*Bing Crosby: The Crooner, 1928–1934*; Columbia 44229). His Decca recordings are well represented on a four-CD set, *Bing! His Legendary Recordings_1931 to 1957* (MCA 10887). There are numerous other compilations available from various labels, including radio transcriptions and material culled from his many film soundtracks. [Ault 1987; Brooks; Rust; Slonimsky 1984.]

CROSBY, BOB

(25 AUG 1913–9 MAR 1993)

American big band leader and vocalist, born George Robert Crosby in Spokane, Washington, on 25 Aug 1913; younger brother of Bing Crosby. He sang with the Anson Weeks orchestra in 1933–1934, and with the Dorsey Brothers band in 1934–1935. He had his own

group from 1935, bringing in over the years star sidemen like Billy Butterfield, Eddie Miller, Matty Matlock, Muggsy Spanier, Charlie Spivak, and Jess Stacy. Crosby developed an updated Dixieland style that set him apart from the other bands of the late 1930s; he exercised the same style in his smaller combo, the Bob Cats. There was great success on radio, in motion pictures, and also on early television shows.

The orchestra recorded first for Decca in June 1935, and remained with the label. Among their finest discs were two with Crosby vocals: "Guess Who" (#836; 1936), and "Loveliness of You" (#1370; 1937). The Bob Cats made acclaimed records like "South Rampart Street Parade" (#15038; 1937), and "March of the Bob Cats" (#1865; 1938). The Andrews Sisters did an outstanding "Begin the Beguine" with the Bob Cats (#2290; 1939). Jess Stacy offered a version of his Commodore 1939 hit, "Ec-Stacy," with the Crosby orchestra in 1942, on Decca 15064. Crosby mostly worked as a solo artist on radio and TV during the 1950s, then retired from performing. However, the band had several reunion tours through the 1980s. Crosby died in La Jolla, California.

CROSBY, STILLS & NASH/CROSBY, STILLS, NASH & YOUNG

One of the first in a wave of supergroups to populate the rock scene during the progressive rock era, each member brought a solid resume — as well as extraordinary songwriting and singing skills — to the union. Of even greater significance, the band was instrumental in returning soft rock to preeminence within the music industry.

They formed as a trio in mid-1968; David Crosby — although still actively collaborating with many West Coast artists — had recently left the Byrds; Stephen Stills had been a key member of the folk-rock ensemble, Buffalo Springfield, and Graham Nash part of the English beat group, the Hollies. The eponymous debut album (Atlantic 8229; 1969; #6), was a watershed musical event during an eventful summer that saw the first manned flight to the moon and the Woodstock Festival. Its freshness derived from ignoring many rock conventions of the day — e.g., guitar feedback, extended drum solos — in favor of close vocal harmonies and crystalline acoustic guitar textures. Recruiting Neil Young, formerly of Buffalo Springfield and already two albums into a successful solo career, the band recorded *Déjà Vu* (Atlantic 7200; 1970; #1; also featuring drummer Dallas Taylor and bassist Greg Reeves), which incorporated electric guitars and greater rhythmic energy than its predecessor. Beset by the usual ego problems, CSN&Y split up in August

1970, releasing the uneven live double-LP, *Four-Way Street* (Atlantic 2-902; 1971; #1), posthumously.

With all four principals pursuing relatively successful solo careers, the group reunited for a 1974 tour; however, no recordings were made at that time. While Young was producing a series of uncompromising albums that attempted to recast punk within the evolutionary framework of progressive rock, the original trio reformed to record *CSN* (Atlantic 19104; 1977; #2), a rather bland affair that included the hit ballad, "Just A Song Before I Go" (Atlantic 3401; 1977; #7). Yet another collaboration resulted in another slick, MOR outing, *Daylight Again* (Atlantic 19360; 1982; #8), followed by the live set, *Allies* (Atlantic 80075; 1983; #45). This edition of the band was effectively quashed by Crosby's legal difficulties due to drugs and firearms violations. While out on bail, he appeared with Stills, Nash, and Young for Live Aid; the four-some would later tour and record *American Dream* (Atlantic 81888; 1988; #16), and *Looking Forward* (Atlantic 47436; 1999; #26). Between these projects the group (sans the ever difficult Young), would release *Live It Up* (Atlantic 82101; 1990; #57), and *After The Storm* (Atlantic 82654; 1994; #98). Despite the declining public interest in Crosby, Stills and Nash's new material, continuing as a group (preferably with the dynamic counterpoint ensuing from Young's active involvement) appeared — in the face of their moribund solo careers — to be their only viable artistic and commercial option.

FRANK HOFFMANN

CROSSFADE

In the music-broadcasting business, a term most often associated with mixers used by disc jockies. Devices of that kind usually feature a slide-type potentiometer control that allows the operator to create a smooth transition or fade from one program source to another program source.

HOWARD FERSTLER

CROSSLEY, ADA JESSICA (3 MAR 1874–17 OCT 1929)

Australian mezzo-soprano, born in Tarrville. She made her debut in Melbourne, then went to London for study and gave a successful debut there on 18 May 1895; she was invited to give command performances before Queen Victoria. Crossley sang in festivals and made world tours, but she is best known to record collectors as the first artist to appear in Victor's American Red Seal series. Her first and best Red Seal

CROSSOVER (I)

was “Caro mio ben” (#2186; 30 Apr 1903; remastered in 1953); it was a 10-inch Monarch. On the same date she made five more discs, but then did not record again for Victor. She made a few records for Pathé in London in 1904. Crossley died in London.

CROSSOVER (I)

In popular music, the term given to a record made for one market that becomes successful in another market as well. Performers involved may then be referred to as “crossovers.” Early crossover artists were the Ink Spots, the Mills Brothers, and other Blacks whose appeal reached beyond the intended racial market and were appreciated by white record buyers. Classical artists may also crossover with successful recordings of popular songs, for example, Placido Domingo and Elly Ameling.

See also Covering

CROSSOVER (II)

In recording characteristics, the crossover point is that where amplitude adjustment by frequency ceases. It is also known as the crossover frequency, or the turnover. For example, in electrical recording up to about 1935, frequencies above 250 Hz had a pure constant velocity characteristic, with amplitude frequency equaling constant; below 250 Hz — the crossover point — the cut was constant amplitude, with all frequencies being limited to the same amplitude, instead of the amplitude increasing with a decrease in frequency. The rationale for this adjustment was that it allowed a higher recording level at higher frequencies and produced advantageous signal-to-noise ratios. Around 1935 the crossover point was moved up to 500 Hz or 600 Hz in the U.S. and U.K., to extend the dynamic range. Neither cylinders nor acoustic recordings had this characteristic. [Owen 1982.]

CROSSOVER NETWORK

Also known as a dividing network. In a sound-reproducing system, the circuitry that divides amplifier output into two or more frequency ranges, most commonly the bass, midrange, and treble, and feeds them to separate loudspeaker drivers within a speaker system. The most common crossovers are “passive,” and are directly fed with the output of an amplifier. That design will normally be installed within the speaker enclosure itself, with the outputs being directly fed to the drivers. A crossover may also be active, and work with the line-level outputs of a preamplifier, with the outputs then being fed to multiple amplifiers that power the speaker drivers directly. Active crossovers are also commonly

used to feed extremely low-frequencies to powered, outboard subwoofer systems.

The advantages to using any kind of crossover is a smoother and wider frequency response, less distortion, and higher maximum output levels from the speaker systems. Typical woofer-to-midrange crossover points will be anywhere from 150 to 400 Hz, or sometimes higher. Typical midrange-to-tweeter crossover points will be anywhere from 3 kHz to 5 kHz. In two-way systems, the woofer-to-tweeter transition may take place anywhere from 2 kHz to 4 kHz. Subwoofer crossovers usually work at frequencies between 60 Hz and 100 Hz.

See also Loudspeaker

HOWARD FERSTLER

CROSSTALK

In both recording and playback, it involves the unwanted propagation of signals from one audio channel to another audio channel. Some recording and playback systems employ crosstalk cancellation between speaker systems to enhance the sound of recordings.

See also Head-Related Transfer Function (HRTF); Interaural Crosstalk

HOWARD FERSTLER

CROWN (LABEL) (I)

A British issue, made from Polyphon masters before World War I.



Crown label issue, c. 1921. Courtesy Kurt Nauck/Nauck's Vintage Records

CROWN (LABEL) (II)

An American label of short life, being a subsidiary of the Arto company in 1921. [Kendziora 1963].

CROWN (LABEL) (III)

A six-inch electrically recorded disc issued in the U.K. by Edison Bell in the late 1920s.

CROWN (LABEL) (IV)

An American label of 1930–1933, affiliated with Victor, offering about 1,200 releases of dance and popular music.

CROWN (LABEL) (V)

A British product of 1935–1937, sold at Woolworth stores for 6d. The manufacturer was Crystalate Gramophone Record Manufacturing Co., Ltd. Good quality British dance music and pop vocals were offered, with some items taken from American Vocalion pressings. [Rust 1978.]

**CROXTON, FRANK (7 OCT 1877–
4 SEP 1949)**

American bass, born in Paris, Kentucky, began as a church and concert singer in New York, and began to record for U-S Everlasting Records in 1910 or 1911 with "In the Garden of My Heart" (#239), a duet with Henry Burr. In October 1911 he began working with Edison, singing "Lost, Proscribed" from *Martha*, a duet with Reed Miller (#799). He headed the Frank Croxton Quartet on Edison Amberols, and sang for Columbia in 1911 and Victor in 1912. He formed his Croxton Quartet in 1912. Croxton's repertoire was concert and opera, with no popular songs. By 1914 he had 17 solos in the Columbia catalog, plus many duets and parts in quartet renditions. In 1914 he was one of the Stellar Quartet, then he joined the Peerless Quartet in 1919 and the Eight Famous Victor Artists in 1919. In 1918 he formed the Croxton Trio. His best-selling Victor was "Weeping Willow Lane" (#18609; 1919), a duet with Burr. In 1925 he left the Peerless and joined another group, but gave up recording during the Depression. He remained active as a teacher and church singer. He died in New York.

CROXTON QUARTET

A group formed by Frank Croxton in 1912, consisting of himself with Agnes Kimball, Nevada Van der Veer, and Reed Miller. Recording for Gennett ca. 1918, Inez

Barbour and Henry Burr took the place of Kimball and Miller.

CROXTON TRIO

A group formed by Frank Croxton in 1918 to record for Okeh; the other singers were Inez Barbour and Henry Burr.

**CRUMIT, FRANK (26 SEP 1889–
3 SEP 1943)**

American tenor, noted for successes in Broadway shows. In 1919 he was with Paul Biese's orchestra in Chicago, then went to New York. His first record was "My Gal" (Columbia A-2884; 1919). Singing in the hit show *Tangerine* in 1921, he recorded its song "Sweet Lady" with Julia Sanderson, who was to become his principal duet partner (Decca 18154; 1921). Subsequently he made more than 500 records, the last in 1941. He died in Springfield, Massachusetts.

**CRYSTALATE GRAMOPHONE RECORD
MANUFACTURING CO., LTD.**

A British firm, having several names over its 36-year history. It was established on 2 Aug 1901 as the Crystalate Manufacturing Co., Ltd. Originally the products were billiard balls, bottle stoppers, and similar items made of a patented hard plastic material, in addition to disc records. Holder of the patent was George Henry Burt, an American inventor of notable business acumen: he contracted to make discs for Berliner and Zonophone; and he also set up a firm, Globe Record Co. (It was Globe that made the first matrices for Columbia, which were released on the Climax label.) Whether or not Crystalate was the first British presser of disc records — as it claimed in its advertising — remains unproved, but the firm was apparently the earliest to make experimental pressings in the U.K. It may have supplied materials to Nicole, which made seven-inch, brown-colored records beginning in 1903 (Burt was associated with that firm, too).

In 1906 Crystalate was engaged to make Fonotipia and Odeon records in Britain. Matrix manufacture extended to many other companies, including Champion, Standard Record, Olympic Record, Beacon, Butterfly, Criterion, Popular, Stavophone, Guardsman, Imperial, Rex, Swing, Celebrity, Continental, Broadcast, Crown, Coronet, Neptune, Gramvox, Citizen and Vocalion.

A close affiliate to Crystalate was the Sound Recording Co., Ltd., founded in March 1910. Around 1915 Sound Recording appeared to own the Crystalate

CRYSTOL (LABEL)

factories; but in 1922 “it was evident that the Crystalate company had taken over the Sound Recording Company and kept it as a going concern” (Andrews). By this time the firm, which did not have a disc label of its own, began to concentrate on the manufacture of Imperials, and made a success of this third introduction of the label. In the mid-1920s depots were opened in Manchester, Dublin, Leeds, Liverpool, Glasgow, and Sheffield. Jewish, Dutch, and French specialty series were issued.

On 30 Jan 1928 a new incorporation was announced, with the name at the head of this entry, located at Golden Green, Kent. A period of great prosperity ensued, with international affiliates in France and Germany, the purchase of Regal from Plaza, and contracts to provide discs for Woolworth and Marks & Spencer. A new corporate home, Crystalate House, was opened in London. A one-third interest was gained in the huge new conglomerate formed in 1929 under the name of the American Record Corporation. That ambitious undertaking was hit by the Depression, and Crystalate’s own future was troubled. The formation of EMI, Ltd., in Britain presented a formidable rival — there were also 21 other labels on sale in U.K. in the bleak mid-1930s — and there were reduced profits in 1933. A price war with British Homophone Co., Ltd. — who marketed a one-shilling Homochord in October 1933 — resulted in Crystalate’s one-shilling Rex, plus Broadcasts and Imperials at 1s. 6d. for the 10-inch size. Economic conditions were intractable, however, and various gyrations and new labels could not save Crystalate. In March 1937 Decca Record Co., Ltd., acquired the record interests for £150,000 and 400,000 of its own shares held by Crystalate. Yet the firm did persist, without its recordings arm: on 31 Jan 1938 it reincorporated as Crystalate, Ltd. Successors survive to this day in the electronic component industry. [Andrews 1983/1984.]

CRYSTOL (LABEL)

SEE *AMBEROL*

CUGAT, XAVIER

(1 JAN 1900–27 OCT 1991)

Spanish violinist and big band leader, born in Barcelona. As a youth he moved to the U.S., where he played the violin and worked as a cartoonist for the *Los Angeles Times*. In 1928 he formed his dance band, and was engaged by the Waldorf-Astoria Hotel in New York in 1933. He began recording in that year, for Victor, with whom he stayed until 1940. He moved to Columbia in October 1940. Cugat’s style was Latin, but he performed typical dance music as well. He was

fortunate to have some outstanding vocalists, most notably Dinah Shore. She recorded elegant versions of “When the Swallows Come Back to Capistrano” and “The Breeze and I” (Victor 26641; 1940). His band was featured in many motion pictures in 1940s, and he was often on television into the 1970s.

CULP, JULIA (6 OCT 1880–13 OCT 1970)

Dutch contralto, born in Groningen. She made her debut in Magdeburg in 1901, and toured Europe. German Lieder was her specialty; she was one of the early female singers to record that repertoire. She performed the art songs “with full, even, wonderfully modulated tones” (Moses). She did not sing opera. In 1913 she appeared in the U.S. Culp made records for Anker in Germany; she recorded more than 30 concert songs and Lieder for Victor Red Seal in 1914–1918, and made one more record in 1924. She died in Amsterdam. [Moses 1949; Riemens 1947.]

CULSHAW, JOHN ROYDS

(28 MAY 1924–27 APR 1980)

British recording producer, musician, and author, born in Southport. In 1942 he entered naval service as an airman and navigator, emerging as a lieutenant in 1946. He joined English Decca in 1946 as an assistant classical recording producer, remaining until 1953. At that time he took a post with Capitol Records, which intended to launch a European venture; that plan dissolved when Capitol was acquired by EMI in 1955. Decca rehired Culshaw as classical recording director, and he stayed until 1967. He became the outstanding producer of recorded opera, achieving international recognition for his Vienna studio recording of the Wagner *Ring* under Georg Solti in 1958–1965 — described by David Hall as the “first complete and integral commercial recording” of the cycle (London 414100–2; 15 LPs). Culshaw’s approach, coming at the beginning of the stereo age, was to exploit the new sonic technology and to make the recording itself a work of art, on equal footing with the music itself.

He was fortunate to have great singers in the studio, including Kirsten Flagstad, Birgit Nilsson, Hans Hotter, and Wolfgang Windgassen. Culshaw was awarded the American Grammy in 1967 for his production of *Walküre*. He had won earlier Grammys in 1963 for the *War Requiem* (classical album of the year), and in 1964 for *Carmen*. He wrote a book about the Wagner recording, *Ring Resounding* (1967).

From 1967 to 1975 Culshaw was head of music for BBC television and a freelance record producer. He was heard frequently as a commentator for Metropolitan Opera broadcasts. In 1975 he became a freelance author

and television producer, and lecturer at the Universities of London and Oxford. He died in London. (See the Bibliography for the titles of his books.)

CURB, MIKE (24 DEC 1944–)

Curb was born in Savannah, Georgia. He is now the sole proprietor of Nashville-based Curb Records, named *Billboard* magazine's top country label for 2001 in both sales and radio airplay. The label is home to LeAnn Rimes, Tim McGraw, the Judds, Hank Williams Jr., Hank Williams III, and others. Curb Records also released the *Coyote Ugly* soundtrack.

Curb began his career as a label executive in California in the 1960s, merging his first company with MGM in 1969, at age 25. At MGM he initiated a controversial policy of dropping artists who advocated drug use. Mike Curb was the first to sign the Osmond Brothers, Shaun Cassidy, and Debby Boone. He produced Donny Osmond's "Puppy Love," and Boone's "You Light Up My Life." His Mike Curb Congregation backed up Sammy Davis, Jr., on "Candy Man," and did soundtrack songs like "Burning Bridges" for *Kelly's Heroes*. In addition to being in tune with mainstream culture, he also found his way into big-time politics. Curb was a protégé of Ronald Reagan, managing his California presidential primary campaign in 1976. He served four years as the lieutenant governor of California, beginning in 1978. He also served as finance chairman for the Republican National Committee from 1982 to 1985. In the 1990s, Curb founded and largely funded the Mike Curb School of Music Business at Nashville's Belmont University.

PAUL FISCHER

CURRY'S (LABEL)

There were four British records with the name Curry's, issued in the 1920s. One was a disc entitled Curry's Cycle Co., from J.E. Hough, Ltd., matrices. There was also a Curry's label from Guardsman matrices, pressed by Crystalate Gramophone Record Manufacturing Co., Ltd. Another Curry's label was from Imperial matrices, pressed by Crystalate. Curry's Electric was a label made from matrices by Piccadilly Records, Ltd.

FRANK ANDREWS

CUSCUNA, MICHAEL (20 SEP 1948–)

Leading jazz producer, historian, and record label executive, Cuscuna was born in Stamford, Connecticut. After attending business school in Philadelphia, Cuscuna headed to Chicago, where he worked as a dee-

jay, sometime record-producer, and jazz journalist. He produced recordings by bluesman Buddy Guy and singer-songwriter Chris Smither in the early 1970s, by which time he was working as a deejay in Philadelphia. He was a staff producer for Atlantic briefly from 1973 to 1974, and then went freelance. A long-time jazz fanatic, in 1982 he formed Mosaic Records with the intention of producing high-quality, heavily documented boxed sets of classic jazz artists. He began working for Blue Note, overseeing their reissue program in 1984 while continuing to work for Mosaic. Eventually, Blue Note's parent, EMI purchased Mosaic, and Cuscuna was put in charge of both labels.

CARL BENSON

CUT

Either a band or a groove on a disc. By extension, the song or selection that occupies a band. "To cut" means to record.

See also **Lateral Recording; Vertical Cut**

CUTOUT

A record withdrawn from normal distribution by the manufacturer and removed from the company's catalog. In publishing terms, a cutout is "out-of-print." The number of cutouts in the pop/rock field may be as much as 85 percent of a company's issues. Records that fail to break even, so-called stiff, are quickly withdrawn and usually sent to a rack jobber for disposal. Like remaindered books, those stiff records are found in bargain sections of the shops, often selling at greatly reduced prices. Retailers have generally denounced this practice as one that undermines their sales of standard material, and requires excessive paperwork. Objections come also from the artists represented on cutout discs, whose royalties are reduced and whose reputations are thought to be injured. Record companies, on the other hand, justify cutouts because they claim that royalty fees are so inflated that only major hit records are profitable.

CUTTING HEAD

Also known as a cutterhead. An electromagnetic device used in disc recording. It includes a moving coil and a cutting stylus; the latter is activated by amplifier signals and transcribes them into the record groove. The "feedback cutting head" was developed at Bell Telephone Laboratories in 1924: it canceled resonances in the cutting head by feeding back a signal from it to the recording amplifier.

CYCLE

In a periodic vibration pattern, a cycle is one complete excursion from a given point through two extremes and back to the given point. The unit of frequency is cycles per second (c/s), now generally superseded by Hertz (Hz). The number of a Hz in a sound wave determines its pitch.

CYLINDER

This article, complementary to disc, has eight sections: 1. History of the format; 2 Materials; 3. Manufacturing and copying; 4. Dimensions; 5. Speeds; 6. The industry; 7. Repertoire; and 8. Contemporary playback of cylinders.

1. *History of the format.* The tinfoil cylinder was the first medium to record and replay sounds, in the phonograph of Thomas Alva Edison (1877). In the language of Edison's U.S. patent application (#200,521, filed 24 Dec 1877, granted 19 Feb 1878) the phonograph was based on "a cylinder having a helical indenting-groove cut from end to end—say, ten grooves to the inch. Upon this is placed the material to be indented, preferably metallic foil. This drum or cylinder is secured to a shaft . . . having at one end a thread cut with ten threads to the inch . . ." Edison's first demonstration machines had hollow brass cylinders with a continuous spiral groove, tightly wrapped in tinfoil.

The earliest practical thinking about the possibility of recording sound was centered on a flat medium as carrier of the signal: the phonautograph invented in 1857 by Léon Scott de Martinville. In 1859 he made a second model, utilizing a cylinder medium. Scott's instrument, which looked quite a bit like Edison's phonograph of two decades later, was designed to trace the fluctuation of sound waves on a sheet of lampblack paper wrapped around a cylinder on a threaded shaft. Apparently its inventor failed to consider that his machine, with some elaborations, could have been used for playing back the signal as well as storing it. There is no evidence that Edison knew of Scott's work as he was developing the first model of the cylinder phonograph in November 1877, but Emile Berliner had seen the phonautograph at the Smithsonian Institution while he was living in Washington, D.C., and devising his approach to sound recording. Berliner took the step that Scott had missed, and made a version of the phonautograph in 1887 that could reproduce the signal. But he soon gave up on the cylinder and developed the disc gramophone, just as Edison had decided to use the cylinder instead of the flat medium that he had also described in his first patent. Through the subsequent competition between cylinder and disc, Edison championed the former

while Berliner and his successors held to the latter. In the end it was the disc that triumphed, outselling cylinders after about 1910. Most firms gave up cylinder making at about that time (Columbia in May 1909); the last to be produced were Blue Amberols in July 1929. From 1914 most Blue Amberol cylinders were dubbed from disc recordings. Ediphone School Records were produced, via electrical dubbing, until 1960. (See section 6, below.) [APM II-6; Dethlefsen 1983; Koenigsberg.]

See also **Oldest Records; Patents**

2. *Materials.* "Mary Had a Little Lamb," the first words to be recorded and played back, were spoken by Thomas Edison to a sheet of tinfoil wrapped around a brass drum. (One could make a case for something like "Hello" as the first word recorded, since Edison had shouted it at a strip of paper pulled along under a diaphragm in an experiment on 18 July 1877, and then "ran the paper back over the steel point and heard a faint Hallo! Hallo! in return." The *New York Times* of 5 Mar 1992, p. C1+, carried an account of Edison's use of "Hello," based on research by Allen Koenigsberg.) The drum, being solid, differed from the hollow type used later. It was four inches in diameter and four inches long, with a helical groove of 0.1 inch pitch (ten grooves per inch) inscribed on its surface. The number of grooves per inch varied on the pioneer tinfoil machines; a photo in *TMR* #49b shows one with 16 threads per inch. Edison and his contemporary inventors searched vigorously for materials to replace the tinfoil, which produced various distortions. Sheets of copper and of soft iron were among the substances tested. Chichester Bell and Charles Tainter filled the grooves of an Edison cylinder with beeswax. Edison turned to wax also, but he made his entire cylinder of it, thus allowing reuse by shaving the surface.

The brass drum of the original phonograph did not satisfy Edison; he and his chemist, Jonas W. Aylsworth, experimented with cores of asphaltum and plaster of Paris. During the period when Edison neglected sound recording in favor of perfecting the incandescent lamp, Bell and Tainter developed their cardboard cylinder core, six inches long, 15/16 inches in diameter, coated with a .05 inch thickness of beeswax and paraffin, later with ozocerite wax. When Edison returned to his phonograph, he entered into new experiments to improve the core: he tried thin brass shells to fit onto the mandrel, the shells having wax cylinders around them to receive the sound signals. To prevent expansion of the shell in high temperature, he proposed also the use of hard rubber shells, and some of these were made for use in coin-ops. Glass cylinders with paraffin surfaces were also tried by Edison, and in 1889 he made white-wax cylinders

and brown-wax cylinders with a core of string in a helical pattern. Other materials were also tried out. Both Edison and rival American Graphophone Co.-under engineer Thomas H. Macdonald-began to make cast cylinders in hard wax around 1900 for laboratory use.

Thickness of the wax surface had become about one half inch on the Graphophone cylinders of 1893. Those cylinders were six inches long, 2 1/4 inches in diameter.

In 1900 the Lambert Co. of Chicago produced cylinders made of celluloid, their "Indestructible" line. (Henri Jules Lioret of Paris had pioneered with celluloid cylinders in 1893.) These were made through a "molding" process, (*see* section 3, below) quickly taken up by Edison, who marketed his first molded cylinders in late 1901. However, there was patent litigation, and a decision favoring Lambert, so that Edison had to use a metallic soap composition instead of celluloid until he acquired the rights to Lambert's patent in 1912 and began producing Blue Amberols of celluloid. [Burt 1977.]

See also Patents

3. *Manufacturing and copying.* Probably the industry's first significant problem of process, as opposed to materials, related to making copies of recorded cylinders. Without such a method, it was necessary for artists to record each cylinder separately. A first solution to this problem involved putting the artist before several recording machines at once. Next a mechanical pantographic system was developed, through which the grooves on a recorded cylinder were traced by a stylus that was attached to a second stylus which would reproduce the undulations on a second cylinder. Clearly these techniques could not lead to mass production. (One 19th-century producer, Gianni Bettini, made copies only to order, pantographically.)

As early as 1889 the Edison laboratory had molded cylinders. They electroplated an original recording and thus produced a master cylinder mold, with the groove pattern reversed. To make copies from this master, it could be dipped into a tank of hot wax, or hot wax could be deposited into it. A new cylinder was thereby formed inside the mold, with the original recorded signal on it. There remained the difficulty of getting the copy out of the mold, since it would have to shrink sufficiently on cooling to slide out-and this difficulty persisted for a decade with waxes. (The mold itself could not be split, or the ridges would imprint on the wax copy.) Then in 1893 Lioret devised his method of duplicating recorded cylinders by making the copies of celluloid, which softens when hot and hardens and shrinks as it cools. This was the basis for the method used by Lambert, and patented by him in 1900-causing a setback to Edison and Columbia. Celluloid had

its defects too, as it tended to wear under pressure and to deform. An improvement on the Lambert process was developed by Chicago-based chemist Varian M. Harris in 1908, who used a thinner sheet of celluloid to form a cylinder. This offered better sound quality than the earlier Lambert process, and was adopted by the U-S Phonograph Co. of Cleveland.

The American laboratories continued to work with wax, since they could not infringe the Lambert patents for celluloid, and attained good results with compounds containing metallic soaps; lead soaps hardened easily, and sodium soaps provided smooth surfaces. Edison's method of producing the requisite electrically conductive surface on the original cylinder was a "gold sputtering" process, and the records became known as "gold moulded." These records were introduced commercially in January 1902, with the new higher speed of 160 rpm. In April 1902 Columbia marketed its first molded cylinders-not "gold sputtered" but simply gold plated on the interior of the copper matrix. Columbia was then using graphite (plumbago) on the wax master for conductivity. The competition from these new processes basically put Lambert out of business, and they folded in January 1906. Edison changed to celluloid in 1912 after purchasing Lambert's patent.

Blue Amberols were usually dubbed, or copied, from Edison Diamond Discs, using a horn-to-horn process. Commercial dubbing began on 23 Sep 1914 with the transfer of Helen Clark's "Firelight Faces." The first such copy to be released was "By the Setting of the Sun," by Walter Van Brunt (Edison #2488; December 1914). Electrical dubbing began on 5 Feb 1929, with "Happy Days and Lonely Nights" by Al Friedman's Orchestra (Blue Amberol #5650). [Dethlefsen 1983 describes the dubbing process.]

See also Acoustic Recording

4. *Dimensions.* Standardization of cylinder size among manufacturers was never fully attained, but the vast majority of records produced from the early 1890s on were 2 1/8 inches in diameter and 43/16 inches long, with 100 threads per inch; these were the dimensions of Edison's brown-wax cylinder of 1892. Edison's first tinfoil machine used one of four-inch diameter and four-inch length, with 0.1 pitch (10 threads per inch). Other tinfoil phonographs had cylinders of seven-inch diameter, two inches long. The Edison talking doll of 1890 had a three-inch diameter cylinder, 5/8-inches long, with 100 threads per inch. In 1895 Edison experimented with an early long-playing record, the 400-thread-per-inch cylinder that ran for eight minutes; it was 2 3/4-inches in diameter and 6 1/2-inches long. Concert Cylinders were five inches in diameter and 4 1/4 inches long, 100 threads per

inch; those were to be played on the Concert Phonograph introduced in December 1898. Columbia sold those five-inch cylinders too, for its Graphophone Grand player that went on sale in December 1898. Five-inch cylinders were also sold in Britain, under the name Grand Concert, by Edison Bell.

Pathé in Paris made 5 1/4 inch diameter Grand Concert cylinders during 1900–1905, to play on their version of Columbia Graphophones. The same firm made extra long cylinders (8 1/2 inches, or 21 centimeters) known as Celeste, which could play four or five minutes. Pathé also made 3 1/2 inch diameter (nine centimeters) cylinders, named Intermédiaire; in Britain these were sold as Intermediate Salon records.

5. *Speeds.* Rotational speeds were increased gradually from 1889 to 1902, in the attempt to achieve greater fidelity. Edison's first cylinders revolved 100/120 rpm; most two-inch, brown-wax cylinders turned roughly 120 times a minute. Concert records played at 100 or 120 rpm. Edison's late brown-wax record ran at 144 rpm. The gold molded records introduced in 1902 established a standard speed of 160 rpm that was maintained for wax Amberols and celluloid Blue Amberols. Most other cylinder manufacturers adopted the 160 rpm speed. The obscure Jumbo brand cylinder was to be played at 185 rpm—the highest known cylinder speed. But this was not much faster than the designated speed of an 1893 Edison Bell "postal" (small) cylinder: 175 rpm. Edison dictation records used a slower speed than entertainment records. Slowest of all were the various language and instructional records, designed to play at 90 rpm or even 80 rpm.

6. *The industry.* If a definite date is to be ascribed to the birth of the sound recording industry, it should be 24 Apr 1878, when the Edison Speaking Phonograph Co. was established at 203 Broadway in New York. In the same year the London Stereoscope Co., sole British licensee of the phonograph, began to sell—as Edison was doing—machines to record and playback tinfoil records. Sales were good, for the novelty of hearing a voice emerge from a machine had wide appeal. Edison's principal early rivals were Bell and Tainter, who set up the Volta Graphophone Co. in Alexandria, Virginia, in 1886 to sell their variety of cylinder and player; the name of that firm was changed to American Graphophone Co. in 1887. Through the financial support of Jesse H. Lippincott, the Edison and Volta interests (i.e. the phonograph and the graphophone) were successfully brought together to share a single sales agency under Lippincott's direction: the North American Phonograph Co. (NAPC). Into the cross-country network of regional corporations that comprised NAPC there happened to be certain destructive elements. For Lippincott to bring the American Graphophone people into the fold he had to

accept the responsibility of purchasing a minimum of 5,000 graphophones a year from them. The agreement gave him personal liability for meeting this contract, and his downfall came from an inability to do so. Another provision in the arrangements for NAPC was that the Columbia Phonograph Co. (incorporated January 1889) would retain sales rights for the graphophone in the District of Columbia, Virginia, Maryland, and Delaware—indeed, the prime sales territory for the device as a dictating machine, which was the envisioned purpose of the phonograph and graphophone at the time.

Following the organizational structure of the American Bell Telephone Co., Lippincott leased sales rights for the phonograph to regional and local companies around the U.S. The individual firms then leased the instruments to customers, and sold them cylinders. Soon there were 33 separate companies in the NAPC. They held a national conference in 1890, dealing with topics like uniform pricing and standardization of equipment. Entertainment cylinders were at the time four inches long, but for dictating machines a six-inch record was introduced. Edison's were 2 1/4 inches in diameter, while graphophone records were only 1 5/16 inches. These differences in size remained, so that customers could not shift from one type to another without having both a phonograph and a graphophone. In fact the market preference was strongly for the phonograph, since the graphophone was showing itself to be unacceptable for dictation or entertainment. Thus came Lippincott's insoluble problem: how to live up to his agreement to buy 5,000 graphophones a year, when they were not marketable. He was forced into bankruptcy.

In any case, the original notion of the cylinder player as a business device was fading. Edison began to supply musical cylinders to NAPC firms in 1891, to be sold at retail. He also offered to make copies of records in high demand—utilizing the new mold process (*see* section 3, above). But local companies, and even customers, found they could make their own copies by re-recording, or by pantographic methods, albeit with loss of quality. "One of the important factors that was responsible for the almost total collapse of the musical entertainment field was inherent in the lack of quality control of the records, as every machine could also be used to record" (Read 1976). NAPC member companies began to drop out; in 1893 there were just 22 at the national convention, and a year later the organization was liquidated. Meanwhile, American Graphophone was in such poor condition that Columbia, the most successful firm in the industry, was able to absorb it in 1894.

The growth of coin-op markets, improvements in the machines, and some progress in standardization (Columbia cylinders were made to be compatible with

Edison phonographs) helped to bring about a national rise in business. In 1896 there were additional firms to compete with Columbia and Edison (who established in that year his National Phonograph Co.): Bettini, Chicago Talking Machine Co., New England Phonograph Co., Ohio Phonograph Co., and U.S. Phonograph Co. (of New Jersey). Walcutt & Leeds was established in 1897, and the American Talking Machine Co. was founded in 1898. In addition, singers J.W. Myers and Russell Hunting were selling their own records direct to buyers. But Columbia led the field, claiming to sell more records than all other companies combined; its prices were \$.50 per cylinder, or \$5 a dozen. The industry's first boom year was 1897, with a half million records produced (including discs). By 1899 sales had reached 2.8 million cylinders and discs per year.

The wax based cylinders offered poor sound quality and were subject to failure due to heat and other environmental conditions. To meet the need for a more durable cylinder, inventor Thomas Lambert developed a system of making cylinders out of plastic celluloid; these were first sold by the Chicago-based Lambert Company (1900-06) and then by the Indestructible Phonographic Company (1908-1922). Lambert employee William Messer also developed a means of mass reproducing cylinders using a steam press, which enabled them to cheaply and quickly produce large quantities of records. Edison naturally objected, and sued the Lambert Co. over patent infringement based on elements of the cylinder design. Lambert issued about 1200 records through its existence, mostly of popular vocal and band music, although also Yiddish language titles and language instruction and fitness training records for sale by other firms.

After Lambert folded, Messer was associated with the Albany-based Indestructible Phonographic Record Co. of Albany, New York. The first Indestructible cylinders were advertised in mid-1907, and released that fall, using technology developed by Lambert and Messer. Edison quickly objected to this move, discouraging major dealers from handling a competing cylinder product. At about the same time, Edison competitor Columbia was phasing out its cylinder production, and looking for a source for this material. The two firms got together, and from 1908-mid-1912 Columbia was exclusive distributor for Indestructible's output, with a joint label (Columbia Indestructible Record) appearing on the product. John G. Murdoch and Co., Ltd., of London served as British distributors for Indestructible's recordings from 1909 through 1913 (if not later), and also supplied masters for recordings released by Indestructible in the U.S. From 1908-22, the firm released about 1500 titles, most in the initial 1908-12 period. After the arrangement with Columbia ended, Indestructible cylinders were sold directly by the firm and also under a

variety of labels through mail order giants Sears, Roebuck (under the "Oxford" name) and Montgomery Ward ("Lakeside"; Ward had previously used the U-S Phonograph Company as its supplier). A factory fire in autumn 1922 ended cylinder production, and the firm formally shut down three years later.

A second process for making "indestructible" celluloid cylinders was developed by Vernon Harris, who licensed his patent to the U-S Phonograph Co. Its cylinders were labeled as the "U-S Everlasting Record," and about 1100 total titles were issued between mid-1910 and fall 1913. They were recorded in New York City, with a heavier emphasis on classical music and opera-and larger performing groups-than was featured on its competitors' releases. U-S supplied cylinders for sale by Montgomery, Ward under the Lakeside label (later Lakesides were made by the Indestructible Phonographic Co.). They also developed a cylinder player that allowed the listener to switch between playing 2 and 4 minute cylinders by simply turning a knob. The first U-S machines and recordings were announced in Spring 1910. Like other cylinder makers, the firm was embroiled in lawsuits brought against it by Edison for patent infringement. Although unsuccessful in proving its case, Edison was kept U-S tied up in courts-and awash in legal fees-for several years. This undoubtedly contributed to the eventual closing of the firm in 1914.

In Europe the industry pioneers were London Stereophonic (1878-1882), J.E. Hough's London Phonograph Co., Edisonia (founded 1897), and Pathé Frères of Paris, which began to make and sell both phonographs and cylinders in 1895. Outside of France and Britain the cylinder never got a dependable foothold in Europe; the gramophone came along too quickly, and it had the powerful support of William Barry Owen, founder of the Gramophone Co. Columbia had moved into London in 1900 with a sales office, then relocated its European headquarters there, from a Paris office that had opened in 1897. Columbia had already been selling its products in Britain, and had met with legal attacks by Edisonia. Edison Bell, licensed in 1892 to import and sell phonographic products, was reorganized in London in 1898, and took over Edisonia; there was also an agreement with Columbia at that time, based on Edison Bell's acquisition of the Bell-Tainter patent rights for Britain, Australia, South America, China, and Japan. By 1904 Edison Bell was one of the three major producers of cylinder records in Britain, along with National Phonograph Co., Ltd., and Sterling Record Co., Ltd. (which was renamed in March 1905 to Russell Hunting Record Co., Ltd.).

Edison Bell's early record labels were the first to bear the name London Records; later it offered

cylinders under the names of Standard, Popular, Concert Grand, Indestructible, and Ebony Indestructible. It began to make gold-molded records as well as phonographs in a Peckham plant in 1904. The firm had no overpowering competition in the cylinder field, but there were many other entertainment labels on sale: Britannia, British Phonogram (later called Brent), Columbia, Electric, Empress, Excelsior, Imperial, International Indestructible, Lambert, New Falcon, Nobles, Pathé, Perfection, Pioneer, and Star. The active British companies in 1907 were Columbia, Clarion, Edison Bell, Russell Hunting Record Co., Ltd., and White. After various price wars and patent fights, the Russell Hunting firm folded in 1908.

Pathé gave up cylinders for discs in Britain in 1906 (though it continued to sell old stock through dealers) followed by Columbia in 1907 and Edison Bell in 1914. Clarion cylinders remained on the market until at least February 1922—the last cylinder maker in the U.K.

In the U.S., Columbia continued to make cylinders and discs, until 1909. It distributed Indestructibles until 1912, when it abandoned the cylinder field to Edison. The high quality of the Blue Amberol cylinder, introduced in 1912, and the fact that Edison had nurtured a loyal multitude of customers—mainly in rural areas (though Sears, Roebuck was selling Columbia graphophones through its catalogs)—who kept Edison in business. He had produced more than 10,000 different cylinders by 1912. His price for two-minute standard records was \$.35; for the four-minute Amberols it was \$.50. Grand Opera records sold for \$.75–\$2. Edison phonographs with sapphire reproducers were marketed at all prices from \$15 to \$200. The fine Amberola phonograph was continually improved from its introduction in 1912 through the late 1920s.

Recently one American company made cylinders on a small scale: Electrophone Cylinder Record Co., Davenport Center, New York. The records were of polypropylene, which was promised to last indefinitely. Repertoire included contemporary material and dubs of old Edison originals. The venture was short-lived. In Britain, Williams' Fox Record was available in 1988, from 21 Park Road, Burntwood, Wallsall. Another British cylinder firm is Miller, Morris and Co., of Exeter. Descriptions of these new cylinders were given in *HN* 170 (October 1989), p. 281. [Andrews 1972; Andrews 1974/4; Andrews 1976/6; Andrews 1985/4; Andrews 1987/1.]

7. *Repertoire*. First conceived and marketed as a device to record and play back the speaking voice, the cylinder's early repertoire was shaped accordingly. When Edison renewed his attention to the instrument in 1887, he perceived that voice recordings would best serve to promote it. His British representative, Colonel George E. Gouraud, set up an exhibit at the London

Crystal Palace and recorded there (or elsewhere in London) Robert Browning, William Gladstone, Cardinal Manning, and Alfred Tennyson. He also made records of Florence Nightingale, H.M. Stanley, and P.T. Barnum. Even Queen Victoria made a record, on a Pathé machine, for Edison Bell. In Germany, Prince Otto Bismarck made an Edison record. Other famous voices were preserved, at least for a time: Leo Tolstoy, Henry Irving, Arthur Sullivan, and Emperor Franz Josef of Austria; unfortunately many of these relics were lost or have deteriorated beyond usefulness.

Edison retained his attachment to the spoken voice throughout the cylinder era, notably through comic recitations like those of Cal Stewart. However, his first commercial sales lists were in fact all musical—in the widest sense of the word. The 24 May 1889 list—the initial entries in the *First Book of Phonograph Records* of the Edison Laboratory—consists of 14 titles played by flutist F. Goede: bird imitation pieces, college songs, polkas, waltzes, and marches. The next group of records featured Alfred Amrhein, violinist, and the third was given over to cornet numbers by John Mittauer. One of Amrhein's selections, the overture to *Fra Diavolo*, appears to be the first operatic recording.

From 1889 to 1892 the most recorded artists at Edison were Duffy and Imgrund's Fifth Regiment Band, Henry Giese (clarinet), H. Giesemann (piano), Edward Issler (piano), the Issler Parlor Orchestra, Will Lyle (banjo), John Mittauer (cornet), George F. Schweinfest (flute, piano, piccolo, violin), William Tuson (clarinet), and A.T. Van Winkle (xylophone, metalophone, violin). Works recorded were mostly arrangements of popular songs, well-known classical items, marches, polkas, waltzes, and so forth. "Jingle Bells" on Will Lyle's banjo was the first Christmas record (October 1889). These were all on two-minute cylinders, so the medium itself limited the repertoire to short numbers. And recording technology limited it to certain instruments and combinations that worked best in the studio.

Recordings of the singing voice became numerous in the late 1890s and early 1900s. Ventures into the operatic vocal repertoire were soon common, with international artists interpreting two-minute versions of popular arias. Among the opera stars on Edison cylinders, between 1896 and 1912, were Mario Ancona, Giuseppe Campanari, Andreas Dippel, Antonio Scotti, and Anton Van Rooy. (However, most of the arias done for Edison were rendered by performers of less distinction.) The cylinders of Gianni Bettini included more than 200 items, mainly from the operatic repertoire and featuring star singers; these were made in the mid-to late 1890s. Columbia's first recording by an opera singer came out in 1898; the artist was Bernard Bégulé.

Edison's repertoire between 1900 and 1912, the period of the two-minute brown wax and gold molded records, was highly varied. Orchestra records appeared in large numbers, by such ensembles as the American Symphony Orchestra, the Edison Symphony Orchestra, Victor Herbert and his orchestra, and the Peerless Orchestra; they played waltzes, marches, and medleys. Military band music was performed by the Edison (Grand) Concert Band, the Edison Military Band, His Majesty's Irish Guards Band, the National Military Band of London, the New York Military Band, Sousa's Band, and the U.S. Marine Band. Probably the most beloved solo vocalist was Arthur Collins; others were Harry Anthony, Albert C. Campbell, Will F. Denny, S.H. Dudley, Edward M. Favor, George J. Gaskin, Irving Gillette, Roger Harding, Byron G. Harlan, Ada Jones, Harry Macdonough, Edward Meeker, Billy Murray, Joseph Natus, Dan Quinn, Bob Roberts, Manuel Romain, Frank C. Stanley, and William H. Thompson. Sophie Tucker and Walter Van Brunt began their long recording careers on Edison cylinders in 1910 and 1912 respectively. Titles chosen by all these singers were ballads of the day, patriotic numbers, Irish songs, and coon songs.

In some ways the early repertoire was more diverse than what we see in a modern CD catalog. There were solo pieces featuring the cornet, the euphonium, the ocarina, and various orchestral instruments; there were whistlers, dialect comics, vaudeville groups, and male quartets in abundance. But the piano could not yet be recorded well (the Edison cylinder output included just four piano items between 1903 and 1908), and of the organ just one early example appeared: "Abide with Me," made in August 1909. Educational recording began with language instruction records, via courses given on Edison cylinders in 1889.

Although Edison made constant improvements in his products, they lost ground quickly to the disc. His Amberol cylinder of 1908 and the Blue Amberol of 1912 did not prove competitive against discs of inferior acoustic quality, and in 1912 Edison offered his own Diamond Disc to the public. Thereafter the cylinder repertoire was second-hand, being dubbed from the Diamond Discs. [Dethlefsen 1980; Frow 1978; Koenigsberg 1987; Wile 1982.]

See also **Accordion Recordings; Brass Instrument Recordings; Cello Recordings; Comedy Recordings; Hymn Recordings; Literary Recordings; Male Quartets; Military Band Recordings; Opera Recordings; Orchestra Recordings; Organ Recordings; Piano Recordings (Historic); Violin Recordings**

(Historic); Whistling Recordings (Historic); Woodwind Recordings; and names of individual artists

8. *Contemporary playback of cylinders.* Playing tinfoil recordings is hazardous to them, and most of the extant cylinders of that type are doomed to silence. A laser system for reading the signals in the tinfoil was described by Tom Hedberg in 1978. In separate articles written in 1975, Tim Brooks and George Blacker explained how to play wax and amberol cylinders electrically, using a modern turntable tone arm. If the tone arm is long enough, and if it swivels 180 degrees away from the turntable, it can be placed on a cylinder—which is turned by its own player—and the stylus will track the grooves. It must be borne in mind that special styli are needed to play cylinders because of the variability in groove dimensions. "A far more convenient method is now available with the Owl Audio Kit. This is a modern cartridge and stylus assembly which mounts easily in an original cylinder player's reproducer carriage; the original machine is thus used only as a transport. Alternatively there are some very expensive archival machines, such as those built by Art Shifrin, which provide both a modern transport and cartridge/stylus assembly" (Brooks).

While playback on authentic cylinder machines may seem appropriate, and it is probably no harder on the records than use of modern equipment, there is no advantage in sound quality. [Blacker 1975/8; Blacker 1980/9; Brooks 1975; Hedberg 1978; Owen, T. 1982.]

See also **Sonic Restoration of Historical Recordings**

CYLINDROGRAPHY

The study of cylinder records; an equivalent term to discography. It was coined by George Blacker. Apparently the first serious research in the field was carried out by Duane Deakins, who published an extensive list of early cylinders in 1956–1961. In Britain H.H. Annand was at work at the same time, listing "indestructibles." Sydney H. Carter compiled Edison cylinder lists, as well as lists of Clarion, Ebonoid, and Sterling. Victor Girard and Harold M. Barnes published their important catalog of cylinders, by artist, in London, in 1964. Much of the British research was superseded by the definitive work of Koenigsberg on Edison cylinders. The Blue Amberols were listed by Ron Dethlefsen in 1980–1981. Further research by the persons named above, and by later scholars, has appeared primarily in the collectors' journals, such as *Antique Phonograph Monthly*. [Blacker 1981/2.] (*See the Bibliography for details on the works cited.*)



D

D&R (LABEL)

A product of the D&R Record Co., Chicago, which was probably related to the Standard Talking Machine Co. of that city. D&Rs, on sale via mail order around 1910, were made from Columbia masters. The label name stands for “Double and Reversible.” [Fabrizio 1980; Rust 1978.]



D&R label, c. 1908. Courtesy Kurt Nauck/Nauck's Vintage Records

D/A

SEE DAC

DAC

Also known as D/A converter, or digital-to-analog converter. A circuit for converting multichannel digital signals that were produced during the recording process back into corresponding analog signals that can be reproduced through speaker systems.

REV. HOWARD FERSTLER

DA CAPO (LABEL)

A Swedish label that offered 94 issues in 1937–1941; it seems to have belonged to a department store. Most of the releases were made from Silverton matrices. [Liliedahl 1971; Nationalfonotekets 1969.]

See also Dacapo (Label)

DACAPO (LABEL)

A German-made record issued in Germany from 1907, and available in Britain from 1910 to 1912. At least 250 titles were on sale by September 1910, including 40 British recordings. The repertoire was mainly popular, with some opera. William Andrew Barraud was the British agent for the firm, setting up the headquarters at No. 1 New Inn Yard, Great Eastern Street, London EC, in November 1911. On

DAILY, PAPPY

12 Jan 1912 the company name was changed to W.A. Barraud, Ltd. A price war in late 1912 in Britain forced the Dacapo import to reduce its price to 1s 6d, but it was unable to sustain competition; there was no Dacapo advertising after September 1912. Barraud left the organization when there was a new incorporation on 2 Oct 1912. The firm was renamed Dacapo Record Co., Ltd., and directed by E.F.G. Hale. [Andrews 1990.]

See also Da Capo (Label).

DAILY, PAPPY (8 FEB 1902–5 DEC 1987)

Harold Westcott Daily was born in Yoakum, Texas. In 1932, he left the Southern Pacific Railroad to launch South Coast Amusements, distributing jukeboxes and pinball machines. During World War II, Daily moved into record jobbing, and in 1946, launched a retail store, Daily's Record Ranch. He discovered and produced Webb Pierce and Hank Locklin for 4-Star Records (Locklin dubbed him "Pappy"), and, in June 1953, he and Jack Starnes started Starday Records. In January 1954, they signed George Jones, but in 1959, the Starday partnership (by then including Don Pierce) dissolved. Daily kept Jones's management and started "D" Records. "D" was the first to issue the Big Bopper's "Chantilly Lace," and the first to record George Strait. Daily also produced Jones for Mercury, United Artists, and Musicor until 1971.

COLIN ESCOTT

DAILY MAIL MYSTERY RECORD (LABEL)

A 10-inch record sold by the *Daily Mail*, London, in 1932. Artists were not identified and a prize of £1,950 was offered to the person who could guess who they were. The disc label was the earliest to carry the names of all the new EMI, Ltd., firms: HMV, Columbia, Parlophone, and Regal Zonophone. In January 1933 the artists and numbers were published in the newspaper. The performers were Ambrose and his orchestra, Leslie Hutchinson, Derickson and Brown, Binnie Hale, Doris Hare, Howard Jacobs, Robert Naylor, Billy Mayerl, Raie da Costa, Debroy Somers and his band, Geraldo Gaucho Tango Band, Peter Dawson, Harold Williams, Albert Sandler, George Baker, Raymond Newell, Jack Mackintosh, Bobby Howes, Francis Day, Melville Gideon, De Groot, John Morel, Albert Sammons, Heddle Nash, Cedric Sharp, Patricia Rossborough, and Sam Browne. [TMR #12 (October

1971) published this revelation, contributed by Frank Andrews.]

DALHART, VERNON

(6 APR 1883–15 SEP 1948)

American tenor and country singer, born Marion Try Slaughter in Jefferson, Texas (he took his stage name from two towns near there). After several years on stage in New York, he began to record for Columbia (1916), Edison (1917), Victor (1918), and many other companies. Under at least 70 pseudonyms, he made thousands of records between 1925 and 1930, perhaps more than any other artist. His repertoire included ballads, patriotic songs, comic numbers, light opera, hill-billy songs, and — most distinctively — disaster songs.

Dalhart's first record for a major label was "Just a Word of Sympathy" (Columbia A2108; December 1916). He then made seven discs in 1917 for Emerson, but did not achieve notable status until his earliest Edison records were issued in 1917. His first Edison, and one of his finest efforts, was "Can't Yo' Heah Me Callin' Caroline?" (Diamond Disc 80334; also on Blue Amberol 3185; 1917); it was in Negro dialect, one of his special styles. He went on tone test tours for Edison, and made a great hit with "Wreck of the Old 97" (Diamond Disc 51361; 1924). At the same time he was working for Victor doing "darky serenades," one of which, "Tuck Me to Sleep in My Old "Tucky Home," was a best seller (Victor 18807; 1921). His greatest success came with "The Prisoner's Song" (Victor 19427; 1924), said to have been Victor's highest-selling acoustic issue, with more than a million sales. The same song was recorded also on about 30 other labels. During the last years of the cylinder, 1925–1929, Dalhart virtually kept the format alive with more than 137 releases. Many were duets with Carson Robison. But there was a quick reversal in his popularity, as public taste shifted to the new crooning style, and he was passé by 1930. Furthermore, he was financially ruined in the Wall Street crash of 1929. Except for a brief, unsuccessful, comeback with Bluebird in 1939, Dalhart remained outside the record industry. He worked in a war plant, taught voice in Bridgeport, Connecticut, and was a hotel clerk there when he died. [Walsh 1960/5–12.]

D'ALMAINE, CHARLES

(13 JUNE 1871– 17 JUNE 1943)

English violinist, born in Hull. He was one of the earliest violinists to record, beginning with "Miserere" (Edison cylinder 7324; 1899), and two other numbers. He was concertmaster of the Edison house

orchestra, and of the Victor Orchestra when it was established in 1906. D'Almaine had 18 cylinders in the 1902 Edison catalog, and 18 in the 1901 Columbia catalog (presumably it was he; the artist was not named) — the two lists were virtually identical. He worked for Victor from 1901, and made his final discs for Pathé. His repertoire included concert pieces, operatic arrangements, reels, and dances. "Because" (Edison 7420; 1900), and "Oh Come All Ye Faithful" (Edison 7732; 1901), were among his popular releases. On Columbia he was sometimes identified as Charles Gordon. D'Almaine gave up recording in 1914 and worked as a chiropractor. He died in Newark, New Jersey. [Walsh 1957/11–12; 1958/1; 1959/11.]

DAL MONTE, TOTI
(27 JUNE 1893–26 JAN 1975)

Italian coloratura soprano, born Antonietta Meneghelli in Mogliano. She made her debut at La Scala in 1916, and sang elsewhere in Italy in roles for various soprano types. With a performance of Gilda in Torino, 1918, she became a secure coloratura, singing that repertoire for 10 years at La Scala under Arturo Toscanini. She sang at the Metropolitan Opera on 5 Dec 1924, as Lucia; in Chicago from 1924 to 1928, and at Covent Garden in 1926. Dal Monte recorded for HMV in 1924–1925, doing the *Lucia* mad scene. (#DB 712), "Una voce poco fa," "Caro nome" (#DB830), and two other arias; all are outstanding interpretations. During 1927–1935 she made electrical discs for HMV, a number of which have been reissued by Harmonia Mundi on CD #89001. She continued to perform through World War II, making her farewell performance in 1949. Perhaps her finest record was "Un bel di," recorded in 1935 and reissued in 1989 (EMI CD CHS7 69990–2). [Renton 1949.]

DALMORÉS, CHARLES
(1 JAN 1871–6 DEC 1939)

French dramatic tenor, born Henry Alphonse Boin, in Nancy. He was a notable horn player, winning the Paris Conservatory prize at age 19, and serving as an orchestral hornist for several years; then he was professor of horn in Lyons. He made his debut as a tenor in 1899 in Rouen, then was heard in Brussels, and for seven seasons at Covent Garden. He was at the Manhattan Opera from 1906 to 1910, and in Chicago from 1910 to 1918 (singing in that city's first *Parsifal*). His repertoire was both French/Italian and Wagnerian. On Victor Red Seal during 1907–1908 and 1912–1913, Dalmorès produced many fine discs. A

favorite among collectors is "Ah si ben mio" from *Trovatore* (Victor 85123). Some of these recordings have been reissued on various compilations of early opera stars.

DAMONE, VIC (12 JUNE 1928–)

American popular singer, born Vito Farinola in Brooklyn. His entrance into show business was as an usher at the Paramount Theater in New York; but not long after that humble beginning he appeared there as a featured performer. In the 1940s he gained quick fame. He had his own radio show in 1947–1948; and he was a sensation at the Mocambo Club in Hollywood. Many films and records followed, including *Kismet* (1955; soundtrack on MGM E-3281), and *Hit the Deck* (soundtrack on MGM E-3163). Damone had a light baritone voice of the Frank Sinatra type, best heard on his greatest hit singles: "I Have But One Heart" (Mercury 5053; 1947), "You're Breaking My Heart" (Mercury 5271; 1949), "My Truly, Truly Fair" (Mercury 5646; 1951), "On the Street Where You Live" (Columbia 40654; 1956), and "An Affair to Remember" (Columbia 40945; 1957). He also made successful LP albums for Mercury (anthologized on the two-CD set, *The Mercury Years*, Mercury 532870), Columbia (a sampling is available on *16 Most Requested Songs*, Columbia/Legacy 48975), and Warner.

DAMPING

The action of dissipating part of the oscillating energy in a sound system, usually by the use of nonresonant material. Tone arm or stylus resonance is often intentionally damped to prevent frequency distortion. Unwanted cone movement in a loudspeaker may be damped.

DAMPING FACTOR

In loudspeakers, it is the ratio of the loudspeaker's impedance to the total impedance of the amplifier driving it. Consequently, it is a measure of a power amplifier's ability to control the back-emf motion of the loudspeaker cone as the amplifier's output signal varies. Most amplifiers have more than enough damping control, and its impact has traditionally been overrated.

HOWARD FERSTLER

DANCE MASTER

A selective coin-op machine, with 12 discs on individual turntables in a Ferris wheel configuration, marketed by the Mills Novelty Co. in 1929. It was similar to the cylinder Multiphone.

Mr. and Mrs. Vernon Castle
 The greatest exponents of Modern Dancing, who have supervised the making of many Victor Dance Records

March 21, 1914.

The superiority of the Victor & Victor Records is so apparent that Mrs. Castle and I after a thorough trial of other sound reproducing instruments, have decided to use the Victor and Victor Records exclusively at Castle House.

Mrs. Castle and I find the Victrola practically indispensable, while the quality of music it supplies during class work is so satisfactory that our pupils are as enthusiastic regarding the Victrola as we are ourselves.

I also take great pleasure in announcing that I have given to the Victor Company the exclusive service of the Castle House orchestra for the making of dance records, so that I will personally superintend the making of Victor Dance Records.

Vernon Castle

The Victor's list of dance records now contains over 500 selections, placing at your disposal the most complete and comprehensive list in the world. Victor Records for dancing are absolutely unapproachable.

Victor Records

Dancing the One Step

Dancing the Hesitation

Dancing the Fox Trot

Dancing the Castle Polka

Advertisement from the 1917 Victor catalog, showing popular dance stars Vernon and Irene Castle. Courtesy Jerald Kalstein

DANCE MUSIC

Music intended to accompany social dancing, usually associated with ballroom dances like the fox-trot. It became a staple of record producers worldwide beginning with the dance craze in America just before World War I, and exhibited a continuous tradition through the Big band era. The Victor 1917 catalog listed these varieties of dances: barn dances, buck dances, cakewalks, Castle dances, clog dances, fox-trots, furlena, globe trot, half and half, jigs, London taps, one-steps, polkas, reels, schottisches, tango and maxixe, three-steps, two-steps, and waltzes. One-steps, fox-trots, and waltzes were the most recorded types in that catalog, accounting for about 500 discs. By 1927, the Victor catalog was dominated by fox-trots and waltzes, the prime forms of ballroom dancing; but there also records suitable for novelty dances like the Charleston. The Big bands of the 1930s and 1940s emphasized the

fox-trot in various tempos, but they also gave dancers the opportunity to do Latin American dances like the tango, the rumba, and the samba. In the late 1930s and in the 1940s the jitterbug and boogie-woogie styles were favored, in which couples were sometimes separated — each partner improvising — and sometimes together for energetic gyrations.

During the 1950s rock 'n' roll music marked the general demise of close couple dancing among young people. Solo and group movements predominated in theater, and have continued to hold the preference of dancers except in formal social events. The twist and the shake were variant forms, popular in the early 1960s. With the rise of rock music, dance music was largely replaced by disco. From time to time a Latin dance has shared the stage, such as the bossa nova of the early 1960s. Ballroom dancing has remained interesting to older persons, who may return to surviving ballrooms for nostalgic fox-trots and waltzes.

See also **Disco Music**

DANDY (LABEL)

An obscure American issue of ca. 1924–1926, carrying dance music from Emerson-Consolidated. [Rust 1978.]



Dandy label. Courtesy Kurt Nauck/Nauck's Vintage Records

DANN TRIO

A group of three women who recorded for Edison in 1919–1923; they were M. Felice Dann (cornetist), Blanche L. Dann (pianist), and Rosalynd Davis (violinist). They recorded for Edison in December 1919, as a trio and with solos for the cornet and violin. The Dann repertoire was composed of ballads of the day. The group was effective enough to be assigned to tone test tours from coast to coast, often with tenor Harvey Hindermyer. [Walsh 1977/7–9.]

D'APPOLITO, JOSEPH (13 APR 1936–)

An internationally recognized authority on loudspeaker system design and testing, Dr. D'Appolito earned a B.E.E. degree in 1958 (Rensselaer Polytechnic Institute), S.M.E.E. and E.E. degrees in 1964 (Massachusetts Institute of Technology), and a Ph.D. in electrical engineering in 1969 (University of Massachusetts). He worked in the defense industry for a number of years, but left that field in 1995, and now runs his own consulting firm, Audio and Acoustics, Ltd. He has designed more than 60 loudspeaker systems for both private and commercial clients, including the ARIA 5 Point Source for Focal, France, that was selected loudspeaker of the year for 1991 by *Hi-Fi Video Magazine* (Paris). One of his more well-known achievements was the MTM (mid/tweeter/mid) vertical loudspeaker geometry, commonly known as the "D'Appolito Configuration." Renowned for its ability to better control vertical system radiation, this driver arrangement has been copied widely by numerous manufacturers throughout the world, and many THX-certified speakers also make use of the concept. He is a contributing editor to *Speaker Builder Magazine* and has published more than 60 articles in both professional and popular hobby journals. His book, *Testing Loudspeakers*, has been published by Audio Amateur Press.

HOWARD FERSTLER

DARIN, BOBBY

(14 MAY 1936–20 DEC 1973)

Born Walden Robert Cassotto in the Bronx, New York, Darin was a major teen pop star of the late 1950s and early 1960s. He first worked as a songwriter for Brill Building producer Don Kirshner, before signing with Atco Records, the pop division of Atlantic. His first major hit was the self-penned "Splish Splash" (1958, #3 pop; Atco 6117). Several teen hits followed, including "Queen of the Hop" (1958, #9 pop; Atco 6127), also written by Darin, and his number 2 hit, "Dream Lover" (1959; Atco 6140). His cover of the Bertolt Brecht-Kurt Weill pop song "Mack the Knife" that year was his first number one, and started Darin's pop crooner career.

Through the mid-1960s he primarily recorded standards, then returned to pop material for his first Top 10 hit in five years in 1966 with "If I Were a Carpenter" (#8 pop; Atlantic 2350), written by folk singer/songwriter Tim Hardin. However, this was to be his last major success. Deeply depressed following the assassination of presidential candidate Robert Kennedy in 1968, for whom Darin had actively campaigned, he withdrew from performing for a while. He returned as a Vegas lounge singer in the early 1970s, enjoying success on the road if not on record. He died in Los Angeles in 1973 following surgery to repair a heart defect. In 1990, Darin was inducted into the Rock and Roll Hall of Fame. The most comprehensive overview of Darin's recording career is available on the four-CD set, *As Long as I'm Singing* (Rhino 72206; 1995). The most popular of his Atlantic and EMI recordings have been reissued in various compilation CDs over the years.

**DARRELL, ROBERT DONALDSON
(13 DEC 1903–1 MAY 1988)**

Editor and discographer, born in Newton, Massachusetts. He attended Harvard College and the New England Conservatory. Darrell edited the *Phonographic Monthly Review* from 1930, and was contributing editor of *High Fidelity* from 1956 to 1984. He wrote the seminal *Gramophone Shop Encyclopedia* in 1936. Darrell was one of the first American critics to focus on recordings, primarily of classical music. He also reviewed discs for *Saturday Review*, *High Fidelity* (1954–1987), and *Opus*. Darrell died in Kingston, New York.

See also **Discography**

DAT (DIGITAL AUDIO TAPE)

The first consumer-oriented and pro/semipro digital tape recording format to appear in the U.S.. Actually, it had been around for some time, at least in Japan and Europe, but suffered a delayed introduction in America because the recording industry was philosophically opposed to consumer-oriented digital recorders from the beginning. The industry had (and still has) the not altogether unjustified fear that "perfect" recorders of any kind would allow individuals, particularly tape pirates, to expertly steal material. Doing this would deny performers (and, of course, agents and record producers) their income. The Philips-designed SCMS (Serial Copy Management System) diminished those fears and DAT was released for sale. SCMS allows a user to copy a recording one time but the copy itself cannot be recopied.

DAT has traditionally appealed mainly to professionals and well-heeled, "advanced" amateurs who do live recording. It should also be noted that prerecorded

DATA COMPRESSION

tapes for this format are no longer available, because there were never enough recorders sold to justify tooling up to make them. The limited number of titles that appeared initially were more expensive and less convenient to use than the subjectively equal CD.

However, those wanting to go first class, particularly if they intend to do live recording in two-channel form, cannot do better than DAT. It takes a back seat to no other type of recording device, unless more than two tracks are needed. However, it has to be admitted that most of those who do recording at the amateur level and want the advantages of digital sound, as well as durability, convenience, and ease of use, would do better to utilize the minidisc or the recordable CD.

The measured performance of DAT can exceed that of the CD, since a 48-kHz sampling frequency (sampling rate) is available (the CD operates at 44.1 kHz and a DAT deck can use this also, as well as 32 kHz for programs with limited bandwidth needs), giving it the kind of effectiveness that performance-oriented enthusiasts demand. A DAT tape can hold 1,300 megabytes of information and data is retrieved at a drum-scan speed of 10 feet per second, compared with the 3.9 to 4.9 feet-per-second linear speed of the compact disc. However, Nagra's portable digital recorder — the Nagra V, introduced in February 2002 — has been touted as the successor to DAT and various analog tape formats for professional audio personnel.

HOWARD FERSTLER

DATA COMPRESSION

In digital-audio systems, it can be any of several algorithms designed to reduce the bandwidth requirements for accurate digital audio storage and transmission. The audible consequences of data compression will vary, depending on the degree of compression and the quality of the algorithm used, and the best systems will be subjectively transparent.

See also **Compression; Data Reduction; Dolby Digital; DTS**

HOWARD FERSTLER

DATA REDUCTION

Sometimes called lossy compression, in digital-audio systems it is designed to reduce the bandwidth requirements for accurate digital audio storage and transmission even further than data compression. Data reduction makes use of psychoacoustic masking to ensure that sounds that are eliminated from the mix would not be ordinarily heard.

See also **Dolby Digital; DTS**

HOWARD FERSTLER

DATING A RECORDING

In record collector parlance, establishing the exact date of an issue or of a recording session. Unlike books, recorded media do not typically carry publication or copyright dates, so the discovery of relative dates requires research. Since the files of most defunct recording firms have been lost, and since the files of major extant companies are often incomplete, in awkward arrangements, or closed to investigators, the problem can be a formidable one. Diaries, appointment books, and recollections of performers are sometimes useful in determining session dates. There are also stories about the performers in newspapers and magazines, telling what cities they were playing in; such information serves to limit the possibilities of recording for specific labels in specific places, although major labels have had studios in many cities. Release dates are sometimes found in contemporary periodicals like *Talking Machine World*, and in new record announcements sent by companies to record shops.

The recorded material on a disc or tape may be traced through copyright catalogs to establish an earliest possible date for the record — assuming that music was copyrighted before it was put on record. It is also a fair assumption that when a hit tune is recorded by several companies at about the same time, so that the date of one release is known, there is a clue to the timeframe of the others.

What might seem like the most promising clue to dating, the matrix number, is occasionally misleading; the matrices were not always chronological. Blocks of matrix numbers might be assigned (as Victor did) to certain studios, or to types of material. Another problem with matrix numbers is that some companies kept the same number for a remake of an earlier record. The physical appearance of a disc is often an indicator of its time period, as label color and designs tend to be constant for a particular series over a period of time.

Students of the various labels have published helpful results of their dating endeavors (see the Bibliography). Likewise, biographers of musicians in recent years have often included detailed dated discographies in their books. [Bryant 1962, makes suggestions for dating British LP issues; Daniels 1985; Gart 1989; Kendziora 1971, a useful introduction to the dating problem; Kinkle 1974; Rust 1978; Walsh 1968 /10–12; Walsh 1969/2–4; Warren 1979. Daniels, Gart, Kinkle, and Rust are important guides to dating the issues of a large number of American labels. Both Walsh articles are guides to dating Victor records.]

DAVEGA (LABEL)

A record produced for sale in the Davega chain of sporting good stores in New York City from the summer of 1922 to ca. March 1923. One series consisted



Davega label, c. 1922–23. Courtesy Kurt Nauck/Nauck's Vintage Records

of dance and popular vocals, while another series had some operatic items. Most of the masters came from Pathé, but a few were from Paramount, via Plaza, and others were from Banner. Among the artists represented were the Synco Jazz Band, California Ramblers (as the Golden Gate Orchestra), and the Original Memphis Five. [Kendziora 1962/3–4; Rust 1978.]

DAVENPORT, EDGAR LONGFELLOW (7 FEB 1862–25 JULY 1918)

American actor, born in Boston. He recorded poems and recitations, beginning with “Jim Bludsoe” (Edison cylinder #9053; 1905). His second record was also his biggest hit: “Lasca” (Edison #9087; 1905); it appeared also on Columbia, Victor, and other labels. Davenport did not record after 1913. He died in Boston. [Brooks 1990; Walsh 1967/8–9, 12.]

DAVIS, ARTHUR C. (11 MAR 1908–7 NOV 1970)

Born in Salt Lake City, Davis spent most of his life in California. In 1938, he founded the Cinema-Engineering company, and after selling it to Aero-Vox sometime later, he went to work for Altec Lansing, heading up their audio-control department. He designed numerous products for the industry, including equalizers, filter sets, loudspeaker systems, audio-console electronics, attenuators, gain sets, and the first mechanical film loudspeaker system. Davis was a

member of the Audio Engineering Society, was named a fellow in 1955, and won the society’s Potts award in 1962. In 1967, he was named a fellow of the Society of Motion Picture and Television Engineers.

HOWARD FERSTLER

DAVIS, CLIVE (4 APR 1934–)

Clive Davis played a key role in transforming the Columbia label into a major force within the record industry in the late 1960s. He went on to prove that this success was no fluke by working the same magic for Arista from the 1970s through the end of the 20th century.

A Harvard Law School graduate destined to go far in the legal profession, Davis opted for a somewhat unconventional career path. Hired by Columbia as a contract lawyer in 1960, David gained recognition shortly thereafter by getting Bob Dylan — whose original contract had become void when the singer turned 21 — to renew with terms favorable to the company. His astute judgment and fair-mindedness in dealing with both associates and label clients enabled him to move up the ranks, becoming president in 1967.

Before Davis took over, Columbia had been slower than any other major label to sign — and promote — rock artists. This conservative approach had been dictated in part by A&R head Mitch Miller’s well-known antipathy for the genre. Davis, however, seemed free of the prejudices found in many of the musicians occupying the company’s management positions; he understood that rock was entering an era of unprecedented creativity. He moved quickly to sign large numbers of talented new rock acts, including Big Brother and the Holding Company (featuring Janis Joplin), the Electric Flag, Santana, Chicago, Bruce Springsteen, and Billy Joel. The *Billboard* pop album charts tell the story of Columbia’s shift in fortunes: between 1965–1967 none of its releases reached the number one position; in 1968, its releases spent 24 weeks at number one; in 1969, 11 weeks; and in 1970, 18 weeks.

Despite the label’s commercial success and newfound artistic credibility, many upper echelon staffers chafed at the alleged egomania displayed by Davis. An internal investigation revealed irregularities such as faked invoices and expense accounts connected with Davis, which led to his dismissal in 1973. He would later provide a different account of these developments in his autobiography, *Clive: Inside the Record Business* (New York: William Morrow, 1975).

By the mid-1970s, Davis had been hired to head the record division at Columbia Pictures. After renaming the company Arista, he signed Barry Manilow, who went on to become a major recording star. Arista’s roster would eventually rival that of his former label,

DAVIS, LOUIS (CHIP)

including the Grateful Dead, the Kinks, Eric Carmen, Graham Parker, Air Supply, Whitney Houston, and Alan Jackson. However, by 2000, corporate parent BMG was hoping that Davis would retire gracefully; eventually, he was replaced by Antonio "L.A." Reid. Ironically, due to the media attention that Davis's firing inspired, BMG formed a new label, J, in association with him soon after. In fall 2002, Davis announced a \$5 million gift to New York University to develop the Clive Davis department of recorded music there. That November, BMG announced it was purchasing Davis's 50 percent share of J Records and putting the venerable executive in charge of both that label and RCA.

REV. CARL BENSON

DAVIS, LOUIS (CHIP) (1947–)

One of the most successful and innovative entrepreneurs in the music business today, it could be said that Davis was the creator of the New Age musical genre. Raised in Sylvania, Ohio, and the son of a father who was a high-school music teacher, Davis was a musical prodigy who composed a four-part chorale when he was six, and began singing in his father's choir at age 10. In addition to being primarily responsible for the New Age phenomenon, he has had a profound impact on country music, has successfully mixed pop and classical music styles in his compositions, and essentially rejuvenated the Christmas music genera with the release of his best-selling series of holiday albums.

After graduating from college in 1969, Davis soon joined the Norman Luboff Choir and went on tour. Although classically trained as a musician, concentrating on bassoon and percussion (having learned to play the drums at age 23), he was also fascinated by electronics, and eventually came to realize that technology could be used in the production of many kinds of music, including completely new forms. In the early 1970s, Davis wrote hundreds of popular jingles for an advertising agency. One of the jingles that was written for Old Home Bread turned into the country hit, *Convoy*, which eventually went on to reach number one on the music charts. An album followed, under the group name "C.W. McCall and the Old Home Band," which was a techno-country release that made use of French horns and big-voiced backup singers. Eight more albums followed, with *Convoy*, written by Davis and Bill Fries, eventually selling 10 million copies. The song went on to inspire a motion picture by the same name. The series won Davis the country music writer of the year award in 1976.

Davis had also been experimenting with his classical roots, and hired on as music director at Sound

Recorders, an Omaha recording studio. At that time, he began to formulate his ideas for compositions that combined classical and rock rhythms, making use of instruments as diverse as classical harpsichords and renaissance recorders, in consort with electric bass synthesizers. He tried to interest several recording companies in the result, which he had entitled *Fresh Aire*, but their lack of interest spurred him into creating his own recording company, American Gramophone, in 1974. He called the "group" performing the music the Mannheim Steamroller, and the result was a hit with both the mainstream public and with audiophiles looking for super-quality program material.

Davis has gone on to compose, produce, and record a total of eight ultra-high sound quality *Fresh Aire* albums, as well as five multi-platinum Christmas albums, with each successive version involving more refined analog, electronic, and digital technologies, including DVD video and DVD-A, in 5.1-channel forms. He is also active in environmental preservation, and produced *Saving the Wildlife* (1986), which was the soundtrack to a PBS special, and also created a concert tour and album entitled *Yellowstone: The Music of Nature* (1989), which went gold in 1994. Davis has donated more than \$600,000 to the park as a result of sales. He continues to tour with his group and compose, record, and produce some of the most innovative music in the business.

HOWARD FERSTLER

DAVIS, MARK (20 DEC 1946–)

A noted audio designer and researcher, Davis was responsible for the early dbx Soundfield speaker systems (a groundbreaking design that showed the real-world importance of time-intensity tradeoffs with speaker performance), the MTS audio system for analog stereo TV sound transmission, and most notably, the early theater version of the AC-3 coding technology employed with the Dolby Digital audio system that has become the defacto standard for motion picture sound and surround sound in home theater. He was part of the team that refined AC-3 for home theater and musical use. Davis has a 1980 Ph.D. from MIT, and has published a number of technical papers on system design.

HOWARD FERSTLER

DAVIS, MILES DEWEY, III (25 MAY 1926– 28 SEP 1991)

American jazz trumpeter and bandleader, born in Alton, Illinois. At age 15 he was already a professional trumpet player. He moved to New York in 1944,



Miles Davis in the recording studio, c. early 1960s.
© Hulton-Deutsch Collection/Corbis

ostensibly to study at the Juilliard School, but primarily to work with Charlie Parker, whose quintet he joined in 1945. He also worked with the Benny Carter and Billy Eckstine bands. He led various bebop groups in the late 1940s, and recorded with many bebop artists. With the collaboration of arranger Gil Evans, Davis created a calmer and more melodic variant of bebop, and became one of the pioneers of cool jazz. Davis famously led a large band on sessions recorded by Capitol in 1949–1950, finally released on LP in 1957 as *The Birth of the Cool* (Capitol T-762; reissued on CD as Blue Note 30117, and again in a “complete” version, Blue Note 94550), a landmark recording in this new style.

Davis signed with the small jazz label Prestige in early 1951, and began a series of small-group recordings for the label. After a highly successful appearance at the Newport Jazz Festival of 1955, Davis was signed to major label, Columbia, who purchased his contract from Prestige. Among his sidemen over the years were saxophonists Cannonball Adderley and John Coltrane, and pianists Chick Corea, Bill Evans, and Keith Jarrett. In the late 1960s he led the development of the fusion style of jazz, mixing improvisations

with rock formulas. He experimented with modal sounds, departing from standard harmonies. In the late 1960s and in the late 1970s Davis developed a preference for the loud rock idiom. After a period of inactivity from the mid- through later 1970s, Davis returned to recording and performing in 1981, signing with Warners in 1985, although his later albums were definitely uneven in quality and execution. After years battling drug addiction and various illnesses, Davis died in Santa Monica, California.

The basic Davis style was crisp, relaxed, and melodic in its improvisations; his ensembles were smoothly blended and restrained. His albums of the 1950s illustrate his best work, among them *Kind of Blue* (Columbia CL 1355; 1959, said to be among the best-selling jazz albums of all time), and *Porgy and Bess* (Columbia 1275; 1959). “Concierto de Aranjuez” and other numbers in *Sketches of Spain*, with Gil Evans (Columbia CS 8271 1960), offered an inspired incursion into Spanish music; it was the first Grammy winner for Davis. *Quiet Nights* was a successful album of 1964 (Columbia CL2106). The rock-laden texture of *Bitches Brew* (Columbia GP 26; 1970), created controversy, but also spawned imitations; it was on the charts 17 weeks. Davis had two later Grammy albums: *We Want Miles* (1982; Columbia 38005), and *Tutu* (1986; Warners 25490). He was honored with a lifetime achievement award at the 1989 Grammy presentations.

Davis’s recordings have been reissued on CD in various forms, including reproductions of the original albums (sometimes with “bonus” tracks), samplers, and boxed sets. His complete Prestige sessions are available on an eight-CD set (Prestige 012), as well as in their original form. Previously unissued live and studio material has also appeared. *Live at the Plugged Nickel 1965* (Columbia 66955), was issued in 1995, is an eight-CD set of the classic mid-1960s group with Herbie Hancock, Wayne Shorter, Ron Carter, and Tony Williams. Columbia has issued other live material, including Davis’s famous fusion concert at *Fillmore East* from 1970 (Columbia 65139).

DAVIS, SAMMY, JR.

(8 DEC 1925–16 MAY 1990)

American popular singer, dancer, and actor, born in New York. He was born into a vaudeville family and was on stage at the age of four. At age six he appeared in a motion picture. During the Depression he was part of a group called the Will Mastin Trio that played in various venues across the U.S. Davis saw military service during World War II, and then gained sudden acclaim in a Hollywood engagement at Ciro’s nightclub. He appeared as a soloist at the Copacabana in

DAWSON, PETER

New York in April 1954, creating a sensation. Signed by Decca, he made a quick success with his first album, *Starring Sammy Davis, Jr.* (#DL 8118; 1955), in which he offered impersonations of Bing Crosby and other luminaries. A second album of 1955, *Just for Lovers* (Decca DL 8170), was also on the charts. In the Broadway show *Mr. Wonderful* he sang several songs that became associated with him, including "Mr. Wonderful." His most popular singles were "What Kind of Fool Am I?" (Reprise 20048; 1962), "The Shelter of Your Arms" (Reprise 20216; 1963), "I've Gotta Be Me" (Reprise 0779; 1968).

Davis spent most of his later career as a nightclub entertainer. He was the first Black artist to be featured in Las Vegas, and is credited with integrating the hotels there and in Miami. He was active in the Civil Rights movement, marching with Martin Luther King, Jr., in Montgomery, Alabama, but gathered mixed reactions from the Black community for his two marriages to white women and his association with President Richard Nixon. His career was beset with various personal miseries, including the loss of an eye and a long final struggle with cancer.

The only compilation to feature recordings that Davis made throughout his recording career is *Yes I Can* (Rhino 75792; 1999), a four-CD set. There are also various reissues, mostly from recordings he made for Reprise.

DAWSON, PETER

(31 JAN 1882–26 SEP 1961)

Australian baritone, born in Adelaide, "grandest of the concert singers of any period of recording" (Rust). He was a choirboy, then won a singing contest at age 19 and gave concerts. In 1902 he was sent to London to study with Charles Santley, who arranged a concert tour in the west of England. Dawson then gave recitals throughout the British Empire. An audition for Edison Bell led to his first cylinder records, under the stage name Leonard Dawson; he also made discs for G&T in London, and for Nicole, then went to other labels, as well. His first Edison cylinder was the Scottish comic song "Foo the Noo" (#13396; 1906), under the name of Hector Grant; in that and other records (and in the music hall), he impersonated Harry Lauder. Dawson's repertoire was vast and diverse: concertarias, comic songs, patriotic numbers, and ballads, all under pseudonyms.

Dawson's busiest year in the recording studio was 1907, as he worked for a half-dozen companies. In 1909–1910 he made a 20-week Australian tour, and in 1913–1914 another. He sang a concert for Maori tribesmen, in their language. He joined the Australian Army in 1918. With electrical recording Dawson's

popularity increased. He made a noteworthy *Pagliacci* "Prologo" in 1926, and won great praise for his "Erlkönig" of 1927. Thomas Beecham regarded him as the ideal Handel singer. During the 1930s he found new audiences, singing children's records and popular tunes. The cowboy song "Empty Saddles" (HMV B8475) also sold well. But his most appreciated and best-remembered disc was "Waltzing Matilda," the only Dawson number to have wide appeal in the U.S., where it appeared on Victor Red Seal (#10–1025; 1938). Another highly popular record was "Mandalay Scena"/"Clancy of the Overflow" (HMV 7EG8159; 1956).

Altogether, Dawson made about 3,500 records, with a total sale of more than 13 million. An LP reissue of 1958 covered many of his hits in different genres (HMV DLP 1180). Pearl and EMI have issued CDs. Dawson died in Sydney, Australia in 1961. [Walsh 1962/1–6.]

DAY, DORIS (3 APR 1922–)

American popular singer and actress, born Doris Kappelhoff in Cincinnati. As a child she performed as a dancer, but turned to singing after a leg injury. During the 1940s she became a band vocalist and Hollywood actress, beginning with Les Brown's orchestra in 1940–1941 and 1943–1945. With Brown she recorded her greatest single, "Sentimental Journey" (Columbia 36769; 1944). She then was wooed by Hollywood, where she became a major film star through the 1950s. She had a dozen chart singles in the 1950s, notably "Que será, será" (Columbia 40704; 1956). Day took the role of Ruth Etting in the 1955 motion picture *Love Me or Leave Me* (sound-track record Columbia CL-710). She was a star on television in the 1960s and 1970s, and had many successful nonsinging roles in films.

Day's work on record has been sporadically reissued on various compilations. The German completist label, Bear Family, has reissued her complete recordings, beginning with a four-CD set of her 1947–1950 recordings, *It's Magic* (15609; 1994), including some of her best and most varied work. They followed with *Secret Love* (15746), another massive collection containing five CDs of her 1951–1955 recordings, *Que Sera Sera*, covering 1956–1959 on five CDs (15797), and her later recordings on *Move Over Darling* (15800; eight CDs), made between 1960–1967. All feature comprehensive, illustrated booklets.

DB

SEE DECIBEL (DB)

DBX CORPORATION

Primarily known for a recording noise-reduction system developed in the early 1970s by David E. Blackmer and colleagues, and using more aggressive circuitry than the early Dolby A and B systems. The dbx technology (the company always printed its name in lower-case letters) achieved as much as a 30-dB reduction in tape hiss by means of a wide-range 2:1:2 compressor-expander voltage-controlled amplifier, with preemphasis/deemphasis and true RMS-level detection. In two implementations, it became popular with both professional and consumer recordists, although unlike Dolby it could not be listened to undecoded. In addition, there were potential audible artifacts on some material when recordings levels were set too low. At one stage, some outstanding LP recordings also were encoded with the technology, but they never caught on. Eventually, improved Dolby noise-reduction systems (Dolby C and S), not to mention digital recording, put an end to its use.

In its heyday, the company was also a leader in analog signal processing; notably the compressors that make broadcast audio possible, but also in the area of consumer products. DBX was also responsible for the technology behind stereo audio for U.S. television broadcasting. The company did further revolutionary work in digital recording, loudspeaker design, and audio measurement systems. DBX pro exists today as a studio and broadcast signal-processing company, while a spinoff, THAT Corporation, provides high-performance audio ICs and technology licensing to the industry.

HOWARD FERSTLER

DIGITAL COMPACT CASSETTE (DCC)

Philips and Matsushita introduced the digital compact cassette (DCC) recorder/player in 1992 as a replacement for the popular analog cassette. DCC was developed as a consumer alternative to DAT, the original digital tape recording medium introduced by Sony in 1987. Selling points for DCC included CD-quality reproduction and durability and backward-compatibility so that standard analog cassettes could be played (but not recorded) in the same machines. Recording was done using 16-bit linear encoding and any of three different sampling rates: 32, 44.1, and 48 kHz, although all three rates were "dithered" to CD-standard 44.1 kHz before being placed on tape. DCC cassettes were manufactured especially for the format and were available in lengths of 45, 60, 75, 90, and 105 minutes. The medium used a proprietary data compression scheme known as Precision Adaptive Sub-band Coding (PASC) to fit audio tracks onto the

tape. Track markers were added during recording to facilitate access to specific tracks during playback, although the linear tape format remained a disadvantage of the medium when compared to the nonlinear, instant access of compact discs.

In 1992, the DCC competed head-to-head with the newly introduced Sony minidisc, yet another consumer product aimed at supplanting the analog cassette. Neither of these media met with early success and Philips discontinued production of DCC products in 1996, followed shortly by its introduction of CD-R recorders for home audio. The Sony minidisc was more resilient and has since become a popular alternative to CD-R for home recording.

THOM HOLMES

DEAD KENNEDYS

The Dead Kennedys represented the cutting edge of postpunk social protest in the 1980s. Because established American record companies wanted nothing to do with the band, leader Jello Biafra formed Alternative Tentacles, one of leading counterculture labels of that era.

Following the example of socially conscious British punk artists, the San Francisco-based Dead Kennedys were formed in early 1978. In addition to vocalist Biafra (Eric Boucher), the original members included East Bay Ray (Glasser), guitar/synthesizers; Klaus Floride, bass/vocals; Bruce Slesinger (aka Ted), drums; and — briefly — a shadowy figure known as 6025. The first single, "California Uber Alles" (Alternative Tentacles 95-41; 1979), established their approach, with Biafra railing (in this case California governor Jerry Brown's policies), over a steamrolling hardcore accompaniment. The Kennedys's albums — *Fresh Fruit For Rotting Vegetables* (Alternative Tentacles 70014; 1980), *In God We Trust Inc.* (Alternative Tentacles VIRUS 5; 1981; ten-inch EP), *Plastic Surgery Disasters* (Alternative Tentacles STATLP 11; 1982), *Frankenchrist* (Alternative Tentacles VIRUS 45; 1985), and *Bedtime For Democracy* (Alternative Tentacles VIRUS 50; 1986) — offered more of the same and, as a result, sold marginally in the U.S. (although intermittently ascending to the lower reaches of the British charts).

The inclusion of a poster by Swiss artist H. R. Giger depicting a broad array of penises in *Frankenchrist* led to prolonged litigation over distributing harmful material to minors. Although the case was ultimately thrown out, defense costs brought on the demise of the band. Biafra continued to perform and record both as a solo poet and with various groups.

FRANK HOFFMANN

DEAD STUDIO

DEAD STUDIO

In the strict sense, a studio in which there is no reflection of sound waves and no entrance of sound from outside the room; more generally, a studio with relatively little reverberation.

DEATH ROW (LABEL)

Notorious rap label founded by rapper/producer Dr. Dre and promoter Marion "Suge" Knight in 1992, with distribution provided by Interscope Records. Knight was born in Compton, the son of a janitor, and enjoyed success in high school and college as a football star. However, he could not successfully transition to the pros, and instead became bodyguard for singer Bobby Brown in the late 1980s. In 1990, he started a music-publishing company, scoring his greatest financial success (ironically) through his coownership of the publishing rights to whitebread rapper Vanilla Ice's songs. Dr. Dre was unhappy with his contract with Ruthless Records, owned by Eric "Eazy-E" Wright, and enlisted Knight's help in getting him out of the deal; rumors spread that Knight threatened Wright, but in any case, Dre became a partner in the new Death Row label, and his first release, *The Chronic*, was a great success. The label became associated with gangsta rap, signing major stars Tupac Shakur and Snoop Doggy Dogg. It was distributed by Interscope Records, a division of Time Warner Inc., which caused some controversy for the large conglomerate (in 1996, Time Warner sold out its holdings in Interscope, which were picked up by MCA). Meanwhile, Knight gained a reputation for unsavory business tactics and violent behavior; he was convicted in 1994 of beating two men with a telephone at Death Row's studios, and again in 1997 for a 1996 assault committed in a Las Vegas casino; this led to his imprisonment until August 2001. Also in 1996, Tupac Shakur was gunned down and, in retaliation, the East Coast rapper the Notorious B.I.G. was then killed; Knight is rumored to have had a hand in these, and subsequent, killings. In light of all these problems, Interscope withdrew its distribution support for the label in the mid-1990s.

By the time Knight was released from prison in 2001, Death Row was in shambles, but nonetheless, Knight has tried to rebuild his empire under the new name of Tha Row, but he has been dogged by further criminal charges. In September 2002, the IRS and Knight settled a lawsuit involving Death Row's failure to pay its federal taxes; the settlement involved the label agreeing to pay \$100,000 a quarter until all of its unpaid taxes for 1990–1995 were paid, as well as a \$100,000 fine for its failure to pay its 1996 federal taxes, and a five-year probation. In November, Tha Row's offices were raided by Los Angeles police (armed with

warrants), who were investigating several homicides related to Tha Row employees and associates. [Brown 2001; Ro 1998.]

CARL BENSON

DE BASSINI, ALBERTO (14 JULY 1847– CA. 1905)

Italian baritone, born in Florence. He was a member of the Lisbon Royal Opera. He is known for his many Bettini cylinders, on which he recorded virtually the entire baritone opera repertoire in 1897–1899: 101 solos plus 16 duets with Rosalia Chalia. He emigrated to the United States in 1898. On disc he recorded for Zonophone in 1903 (eight arias and songs), and Columbia in 1903–1905 (26 numbers). He used the pseudonym "A. del Campo" on some of his records. Nothing is known of his life after 1905.

DECCA GRAMOPHONE CO., LTD.

The name taken by the firm of Barnett Samuel and Sons as they changed from a musical instrument maker to a manufacturer of gramophones. The Decca Dulcephone portable, first marketed in 1914, was the most successful of its products, advertised under Barnett Samuel's name as late as 1926. The portable, which closed into a cubic-foot-size carrying case, was very popular among British military personnel during World War I. In 1929 the company was acquired by the new Decca Record Co., Ltd. [Bayly 1974 has illustrations and details; *TMR* #63/64 has advertisements, p. 1770.]

See also Samuel (Barnett) and Sons, Ltd.

DECCA RECORD CO.

One of the major firms in the record industry of the U.S., established as the American branch of Decca Record Co., Ltd., on 4 Aug 1934 in New York. Founders were Jack Kapp, who became president, Edward Robert Lewis (head of the British company; he became chairman of the U.S. board), and E.F. Stevens. Kapp had been a Brunswick executive, and when he left that company to form Decca he used Brunswick series numbers as the basis for Decca's master-numbering system. (Brunswick was affiliated with the English Decca label, which had rights to the label, from an agreement with its owner, the American Record Corp.) Thus the first Decca matrix, New York series, was #38290 (13 Aug 1934): Guy Lombardo's "Down by the Old Mill Stream," issued as Decca #102. It was from the Decca studio in Los Angeles that the earliest dated matrix was made, on 8 Aug 1934: "Poor Unlucky Cowboy," by Scott Hamblin and his Covered Wagon Jubilee.



U.S. Decca 78 label. Courtesy Kurt Nauck/Nauck's Vintage Records

Decca was in financial trouble immediately, with rising debts and some unmet payrolls. Lewis wrote that "at the office in New York we had a pleasant enough waiting room. There the unfortunate creditors used to wait." The year 1934 ended with the U.S. and U.K. companies just surviving bankruptcy. Yet American Decca soon made its place in the market, by means of a low sale price for its product: \$.35 per disc, compared to \$.75 for competing labels. Decca also attracted highly popular artists such as Bing Crosby, Jimmy Dorsey, Tommy Dorsey, the Mills Brothers, Skitch Henderson, and Arthur Tracey. A successful country music series was offered from 1934 to 1945, consisting of 1,113 releases. By 1936 the company was showing a profit. Reflecting the taste of Jack Kapp, almost all the company's releases until his death in 1949 were of popular music. Great sales success was achieved by many Crosby songs, above all "White Christmas" in 1942. Other acclaimed Decca artists included the Andrews Sisters, Count Basie, Louis Armstrong, and Woody Herman. In 1942 American Decca revived the Brunswick label, defunct since 1939, and reissued many outstanding Brunswick discs by such performers as Cab Calloway, Crosby, Duke Ellington, Benny Goodman, Red Nichols, and Pine Top Smith.

A major technological improvement was introduced in 1946: full frequency range recordings (ffrr). It was the outcome of research by Arthur Charles Haddy, who had worked on submarine-detection devices. Used in conjunction with the Decca Piccadilly record player, this shellac 78-rpm disc achieved a range of 50–14,000

Hz, the best in the industry. It was marketed first by American Decca, then by London. In 1949 the earliest Decca LP appeared, in time to be included with 10 other labels in the first *Long Playing Record Catalog* issued by W. Schwann in October. The firm was among the pioneer stereo labels. An affiliation with Deutsche Grammophon Gesellschaft (DGG) was negotiated in 1956. In 1962, MCA, Inc. acquired the company, continuing the Decca label name into the 1970s. When MCA was absorbed into Universal Music Group in the late 1990s, the Decca name was revived for classical music releases; as of 2002, the Decca Music Group division of Universal included Decca, Universal, and Phillips Classics, and Deutsche Grammophon.

Decca's label design began with a blue and gold sunburst pattern, then had many variants. Its most familiar manifestation was the blue color with either shaded or plain block letters for the company name. A Personality series, initiated in 1939, was crimson color with gold letters. [Ginell 1989 (the country music series); Hayes 1971; Rust 1978.]

DECCA RECORD CO., LTD.

A British firm, established on 14 Feb 1929 in London, taking over the Decca Gramophone Co., Ltd. The founder was Edward Robert Lewis, a stockbroker. Entering the record market — with the acquisition of the Duophone Record Co. — during a period of worldwide depression in the industry, Decca thrived. Lewis took the approach of acquiring rights to American labels like Brunswick and Melotone, while at the same time underselling the British competition. The Decca trademark was registered in Sweden in 1929, and by 1930 there were distributors in Stockholm and Gothenberg; Swedish artists were recorded in London. Decca acquired British rights to the Polydor label in 1930, gaining a much-needed classical repertoire and a group of classical artists.

In 1931 Lewis persuaded the directors to offer discs at 1s 6d, while other leading labels were selling at 2s 6d or 3s, and only a few bargain labels like Broadcast and Imperial cost 1s 6d. Jack Hylton's orchestra was signed to an exclusive contract, with the quick reward of a hit record, "Rhymes," that sold 300,000 copies. A number of British classical performers were added to the catalog by the mid-1930s, including Henry Wood, Clifford Curzon, Hamilton Harty, and Boyd Neel. Decca's classical records were priced below those of HMV Red Label.

However, the times were bad, and the firm appeared to overextend its resources. It bought Edison Bell in 1933. While attempting to acquire British Brunswick, Ltd., a cashflow crisis developed. Lewis wrote that "we were extended generous credit by our suppliers....

DECCA TREE

One day the phones were cut off....Salary cuts were accepted by the loyal and enthusiastic staff....” Louis Sterling at EMI, Ltd., was anticipating a takeover of Decca, and so was the Crystalate Gramophone Record Manufacturing Co. (Sterling’s firm was not that secure either; according to Lewis, Sterling remarked that Decca was such an unconscionable time in dying that by the time the end came EMI themselves would be so weak they would probably fall into the same grave.) But Decca held on, and ironically it acquired a debilitated Crystalate in March 1937. Before that, Lewis moved boldly to acquire American Columbia from Grigsby-Grunow, but while he was sailing to New York to arrange that transaction Columbia was sold to the American Record Corp. Yet Lewis was insistent on having an American affiliate, and “decided then and there to form a new record company” — it was the new U.S. Decca Record Co. Another acquisition took place in May 1935, as Decca and EMI jointly purchased British Homophone Co., Ltd.

During the 1930s, the labels sold by Decca were Brunswick 10-inch and 12-inch (through its British Brunswick, Ltd., subsidiary), Decca 10-inch and 12-inch, Decca Polydor 10-inch and 12-inch, Panachord (sometimes from U.S. Melotone masters), Rex 10-inch, Vocalion 10-inch, and some Edison Bell Winners.

World War II brought little economic benefit to Great Britain, but the record industry got some of it. With other entertainment unavailable because of the blackout and threat of bombing, demand for records was stimulated. Some bombing damage to the Decca production plant was sustained. Great prosperity for Decca came in the postwar years, in large measure due to the invention of full frequency range recording (ffrr), which marked the birth of the high-fidelity market. The lightweight Decola pickup, with its diamond or sapphire stylus, turned consumer interest away from the metal needle and its fiber/cactus relatives.

Decca brought the LP record to Europe in June 1950, and in 1958 was among the first to market stereo records in Britain, as ffss (full frequency stereophonic sound) discs.

As many as 80 percent of the Top 20 pop discs in Britain were Deccas in the late 1950s. The firm’s classical output also flourished, with recordings made all over Europe. From Decca in 1958–1966 came what David Hall refers to as “perhaps the grandest achievement of the recording art up to that time” — the complete *Ring* produced by John Culshaw. Thus did the early low-price pop label join the great names of classical music recording. Another success of the period was the takeover, from EMI, of RCA Victor distribution in Britain. The new Decca House, on the Albert Embankment, London, was opened on 10 Mar 1958.

Then problems developed: an old, slow production plant was one, a shift of focus to classical repertoire was another. The American situation had become troubling too, as U.K. Decca lost rights to the Decca trademark in the U.S., and had to ship to America under the London label. Finally in 1980 the Decca companies were broken up, and the record label was acquired by PolyGram International — which still operates the company as a separate firm and makes limited use of the Decca label name. The rest of the Decca interests, including the old Duophone factory at New Malden, were bought by Racal Electronics, just at the time of Lewis’s death. [Culshaw 1979; Hall 1980; Lambert 1983; Rust 1978.]

DECCA TREE

First used in 1954, it is a microphone-placement technique pioneered by engineers working for Decca/London Records (the concept was actually formulated by Roy Wallace), and used to make many of their classical recordings. It involves three omnidirectional microphones set up in a T-shaped array, usually placed 10 to 12 feet above and slightly behind the conductor’s podium, with the left and right capsules about two meters apart, and with the center unit (feeding both left and right channels equally) placed about 1.5 meters out in front of the axis between them. The microphones were angled 30 degrees downward and clustered tightly together, in order to exclude reflected sounds from the sides and rear. The resulting geometry, in combination with the microphones chosen (initially Neumann KM-56s, but later M-50s, as finally settled upon by recording engineer Kenneth Wilkinson), imparts a warm and spacious sound to a properly mixed recording.

HOWARD FERSTLER

See also **Microphone; Stereophonic Recording**

DECIBEL (DB)

A logarithmic measure of the relative intensity of sound. It represents a ratio between two acoustical or electrical quantities. One dB expresses a ratio of approximately 1.1:1, between the first and second levels. Human hearing is logarithmic with respect to the perception of loudness: the intensity of a signal must show a certain increase before the human ear perceives change, and the change that is noted is arithmetically smaller than the actual rise in signal intensity. Signal A will be perceived as minimally louder than signal B if it is one dB higher in intensity than B, and it will seem about twice as loud as signal B if their intensities differ by three dB. Signal A will seem four times as loud

if there is a six dB increase, and eight times as loud if there is a nine dB increase in the difference between A and B. Twenty dB are 100 times greater than 10 dB, rather than twice as great.

The value of a dB was chosen to match the smallest increment of loudness that the human ear can distinguish in the mid-frequency range. Human hearing has a range from zero dB, the threshold of hearing, to 120 dB, the threshold of pain. (Sustained exposure to sound levels above 120 dB is not only painful, but may lead to temporary or even permanent hearing loss. The noise at rock concerts has been measured as high as 130 dB.) In musical language, the range is from ppp to fff; that 120 dB range actually encompasses a million variations in sound intensity (10^6). A listener 20 feet from a symphony orchestra playing fff would experience about 110 dB. [Backus 1969; Rosenberg 1983.]

See also **Hearing**

DECK

In open-reel or cassette tape recording, the name of the unit containing much of the apparatus: it may include the tape transport, amplifier, preamplifier, controls, meters, and a built-in microphone. It may or may not be a recording deck as well as a playback deck. Decks do not have loudspeakers or output amplifiers, so they need to be connected to those components in order to function. The tape deck is often found as an element in a high-fidelity system or rack system. Recently, many decks have been made with two tape transports, permitting the user to copy a recorded tape onto a blank.

DECODER

A device that assigns each signal in a multichannel system to its proper channel.

DE-EMPHASIS

A change of frequency response in a reproducing system.

See also **Pre-Emphasis**

DEEP PURPLE

Deep Purple achieved its greatest success by “giving-the-people-what-they-want.” The core members of the band — guitarist Ritchie Blackmore and organist Jon Lord — were classically trained as well as possessing lengthy resumes as professional musicians; however, after four albums of progressive-rock experimentation that achieved only moderate commercial success, they

opted for a stripped-down, heavy-metal sound, acquiring a huge following in the process.

Despite the fact that all original members of the group — Blackmore, Lord, drummer Ian Paice, bassist Nick Simper, and vocalist Rod Evans — hailed from England, none of their recordings were released there through mid-1969. In the meantime, three U.S. albums — *Shades of Deep Purple* (Tetragrammaton 102; 1968; #24; including the Top 5 single, “Hush,” Tetragrammaton 1503), *The Book of Taliesyn* (Tetragrammaton 107; 1968; #54), and *Deep Purple* (Tetragrammaton 119; 1969; #162) — sold moderately well, blending classical motifs with hard rock (e.g., liberal borrowings from Rimsky-Korsakov’s *Sheherazade* in “And the Address”/“I’m So Glad” medley). The three-part song-suite, “April” (included within the ill-fated third album, which disappeared from retail outlets shortly after release when Tetragrammaton went out of business), anticipated the band’s next recording, *Deep Purple/The Royal Philharmonic Orchestra “Concerto for Group and Orchestra”* (Warner Bros. 1860; 1970; #149). Although the release earned some critical raves, sales were flat; a side project written and produced by Lord, *Gemini Suite* (Capitol 870; 1971), was the last flirtation with the symphonic format by band members.

The band’s fifth LP, *Deep Purple in Rock* (Warner Bros. 1877; 1970; #143), represented a major stylistic shift to classic heavy metal, spearheaded by lead vocalist, Ian Gillan (who’d replaced Evans in July 1969 and would attract further attention singing the lead role in the stage version of the rock opera, *Jesus Christ Superstar*). Later albums — *Fireball* (Warner Bros. 2564; 1971; #32), *Machine Head* (Warner Bros. 2607; 1972; #7), *Who Do We Think We Are?* (Warner Bros. 2678; 1973; #15), *Made In Japan* (Warner Bros. 2701; 1973; #6), *Burn* (Warner Bros. 2766; 1974; #9), and *Stormbringer* (Warner Bros. 2832; 1974; #20) — continued the formula, paying considerable financial dividends. However, the band’s momentum was ultimately undermined by the loss of key personnel: Glover and Gillan departed in 1973, followed by Blackmore in 1975. Deep Purple officially disbanded following the release of *Come Taste the Band* (Warner Bros. 2895; 1975; #43); the label later released *Made in Europe* (Warner Bros. 2995; 1976; #148), and various retrospective compilations in order to capitalize on lingering interest in the band.

Band members remained active in new alignments; most notably, Blackmore in Rainbow, and Lord and Paice in Whitesnake. The success of second-generation metal bands, particularly those adapting to the video medium, spurred a reunion of the band’s early 1970s lineup. Subsequent releases — *Perfect Strangers* (Mercury 824003; 1984; #17); *The House of Blue Light*

DEF JAM (LABEL)

(Mercury 831318; 1987; #34), *Nobody's Perfect* (Mercury 835897; 1988; #105), *Slaves and Masters* (RCA 2421; 1990; #87), *The Battle Rages On* (RCA 24517; 1993; #21), *Come Hell or High Water* (RCA 23416; 1994), *Purpendicular* (RCA 33802; 1996; #58), and *Abandon* (RCA 495306; 1998) — charted, albeit less dramatically the second time around.

FRANK HOFFMANN

DEF JAM (LABEL)

Def Jam was founded in New York in 1983 by producer Rick Rubin and Russell Simmons, who'd gotten involved with hip-hop culture as a manager for artists like Run-DMC. Roughly a year following the release of its debut recording — L.L. Cool J's "I Need a Beat" (Def Jam; 1984) — the label achieved platinum sales for two albums: the Beastie Boys's *Licensed To Ill* (Def Jam 40238; 1986; #1 7 weeks), and L.L. Cool J's *Radio* (Def Jam/Columbia 40239; 1986; #46).

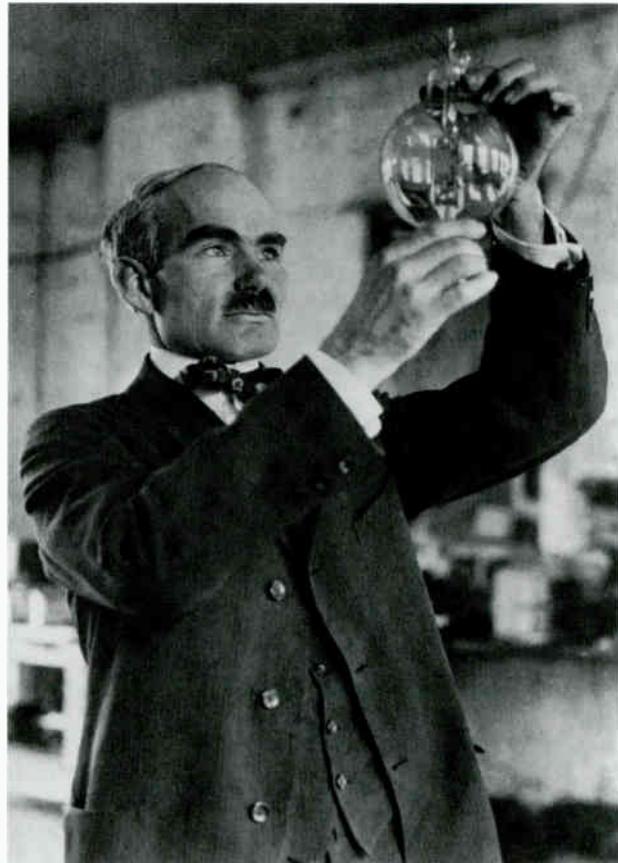
As rap broke into the pop music mainstream during the 1980s, Def Jam continued to grow, achieving both commercial and artistic success with Public Enemy — *It Takes a Nation of Millions* (Def Jam 44303; 1988; #42; platinum), *Fear of a Black Planet* (Def Jam 45413; 1990; #10; platinum), and *Apocalypse 91...The Enemy Strikes Back* (Def Jam 47374; 991; #4; platinum) and Warren G, among others. Seeking greater creative control, Rubin left to establish his own imprint, the Los Angeles-based Def American.

Polygram purchased 60 percent ownership of the company in 1993. Taking note of Def Jam's \$40 million in profits for 1998, Seagram's acquired Polygram's interest in the label the following year. In 2000, Seagram's bought Def Jam's remaining shares for approximately \$100 million, renaming their record company holdings the Island/Def Jam Music Group, including the subsidiaries American, Def Soul, Lost Highway, Murder Inc Records, Roadrunner Records, and Roc-A-Fella Records.

DE FOREST, LEE

(26 AUG 1873–30 JUNE 1961)

American inventor, born in Council Bluffs, Iowa. His childhood was spent in Talladega, Alabama, where his father was president of Talladega College. As a boy he was fascinated with machinery, and in time went on to the Sheffield Scientific School at Yale University, where he specialized in electricity and mathematical physics; he took a Ph.D. in 1899. De Forest moved to Chicago, held various jobs and carried out his own research. His invention of the responder provided an improvement in radio reception, and led him to



Lee DeForest holding an audion tube. © Bettmann/Corbis

concentrate in the radio field. In 1907 he formed the De Forest Radio Telephone Co. The triode audion circuit he developed was patented in the U.K. (#1427; 1908), and his single stage amplifier received U.S. patent #841,387 in 1907. These inventions introduced the new age of electronics.

On 2 Jan 1910 De Forest used his equipment to broadcast from the stage of the Metropolitan Opera House, transmitting the voice of Enrico Caruso. His laboratory produced the first efficient multistage amplifier in 1912. He formed a new company, De Forest Radio, Telephone, and Telegraph Co.

Acquiring patent rights to several inventions, including the Tellafide photoelectric cell, he was able to work successfully on soundtrack systems. On 12 Apr 1923 he presented the first commercial talking picture, at the Rivoli Theater in New York. By 1925 he had made a number of "phonofilms" — short subjects with synchronized sound — featuring Al Jolson and other popular performers. He set up another firm, Phonovision Co., to exploit the motion picture area.

His firm began to have financial setbacks in the early 1920s, and there was a reorganization in 1923. Bankruptcy came in the summer of 1926, and the

company was acquired by Powel Crosley, who became president. De Forest remained with his old company as a consulting engineer. He went on to experiment for another 30 years, working in diathermy and color television. He had more than 300 patents, the last issued when he was 83 years old. His nickname, "Father of Radio," was the name he gave to his autobiography (1950).

DE FRANCO, BUDDY (17 FEB 1923–)

American jazz clarinetist, born Boniface Ferdinand Leonardo De Franco in Camden, New Jersey. He played with the Big bands of Gene Krupa, Charlie Barnet, Tommy Dorsey, and Count Basie; then had his own band from 1951 and a quartet from 1952. De Franco led the Glenn Miller orchestra in 1966–1974. He won the *Down Beat* poll as favorite clarinetist every year from 1945 to 1955, again from 1960 to 1963, and again from 1965 to 1967. "Opus No. 1" was one of his finest records with Tommy Dorsey (Victor 20-1608; 1944). "Golden Bullet"/"Bluebeard Blues" was a major disc with Count Basie (Columbia 38888; 1950). Among the popular sides De Franco made with his own combo were "Get Happy" (MGM 11250; 1951), and "Oh Lady Be Good" (MGM 11453; 1953). From 1966 to 1974, he led the Glenn Miller Orchestra. He toured with his own quintet in the 1970s and 1980s.

DE GOGORZA, EMILIO (29 MAY 1874– 10 MAY 1949)

American baritone, born in Brooklyn; his name is also seen as Gorgoza. He was first known on record as "Signor Francisco," "E. Francisco," or "Carlos Francisco." The spelling "Francesco" was also used. Under these names he appeared on the Berliner label, singing the *Pagliacci* "Prologo" in 1898 or 1899 (#1120), and on Zonophone in 1900–1901, doing 22 numbers. He recorded for Eldridge R. Johnson's Improved Record in 1900–1902, doing 76 numbers — "La paloma" (#171) was notable in the group. In 1903 he was on Victor's black Monarch label, singing seven pieces, and he continued with Victor to 1906. In all these records he used the Francisco (Francesco) name.

He sang as Edward Franklin for Zonophone in 1900–1901 and for Climax in the same years. He was M. Fernand for Johnson in 1902 and many later Victors. Herbert Goddard was another early stage name, used for Johnson and on black Monarch from 1900 to 1905.

De Gogorza used his own name on black Monarchs in 1903–1909, singing 57 items, some of which came out later on Red Seal. Perhaps his outstanding recordings were "Largo al factotum," "Dio possente," from *Faust*, the "Prologo," "Vison fugitive," and "Il balen" from *Trovatore*. He was also recognized as supreme in



Emilio De Gogorza from a 1917 Victor catalog. Courtesy Jerald Kalstein

Spanish songs and French art songs. The Victor 1917 catalog retained 55 numbers by him. He retired in 1928, headed the vocal department of the Curtis Institute in Philadelphia, then taught in New York, where he died. [Walsh 1945/1–2.]

DEIRO, GUIDO (10 JUNE 1886–26 JULY 1950)

Italian accordionist, born in Turin; brother of Pietro Deiro. For most of his recording career he was a Columbia artist, beginning with "Sharpshooter's March" and "Ciribiribin" in May 1911. He made Columbians until 1924, and remained in the catalog into the 1930s. One of the most prolific and popular artists on the accordion, Deiro also made Edison cylinders, beginning with "My Sweetheart Waltz" (#743; August 1911), and continuing with operatic excerpts and ragtime. He was heard on Cameo discs as Carlo Pampini. Deiro claimed to have coined the term "piano accordion." His other accomplishments include composing the song "Kismet" (1911), a major hit on Broadway that was twice revived in Hollywood films; marrying sex goddess Mae West in 1914; and appearing in an early Vitaphone sound short in 1928. He died in California.

DEIRO, PIETRO

(28 AUG 1888–3 NOV 1954)

Italian accordionist, born in Turin; brother of Guido Deiro. He moved to the U.S. in 1907, settling in Seattle. In 1909 he began his long vaudeville career in San Francisco, going on to the New York Palace Theater and other major venues. He was identified in the 1917 Victor catalog as the “greatest accordionist in the world,” and was represented there by more than 50 titles. His first records were for Columbia in July 1913: “Row, Row, Row,” and “When the Midnight Choo Choo Leaves for Alabam” (#A1323). Then he went to Victor, starting with “Broadway Medley” and “Great White Way” (#17486; January 1914). Much of his repertoire consisted of operatic excerpts and waltzes. One waltz record remained in the Victor catalog until 1942 (“Kiss Waltz”/“Broadway Waltz”; #21163; 1928). Deiro left Victor in 1919, was less active for a time, then made some Deccas ca. 1936. One of his finest discs was Decca #1276, “Ciribiribin”/“O sole mio.” Deiro died in New York.

DELAUNAY, CHARLES

(18 JAN 1911–16 FEB 1988)

French critic, born in Paris, the author of the first extensive discography in 1934 (*see* the Bibliography) as well as an important jazz discography published in 1948. (He was long credited with coining the term “discographie,” but recent research attributes this creation to Compton MacKenzie.) Delaunay established the Hot Club of France, and with Hugues Panassié started *Le jazz hot*, the earliest jazz magazine (1934). He organized recordings in France by such jazz artists as Django Reinhardt, Stéphane Grappelli, and Benny Carter. Delaunay died near Paris.

DELAY SYSTEM

A mechanism that holds back in time all or part of an audio signal passing through all or part of a sound or recording system. With musical recording techniques, the purpose might be to introduce special reverberation effects or even the impression of an increased number of performers. In live radio interviewing, delays may be used to give the controller time to remove potentially offensive material. In home-playback systems, delay circuits, in conjunction with additional channels and ambiance extraction or ambiance synthesis techniques, can often effectively simulate concert-hall, nightclub, theater, or even stadium acoustics from two-channel source material.

REV. HOWARD FERSTLER

DE LEATH, VAUGHN

(26 SEP 1896–28 MAY 1943)

American popular singer, also a whistler and pianist, born in Mt. Pulaski, Illinois. She sang in public as a teenager, and was one of the first women to appear regularly on radio. Her singing was of the crooning type. De Leath was seen in vaudeville, and on Broadway; she was a great success in *Laugh, Clown, Laugh* (1936). She was one of the early television artists, in 1939.

De Leath began to record in 1920, with “I Love the Land of Old Black Joe” (Edison Blue Amberol cylinder 4097), then made hundreds of records for many labels to 1940. She recorded 44 Edison Diamond Discs, including the final one from that label, in November 1929. Much of her work was with Sam Lanin’s orchestra, and she made many duets with Irving Kaufman, but most of her discs were with studio orchestras. Her best known record is “The Man I Love” with the Paul Whiteman band (Columbia 50068-D; 1928). She died in Buffalo, New York.

DEL-FI (LABEL)

Latin-rock label founded by Bob Keane (sometimes spelled “Keene”) in 1957. Keane (born Robert Kuhn, 5 Jan 1922, in Manhattan Beach, California), was a clarinetist who had his own southern California band between 1948–1953; in 1953, he took over Artie Shaw’s big band. He briefly worked for the Keen label in 1957 before founding his own Del-Fi label to record local Mexican-American musicians in the Los Angeles area. He signed young Latin singer Ritchie Valens, and scored a minor hit in 1958 with “C’Mon Let’s Go,” and then broke big with the number two hit “Donna” (Del-Fi 4110). Its flip side was Valens’s classic “La Bamba,” which was only a Top 25 hit in early 1959, but has since become a classic. Valens tragically died in the same plane crash that took the life of Buddy Holly in February 1959, and Keane lost his biggest potential hitmaker. Later, Keane issued a few more hits, including Chan Romero’s classic “Hippy Hippy Shake” (1959; Del-Fi 4119; covered by the British pop group, The Swinging Blue Jeans [#24, 1964; Imperial 66021]), and Little Caesar and the Romans (“Those Oldies but Goodies [Remind Me of You]” [#9, 1961; Del-Fi 4158]). In the early 1960s, Del-Fi and the related Donna label were issuing surf-guitar music. In 1965, Keane founded a new label, Mustang, to feature a Texas-based rock band, the Bobby Fuller Four. Fuller had a number nine hit with “I Fought the Law” (February 1966; Mustang 3014), before committing suicide later that year. Keane continues to reissue his recordings on Del-Fi CDs, and also in early 2000 self-published his autobiography,

The Oracle of Del-Fi. In 2001, he founded DF2K to sign new acts. [Website: www.del-fi.com.]

CARL BENSON

DELL, EDWARD T. (12 FEB 1923–)

An important member of the audio-journalism community, Dell was born in Atlanta, Georgia. His father worked as an installer for Western Electric, and the family moved throughout the South until 1935. As a result, Dell attended 17 different public schools before graduating from Ponce de Leon High School in Coral Gables Florida, in 1941. During World War II he attended college by day and worked as an electrician in Bethlehem Steel's Hingham hipyard evenings. Dell holds a B.A. in history, a Th.B. in theology from Eastern Nazarene College, Wollaston, Massachusetts, and a M.Div. from Episcopal Theological School, Cambridge, Massachusetts. He held three Episcopal parish appointments in Massachusetts before moving to a journalism appointment. In 1962, he became a reporter for *The Episcopalian* magazine, a national monthly of the Episcopal Church, and ended his career there as managing editor in 1974. His work involved extensive travel throughout North America, Europe, and in five Pacific Rim countries.

Having written for *Audiocraft* magazine as an avocation in the 1950s and for *Stereophile* in the 1960s, he founded *Audio Amateur*, an audio construction quarterly in 1970, moving the magazine to Peterborough, New Hampshire, in 1975. In 1980, he founded *Speaker Builder* magazine, and then went on to found *Glass Audio* (a tube-electronics oriented journal) in 1989. In the same year, Dell founded *Voice Coil*, a monthly newsletter. Edited by Vance Dickason, the latter magazine became a business-to-business loudspeaker industry monthly in 1993. Dell's Audio Amateur Press also published all three editions of Dickason's *The Loudspeaker Design Cookbook*, and, in addition, the press has published 45 original and reprint titles, as well as software and information CD-ROMs. A wholly owned subsidiary, Old Colony Sound Lab, offers a wide variety of audio-related, ancillary products for enthusiasts. In 2001, Dell merged three titles, *Audio Electronics* (formerly *Audio Amateur*), *Speaker Builder*, and *Glass Audio* into a single monthly, *AudioXpress*, which presently has a worldwide monthly circulation of more than 15,000.

HOWARD FERSTLER

DELLER, ALFRED

(31 MAY 1912–16 JULY 1979)

English countertenor, born in Margate. He sang as a child in the Canterbury Cathedral choir and then at

St. Paul's in London. In 1950 he formed the Deller Consort, which helped to revive interest in British Renaissance music. By 1976 he had 16 LP albums in print, including the Bach Society, RCA, and Vanguard labels. He died in Bologna.

DELMARK (LABEL)

One of the leading independent labels for both Chicago blues and avant-garde jazz, Delmark was founded in 1953 by Bob Koester. The label remains independently run by Koester in Chicago. The majority of the label's catalog is devoted to the classic electric blues of Chicago in the 1960s, featuring artists such as Big Joe Williams and Sleepy Joe Estes. Of particular note are several recordings by Junior Wells, including the classic *Hoodoo Man Blues* (Delmark DD-612). In addition, many of the major recordings by Chicago's premiere avant-garde jazz artists, such as Anthony Braxton, Ari Brown, and the Art Ensemble of Chicago are released by Delmark.

CHRISTOPHER MEEDER

DEL MONACO, MARIO

(27 JULY 1915– 16 OCT 1982)

Italian dramatic tenor, born in Florence. He taught himself by listening to operatic records, and in 1935 won a vocal contest in Rome. His debut was as Pinkerton in Milan in 1941; then he served in the Italian army to the end of World War II. After the war he appeared in many world opera houses, and made his Metropolitan Opera debut as Des Grieux in *Manon Lescaut* on 27 Nov 1950 and stayed with the company to 1959, singing 102 performances. Otello was his greatest role; he made a complete recording of the opera under Herbert Von Karajan for Decca. He also starred in a dozen other LP recordings of complete operas. Del Monaco died in Mestre, near Venice.

DELMORE BROTHERS, THE

Popular country duo of the 1930s and 1940s. Alton (25 Dec 1908–8 June 1964), and Rabon (3 Dec 1916–4 Dec 1952) Delmore were raised on a farm in rural Alabama. As a young singing duo they won a prize at a fiddler's contest in 1930. The brothers accompanied themselves on guitars, with Rabon playing the tenor guitar (with four strings tuned like a tenor banjo, this instrument has a smaller body and a sweeter tone than a standard guitar). They began recording for Columbia in 1931, and joined the Grand Ole Opry in 1932, remaining there until 1938.

DELOS (LABEL)

Their first recordings already showed great maturity, with their close, uninflected harmonies, great bluesy material (including "Brown's Ferry Blues," "Gonna Lay Down My Old Guitar," and "Nashville Blues"), and Rabon's lead guitar work, which forecast the style of later pickers like Merle Travis and Doc Watson.

In 1944, the brothers began recording in an even bluesier style for King Records out of Cincinnati, often accompanied by electric guitars and string bass. Their 1949 recording of "Blues Stay Away from Me" was a smash country hit, remaining on the charts for 23 weeks. These recordings were highly influential on the next generation of rockabilly/rockin' country stars, particularly the young Carl Perkins. The Delmores also worked with Merle Travis and Grandpa Jones during this period as the Brown's Ferry Four, concentrating on gospel music. Rabon died in 1952 of cancer, and Alton continued to work sporadically until his death 12 years later. The brothers were honored by induction into the Country Music Hall of Fame in 2001. Their Columbia recordings were reissued on LP by County Records (and reissued on CD in 1995 as *Brown Ferry Blues*, County 116), and their later King recordings have been reissued by County (*Sand Mountain Blues*, County 110), as well as the current owners of the King catalog in different CD compilations.

CARL BENSON

DELOS (LABEL)

Founded by Dr. Amelia Haygood in 1973, Delos is one of America's leading independent classical and jazz-music recording companies. A leader in surround sound as well as conventional recording techniques, with Grammy-winning recording engineer John Eargle overseeing the company's technical efforts for more than 25 years, Delos has released material in both Dolby Surround and the SACD formats. The company's emphasis has long been on American artists, often in conjunction with overseas groups. Consequently, individuals and ensembles under contract include the Moscow Chamber Orchestra, Dallas Symphony Orchestra, Oregon Symphony, Dmitri Hvorostovsky, Ewa Podles, Marina Domashenko, Olga Guryakova, Galina Gorchakova, Carol Rosenberger, Paul Galbraith, Angel Romero, Eugenia Zukerman, David Shifrin, Federico Mondelci, Allan Vogel, Arleen Auger, Voices of Ascension, Shanghai String Quartet, Brazilian Guitar Quartet, and the Chamber Music Society of Lincoln Center. [Website: www.delosmus.com.]

HOWARD FERSTLER

DEL PAPA, DANTE (?-FEB 1923)

Italian tenor, one of the early operatic recording artists. He made his debut in Milan in 1887, then sang throughout Italy. He first appeared at the Metropolitan Opera in 1898. Del Papa made cylinders for Bettini in New York: in the 1897 Bettini catalog Del Papa has 22 numbers; in 1898 he had 23 solos and three duets; and in 1899 there were 61 solo arias and songs, plus duets with Rosalia Chalia. After retiring from the stage, Del Papa directed a vocal school in New York. He died in New York.

DELPHEON CO

A firm established in 1916 in Bay City, Michigan. It was maker of the a line of disc players.

DE LUCA, GIUSEPPE

(25 DEC 1876-26 AUG 1950)

Italian baritone, born in Rome. He sang in Piacenza in 1897, then at La Scala in 1903. His Metropolitan Opera debut was in *Barbiere di Siviglia* on 25 Nov 1915; he stayed with the company until 1935. He made his first commercial records for G&T in 1903-1904, after which he was primarily a U.S. Victor artist. From 1917 to 1925 he made 36 Red Seals, including a famous version of the *Rigoletto* Quartet with Amelita Galli-Curci and Enrico Caruso (#10000), which sold for a premium price. The reverse side offered a great recording of the *Lucia* Sextette, with Galli-Curci, Caruso, De Luca, and Marcel Journet. Later he rerecorded both ensembles, with Beniamino Gigli, Louise Homer, and Ezio Pinza (#10012).

Other favorite records are "Ah per sempre" from *Puritani* (Victor 74787), "A tanto amor" from *Favorita* (Victor 74591), "Sei vindicata assai" from *Dinorah* (Victor 74872), "Largo al factotum" (Victor 74514), and his final disc: "Quand' ero paggio" from *Falstaff*. The last-named record was made at his farewell concert at Town Hall in New York, on 7 Nov 1947, when he was 71 years old. He died in New York. [Favia-Artsay 1955/2 gives the playing speeds required to get correct pitches on various records; Williams, C. 1957.]

DE LUCIA, FERNANDO

(11 OCT 1860-21 FEB 1925)

Italian lyric tenor, then also dramatic tenor, born in Naples. His debut was in Naples in 1885; he appeared first at the Metropolitan Opera in 1894. He was unmatched in his interpretations and recordings of Rossini and Donizetti. "Ecco ridente" from *Barbiere di Siviglia* is one of his outstanding discs (G&T 052078; 1904; Victor 76000); another is "Prendi l'anel" from

Sonnambula, with Maria Galvany (G&T 054217; 1908). He recorded first for G&T, in Milan, in 1903–1904, then again in 1906–1908, covering most of the Italian/French tenor repertoire. During 1910–1912 he recorded for Fonotipia in Milan. The 1917 Victor catalog lists arias from *Carmen*, *Lohengrin* (in Italian), and *Manon*. De Lucia made more than 100 sides for Phonotype in Naples, from around 1915 to 1920. Two of them, arias from *Pagliacci*, were reissued on IRCC 210. In 1918 Phonotype recorded a complete *Rigoletto* and a complete *Barbiere* with him in the leading roles. De Lucia retired in 1917, then sang again — for the last time in public — at Enrico Caruso’s funeral in 1921. He died in Naples. [Henstock 1991.]

DE LUSSAN, ZÉLIE (21 DEC 1862–18 DEC 1949)

American soprano, born in Brooklyn. She made her debut at age 16, at the Academy of Music in Brooklyn. In 1885 she sang with the Boston Opera Co. She went to London in 1888, earning great acclaim for her magnetic *Carmen*. She sang at Windsor Castle and at other command performances, and at Covent Garden, mastering 31 roles. She performed with the Metropolitan Opera in 1894–1895, 1898, and 1899–1900. De Lussan’s “Habanera” was the first aria to be recorded on Victor (#2198; 17 May 1903). This session was only the second of Red Seal recording (the first was 30 Apr 1903). On the same day she did four songs and another aria, “Connais-tu le pays” from *Mignon*. In 1906 she made four discs for Beka Records GmbH. She died in London. [Potterton 1967.]

DELUXE (LABEL)

An American record established in 1943 by the Jules Braun family, with offices in Linden, New Jersey. The specializations were country and western, race records, and Latin-American music. In 1945 the label had more than 120 items available. Deluxe was taken over by the King label in 1947, but issues under the Deluxe name continued until ca. 1961. [Rotante 1973 includes a label list of the 5000 and 6000 series.]

DELUXE RECORD (LABEL)

A Victor Talking Machine Co. record of ca. 1903–1904. From March 1903, the records were 14 inches, styled Deluxe Special Record; 12-inch releases began in June of that year. About 150 of the 12-inch Deluxe Records were made. Although they gave three or four minutes of playing time, their content was basically the same as that of the seven- and

10-inch records that had preceded them, except that the performances went on a little longer. Takes of varying lengths were made in the same session, and releases were available in some cases for all three sizes. For example, “Love Thoughts” by Sousa’s Band was recorded on 8 May 1902 in a 10-inch and 12-inch version. Cal Stewart’s “Uncle Josh Weatherby in a Department Store” was recorded for all three sizes on 21 July 1902. The 14-inch record, which sold for \$2, was made to play at 60 rpm. It thus carried between five and six minutes of material, and may be considered the first attempt to produce a long-playing record. The extra playing time was not well exploited, however, since the repertoire consisted primarily of “selections” and arrangements, rather than of complete versions of longer works. Fewer than 50 titles were offered. The innovation was technically acceptable, but proved to be a commercial failure, and the series was dropped from the catalog by 1904. [Fagan 1983.]

DEMAGNETIZATION

A procedure in tape recorder player maintenance, used to counteract the buildup of residual magnetism in the tape heads and in the player’s metal parts. The device employed produces an alternate magnetic field that neutralizes polarities on the metal parts, creating a random alignment of the polarities instead of a dominant charge. This procedure, followed after every 40 hours or so of operation, will prevent unintentional signal erasure as tapes are played. Demagnetizer cassettes are available for use with cassette tape equipment.

DEMO

A record made for demonstration purposes or as a kind of audition by a performer seeking a label contract.

DEMON/EDSEL RECORDS

Demon and Edsel Records were launched in London in 1980 by former United Artists Records executive Andrew Lauder and artist manager Jake Riviera, formerly a partner in Stiff Records. Demon was started as an offshoot of Lauder and Riviera’s frontline label, F-Beat Records, and was designed initially to license new and vintage product from the U.S.. The first release was *Dr. John Plays Mac Rebennack*. Edsel was launched shortly afterward to reissue British product (the first releases were by the groups the Escorts and the Action). Even after the principals’ departure, and the label’s subsequent absorption into MCI Records and then the Kingfisher Group, Demon/Edsel retained

DENNY, WILL F.

control of Elvis Costello's back catalog and held the British license for Hi Records. It has become a broad-based reissue label.

COLIN ESCOTT

DENNY, WILL F. (1860–2 OCT 1908)

American tenor and vaudeville performer, born in Boston. He began to record for the New England Phonograph Company ca. 1891, then went to many labels. He did 10 numbers for Victor, all of which were dropped from the catalog by 1904, and many for Zonophone. Edison had 34 of his cylinders by 1899, including his biggest hit: "A Widow's Plea" (Edison #6602). Most of his records were Columbias; he had 59 items in the 1899 catalog. Denny died in Seattle.

DENON ELECTRONICS

A Japanese manufacturer of electronics. It was founded in 1910 as Nippon Columbia Co., Ltd. to sell single-sided disc recordings and gramophones. In 1939, Denon introduced the first disc recording equipment made in Japan, and subsequently introduced LPs (1951) and tape recorders (1953) to the Japanese market. In the 1960s, the company moved into manufacturing open reel and cassette audio tape and in 1971 moved into electronics, primarily components for hi-fi systems. In 1972, Denon developed the first digital recorder for studio use, the PCM system. In 1983, Denon was the first to market commercial CDs, and began producing CD players for the home market. In the 1990s, the company moved into the manufacture and development of DVDs and minidisks. Besides its Japanese main offices, the company has subsidiaries in the U.S., Canada, Mexico, Europe, and Asia. [Website: www.denon.com]

DENVER, JOHN

(31 DEC 1943–12 OCT 1997)

American popular singer and songwriter, born Henry John Deutschendorf, Jr., in Roswell, New Mexico. His family moved to Waco, Texas, while he was in high school, and he began to perform there as a church singer and as a guitarist for local events. He moved to California and achieved some success in a vocal group, then auditioned for the Chad Mitchell Trio. He took Chad Mitchell's place in the trio, which was then renamed the Mitchell Trio, and toured with it from 1965 to 1968, when it disbanded. In 1966 Denver wrote the song "Leaving on Jet Plane" and performed it with the trio; it became a top hit in 1969, having been recorded by Peter, Paul, and Mary. Denver's solo

career brought him fame as a writer-performer of music with folk, rock, and country aspects. His most popular albums were *Poems, Prayers, and Promises* (RCA LSP 4499; 1971, 1974), which included the hit song "Take Me Home, Country Roads," and *Rocky Mountain High* (RCA LSP 4731; 1972), which included the hit title song. Another outstanding single, "Annie's Song," helped to carry the album *Back Home Again* into the gold category (RCA CPL 1-0548; 1974). "Sunshine on My Shoulders" was a song Denver wrote for a television score; it was a number one hit in 1974 (RCA 0213).

Denver was named entertainer of the year by the Country Music Association in 1975. His album of that year, *John Denver's Greatest Hits* (RCA CPL 1-0374), was on the charts for two years, selling more than 5 million copies. Although he did not sustain the popularity he attained in the mid-1970s, Denver continued to perform and record successfully until his death in a plane crash.

DENZITE PRODUCTS MANUFACTURING CO.

A Brooklyn firm, active ca. 1920–1922. Denzite is known to have been operating in 1920, pressing discs for others. It did not have its own label, so far as is known.

DE PACHMANN, VLADIMIR (27 JULY 1848–6 JAN 1933)

Russian pianist, born in Odessa. He studied in Vienna, then toured Russia in 1869. His American performances of 1891 brought much attention, in part because of his eccentric behavior and additions to the scores he played. He was particularly emotional in performing Chopin, the composer he recorded most frequently. He did 15 numbers for Victor Red Seal in 1911–1913, and three more in 1924–1925. A reissue of English Columbia discs made in 1915–1916 appeared in 1981; it revealed the pianist to be at times impressively dazzling, at other times given to foolish distortions. He died in Rome.

DEPARTMENT STORE LABELS

In the U.S. and U.K., record sales sections in department stores became common in the 1920s and 1930s. A number of stores issued discs under house labels, such as — in Britain — Curry's, Ltd. (Curry's label, Portland, and Westport), A.W. Gamage, Ltd. (Gamage), Woolworth (Victory, Eclipse, Crown), Lewis's, Ltd. (Lewis's Long Life), Marks and Spencer

(Marspen), Metropolitan Chain Stores, Ltd. (Empire), Peacock Stores (Peacock), and Selfridge, Ltd. (Key, Silvertone). The Selfridge Silvertone was made by British Homophone Co., Ltd., and was not related to the most well known store label, the Silvertone of Sears, Roebuck, and Co. Sears, the largest U.S. retailer, also sold Oxford discs. Other American department stores with recordings included the W.T. Grant chain, which marketed the Diva label. Philadelphia's John Wanamaker issued discs under the Carnival label in 1924–1925. J.R. Hudson of Detroit offered its Hudson label in 1924. A Montgomery Ward label was available from that Chicago store and mail-order house in the 1930s. Another Chicago mail-order firm, Strauss and Schram, Inc., sold Puritone records in 1928–1929, and Supertone. McCrory's sold its Oriole label from 1921 to 1938. Bamberger's, of Newark, New Jersey, had the Pennington disc from 1924 to 1925. Resona was the label produced for the Charles William Stores, Inc., of New York for a few years, ending in 1925. Buffalo's Larkin Co. had the Symphonola label briefly before 1920.

DE RESZKE, EDOUARD
(3 DEC 1853–25 MAY 1917)

Polish baritone, born in Warsaw. He studied in Italy, and made his debut as Amonasro in Paris, under Verdi's direction, on 22 Apr 1876. Then he went to La Scala, London, Chicago, and the Metropolitan Opera — his debut there being on 14 Dec 1891 (on the same evening as his brother Jean's debut) in *Roméo et Juliette*. He stayed with the Metropolitan until 1903, achieving recognition as the leading Wagnerian and French/Italian baritone of his time, then retired. His greatest role was Mephistopheles in *Faust*. He recorded three items for Columbia in 1903: "Infelice" from *Ernani* (#1221), the Porter's Song from *Martha* (#1222), and the "Don Juan Serenade" by Tchaikovsky (#1223). He made no other records. He died in Garnek, Poland. [Dennis 1951.]

DE RESZKE, JEAN
(14 JAN 1850–3 APR 1925)

Polish tenor, born Jan Mieczyslaw De Reszke in Warsaw. He started as a baritone, singing in Italy and France. By 1879 he had changed to tenor, and sang in Madrid. He created the title role in *Le Cid* in Paris on 30 Nov 1885, and became a favorite there. Then he sang in London, and made a Metropolitan Opera debut on 14 Dec 1891 as Roméo (his brother Edouard's debut was in the same performance). He remained at the Metropolitan for 11 seasons, and was greatly

acclaimed for his French/Italian roles, and also for Tristan (performed 27 Nov 1895). He left the Metropolitan in 1901, recognized as the greatest tenor of his era, and transferred to Paris. He died in Nice.

Only two commercial recordings by the tenor exist: Fonotipia 69000, the tomb scene from *Roméo et Juliette*, and Fonotipia 69001, "O souverain" from *Le Cid*; both were made in 1905. The voice is faint and poorly recorded. There are also some dubbings available from Mapleson cylinders made during Metropolitan performances in January and March 1901. These give segments from *Le Cid*, *L'africaine*, *Huguenots*, *Siegfried*, and *Lohengrin* — the last being from his final Metropolitan appearance. Another cylinder, of De Reszke with Milka Ternina in *Tristan* was recorded with so much background noise that David Hall pronounced it "a monumental disaster." [Dennis 1950/1; Hall 1981/1; Stratton 1967; Taylor, G. 1988.]

DE SABATA, VICTOR
(10 APR 1892–4 DEC 1967)

Italian conductor, born in Trieste. He began as a pianist and violinist, then followed Arturo Toscanini's advice and turned to conducting. He led the Monte Carlo Opera from 1918 to 1930, then conducted and became artistic director at La Scala (1929–1957), conducting also in Bayreuth, London, Chicago, New York, and elsewhere. In 1957 he made his last public appearance, conducting at Toscanini's funeral. He died in Santa Margherita Ligure.

De Sabata recorded for Cetra, Polydor, HMV, and Decca, producing many outstanding discs. His 1953 *Tosca*, with Maria Callas, Giuseppe Di Stefano, and Tito Gobbi, is one of the great operatic recordings (Angel 3508, reissued on EMI CD S7 47175). His famous *Tristan* is represented on disc by the *Prelude* and *Liebestod* (with the Berlin Philharmonic Orchestra, Polydor 67498).

DESMOND, PAUL
(25 NOV 1924–30 MAY 1977)

American alto saxophonist, born Paul Emil Breitenfeld in San Francisco. He was the outstanding performer on his instrument during the cool jazz period, noted especially for his participation in the Dave Brubeck Quartet (1951–1967). Earlier he had worked with Jack Fina, Alvino Rey, and others. With Brubeck his most famous recording was his own composition "Take Five" (in Columbia album CL1397; 1959). Desmond won the *Down Beat* poll for favorite alto saxophonist each year from 1955 to 1959, and from 1962 to 1967. After leaving Brubeck, Desmond retired

DESTINN, EMMY

from performing for three years. He then performed and recorded, sometimes reuniting with Brubeck, until his death from lung cancer in New York.

DESTINN, EMMY

(26 FEB 1878–28 JAN 1930)

Bohemian dramatic soprano, born Emmy Kittl in Prague. She made her debut as Santuzza in Berlin on 19 July 1898, and remained with the Berlin Opera until 1908. Wagner was her specialty, and also *Salome*; she starred in the latter's Berlin and Paris premieres. From 1904 to 1914 she was in Britain, after making her debut at Covent Garden as Donna Anna. She began at the Metropolitan Opera on 16 Nov 1908, singing Aida under Arturo Toscanini, and stayed to 1914. Destinn retired in 1920, and died in Budejovice, Bohemia.

She was poorly recorded in her first effort, one side made in Berlin for G&T in 1901, and fared no better recording for Fonotipia in Berlin in 1905. She was heard to better advantage on four Columbias made in Berlin in 1904. The "Habanera" was the earliest of the Columbias (#40483). Destinn recorded for Odeon in 1905–1906, repeating some of her Fonotipia material and offering her first Wagner discs. G&T recorded some her most important material from 1906 to 1909, including the outstanding "Dich teure Halle" (#043133; reissued on IRCC 184 with "Wär es wahr?" (#043138) from Smetana's *Dalibor*. She sang in the 36-disc complete *Carmen* and the 34-disc complete *Faust* of 1908. In 1911 Destinn made three records for Edison Diamond Discs. She was with Columbia again in 1912–1913, presenting brilliant interpretations of "Wie nahte mir" from *Freischütz* (#30974), and "Vissi d'arte" (#30998). The 1917 Victor catalog had 20 items by Destinn, including the remarkable "Miserere" with Giovanni Martinelli (#88530). Her total career output was 218 sides. IRCC reissued seven of her arias, and there were many LP reissues on various labels. On some recordings she is identified as Destinova. Destinn was the subject of the earliest published discography about a singer, in *Gramophone*. April, 1930. [Rektorys 1971.]

DESTINY'S CHILD

One of the most popular recording acts at the onset of the 21st century, the Houston-based group — originally consisting of lead singer Beyonce Knowles, second lead vocalist Kelly Rowland, alto LaTavia Roberson, and soprano LeToya Luckett — came together in 1993, adopting their name from the Book of Isaiah. Beyonce's father, Music World Management's Mathew Knowles, steered the quartet from early local impact

opening for best-selling rhythm and blues artists to international recognition after signing with Columbia in 1997.

Their initial success came with the inclusion of "Killing Time" in the top-grossing 1997 film, *Men In Black*. They built up further momentum with the release the eponymous debut LP (Columbia 67728; 1998), which featured production assists from leading urban R&B/hip-hop producers R. Kelly, Timbaland, Missy "Misdemeanor" Elliott, and Wyclef Jean. The latter's collaboration with the quartet, the infectious dance number "No, No, No (Part 2)" (Columbia 78618; 1997; #3 pop), reached number one on the R&B charts. Their second album, *The Writing's on The Wall* (Columbia 69870; 1999) — while including producers Elliott, Kevin "She'kspere" Briggs, Rodney Jenkins, Chad Elliot, and Dwayne Wiggins of Tony! Toni! Tone! — provided more opportunities for creative input by group members. The anti-male anthem "Bills, Bills, Bills" (Columbia 79175; 1999; #1 pop), topped the R&B charts for nine consecutive weeks.

Despite personnel problems — Roberson and Luckett were, according to a lawsuit settled 24 July 2002, allegedly forced out by Mathew Knowles after refusing to accept his legal guardianship — Destiny's Child, bolstered by the additions of Farrah Franklin and Michelle Williams in February 2000, emerged as the leading female R&B vocal act. With Beyonce Knowles now dominating songwriting and production, the group released a steady stream of hits, most notably, the albums, *8 Days of Christmas* (Columbia 86098; 2001) and *Survivor* (Columbia 61063; 2002; #1; platinum) — winner of the 2002 Grammy award for best R&B performance by a duo or group with vocal — and the singles "Say My Name" (Columbia 42841; 2001; #1 pop), and "Independent Women, Part 1" (Columbia 669804; 2002; #1 pop 11 weeks), the latter of which appeared in the *Charlie's Angels* soundtrack. In late 2001, the group — now a trio following the departure of Franklin that August — announced a hiatus to work on solo recording projects. During the interim, they released *This Is the Remix* (Columbia 86431; 2002), comprised largely of old hits — ranging from street-smart hip-hop to torchy R&B-tinged ballads — reworked by producers such as Timbaland, Maurice Joshua, and Neptunes.

FRANK HOFFMANN

DETROIT TALKING MACHINE

A disc player produced by the Detroit Brass and Iron Works Co. It was introduced in 1899 at the modest price of \$1.98 by mail order. The player was similar to the one sold by the United States Talking Machine Co.

in 1897, both being intended for use with Berliner's discs. [Fabrizio 1976.]

DEUTSCHE GRAMMOPHON GESELLSCHAFT (DGG)

A firm established in Hanover, Germany, by Emile and Joseph Berliner on 6 Dec 1898, to press discs for the European market. The original name of the firm was Deutsche Grammophon GmbH; this was changed to Deutsche Grammophon AG, then reverted to the first form after World War I.

DGG has always been recognized for its implementation of the most advanced recording techniques. Its innovations have included Berliner's twin inventions of the gramophone and accompanying disc, the shift from acid-etched zinc plates to wax recordings in 1901, the introduction of the shellac disc, and the 1922 introduction of the "father-mother-son" process for matrix production.

Masters were originally drawn from Victor and the Gramophone Co. There was quick growth for the firm, which sold both records and players, but the Berliner family did not have the resources to expand. DGG became a joint-stock company on 27 June 1900, owned by three companies, then passed entirely into the hands of the Gramophone Co., and the office was moved to Berlin — headed by Theodore B. Birnbaum — with the factory remaining in Hanover under Joseph Berliner. Within a year the Hanover factory was advertising that it had made more than 5,000 recordings in all languages; a second factory was leased, and purchased in 1908, to handle the demand; it became the "Werk 1" of DGG, located on what is now Podbielskistrasse.

Both seven-inch and 10-inch Grammophon discs were made, sold at 2.5 marks and five marks, respectively. With the takeover by the Gramophone Co. of International Zonophone Co. in 1903, discs bearing the Zonophon label were also pressed in Hanover, and sold at two marks for seven-inch and four marks for 10-inch sizes. Prices were lowered in 1906. The first double-sided discs (12-inch) appeared in 1907, and the seven-inch size was phased out.

Birnbaum was replaced in 1904 by N.M. Rodkinson, who left in favor of Leo B. Cohn in 1907. At that time daily production was 36,000 discs, coming from about 200 presses. The year 1908 brought 6.2 million records out of Hanover.

The recording angel trademark, associated with the Gramophone Co. and DGG since 1898, was dropped in 1909, and Nipper came onto the scene; at this time the label name was changed to "Die Stimme seines Herrn," to match the British His Master's Voice. Salesrooms were by then operating in many large German cities.

A famous first in recording history occurred in 1913 when DGG released a complete symphony, Beethoven's *Fifth* — featuring Arthur Nikisch conducting the Berlin Philharmonic Orchestra — on four 12-inch discs (albeit truncated and somewhat rearranged). Excerpts from *Parsifal* soon followed. However, this ambitious agenda was halted by the World War I, which brought DGG near to a complete shutdown. In 1917 only 400,000 discs were made, and only through the requirement that buyers trade in an old record when buying a new one, to replenish the supply of materials at the factory. Finally, the German government took over DGG, along with other British holdings in the country, and sold it to Polyphon Musikwerke AG of Leipzig on 24 Apr 1917.

Subsequent reorganizations were nullified by the war's end, at which time the old British parent firm prevented Polyphon from using the Nipper trademark, and from exporting records that had not been made in Germany. Nevertheless, the company prospered in Germany and through affiliated firms established in Austria, Denmark, Norway, and Sweden. The trademark dispute was settled in 1924, as the Anglo-German Arbitration Tribunal gave DGG the right to use both Grammophon and Die Stimme seines Herrn in Germany. But for exports the Polydor label had to be used.

After the war the roster of artists was rapidly built. It included Wilhelm Kempff, Wilhelm Backhaus, Carl Flesch, Richard Strauss, Leo Blech, and Hermann Abendroth. Despite the great inflation of the early 1920s, the company was able to produce 2.1 million discs as well as Polyphon gramophones. With the introduction of electrical recording new performers were added to the catalog, among them Wilhelm Furtwängler, whose first release was the Beethoven *Fifth* with the Berlin Philharmonic Orchestra.

An arrangement with Brunswick in 1927 allowed DGG to sell discs in the U.S. on the Brunswick label, and American jazz masters were pressed in Hanover for issue in Germany on the British Brunswick label. In 1928 the company pressed its first million-selling disc, a Christmas item entitled "Erzengel Gabriel verkündet den Hirten Christi Geburt." During that year the Japanese affiliate Nippon Polydor Chikunonki was opened in Tokyo.

DGG's prosperity peaked in 1929, with an output of 10 million discs. But in the economic crisis that began in 1929 it was necessary to form a holding company, Polyphon-Holding AG (later renamed Polydor-Holding AG) comprised of Austrian, Danish, Swedish and French interests. Even this move failed, and in 1933 Polydor-Holding was sold. Disc production never entirely ceased, though it was down to 1.4 million per year in the 1934–1936 period, and a

DEUTSCHER INDUSTRIE NORMENAUSSCHUS (DIN)

restructured directorship negotiated a consortium of the German national bank and Telefunken to create a new Deutsche Grammophon GmbH. The two labels, Deutsche Grammophon and Telefunken, were able to sell 4.6 million discs in 1938. Progress was shattered in the World War II, and in the turmoil the conglomerate Siemens and Halske acquired control of DGG. At the same time the Telefunken operation was separated and sold to Allgemeine Elektrizitäts Gesellschaft (AEG).

Somehow recording continued, and on an important level. The outstanding production during the World War II was the *St. Matthew Passion*, issued on 18 12-inch discs. At that time the Siemens name was used on labels: Siemens Spezial for classical records, and Siemens Polydor for popular music. A new manufacturing process developed in the Siemens laboratories reduced surface noise. Again the company was surviving under stressful conditions — and again there was disaster. Air raids destroyed the enterprise in 1944–1945.

In June 1946 DGG was permitted to start fresh, and already in 1948 the firm was producing 1.8 million discs; in 1949 the output climbed to 3.2 million. Four different labels were in use after 1949: a yellow one styled Deutsche Grammophon Gesellschaft for classical music (issued in America by Decca); a red Polydor for popular music; a black Brunswick for foreign popular music; and a silver Archiv Produktion for classical music. The firm introduced the LP to the German market.

In 1958, the DGG adopted the now-famous label design featuring a yellow cartouche bordered by a garland of tulips; prior faces had included a Recording Angel, Francis Barraud's dog Nipper in front of an Edison horn, and the His Master's Voice logo utilized for much of the first half of the twentieth century. The Archiv Produktion subsidiary was established that same year, which focused on recordings of early music (more recently it has been used to document period instruments and historical performance practices).

The recording division of Siemens merged with the Netherlands-based Philips in 1962 to form the DGG/PPI Group; this company (which maintained its autonomy) was a key component in the establishment of PolyGram in 1971. Siemens sold its assets in the conglomerate in 1987, leaving Philips as the majority shareholder. The Canadian-based Seagram Company Ltd. acquired PolyGram in 1998, forming the Universal Music Group; DGG is now a part of a subsidiary, the Decca Music Group.

Deutsche Grammophon remains an international leader within the area of classical recordings, due to cutting edge recording techniques, a prestigious stable

of artists, and a comprehensive slate of reissues and collector editions that exploit its illustrious past.

REV. FRANK HOFFMANN

DEUTSCHER INDUSTRIE NORMENAUSSCHUS (DIN)

SEE DIN DEUTSCHES INSTITUT FÜR NORMUNA

DEUXPHONE, INSTITUT FÜR

An English record player, made by the Deuxphone Manufacturing Co., Ltd., Wolborough Street, Newton Abbot; notable for its capability of playing either disc or cylinder records. It was first advertised in *Talking Machine News* in October 1906, as the only player to handle both formats, and remained on the market a short time. A mandrel was fitted in the center of a turntable, and the whole machine had to be set on its side to put a cylinder in horizontal (playing) position.

DEVINE, ANDREW (1832–4 MAY 1909)

American record industry executive. He was one of the founders of the American Graphophone Co., and — according to his obituary in *TMW* — "Father of the talking machine business." He had an early career as a court stenographer, then as a war correspondent during the Civil War, also covering courts martial and trials. Working for the Associated Press in the U.S. Senate, he was assisted by James G. Blaine, and when Blaine campaigned for president he took Devine along as official reporter. Later, as a U.S. Supreme Court reporter, he became interested in the dictation/shorthand use of the phonograph after seeing a demonstration. He visualized the commercial possibilities of recorded sound, thinking in terms of its business use. With James O. Clephane and John H. White, he entered into a marketing agreement with the Volta Graphophone Co. on 28 Mar 1887, marking the beginning of the American Graphophone Co. In addition to his concerns with the graphophone, Devine supported Mergenthaler, the inventor of the typesetting machine, and established with him and Frederick Warburton the Mergenthaler Linotype Co. He was a director of that firm, and of the Columbia Graphophone Co., at the time of his death, in Brooklyn. [Wile 1990/2.]

DEVINEAU BIOPHONE CO.

A Cleveland firm, located at 2095 E. 36th Street It made the Biophone, an attachment by which disc records could be played on a cylinder machine. The

aggregate device had a ludicrous appearance, with the disc player mounted on top of the cylinder player (illustration in *TMW*, 15 Oct 1907). Marketed first in 1907, at \$15, it was not advertised after 1909, when company founder Louis Devineau left Cleveland to reside abroad.

DF

SEE DAMPING FACTOR

DGC RECORDS

DGC Records, its name formed from the initials of the David Geffen Company, was a subsidiary of Geffen Records, established in the late 1980s. Its most successful act was the grunge-rock band Nirvana, which took the DGC album *Nevermind* to the top of the charts in early 1992. Other DGC chart acts have included Beck and Counting Crows. Along with the rest of Geffen Records, DGC became part of MCA (now Universal) when Geffen sold it in 1990.

WILLIAM RUHLMANN

DGG

SEE DEUTSCHE GRAMMOPHON GESELLSCHAFT (DGG)

DIAL RECORDS (LABEL)

Jazz label founded in 1946 by Ross Russell (born 1909, Glendale, California), a Los Angeles-based record dealer. After serving in World War II, Russell used his combat pay in 1945 to open the Tempo Music Store on Hollywood Boulevard. With partner and financial backer Marvin Freeman, a local lawyer and jazz aficionado, Russell started Dial Records a year later. At that time, Dizzy Gillespie and Charlie Parker were in Los Angeles performing; Gillespie was Dial's first artist, cutting one session before returning to New York in February, but Parker remained. He signed with Dial in March, and made the first recordings of his bop classics "Moose the Mooche," "Yardbird Suite," "Ornithology," and Gillespie's "A Night in Tunisia"; the trumpet player on these sessions was a young Miles Davis. However, a second Parker session that July was a disaster; Parker was drinking heavily at the time and suffering from heroin withdrawal and he struggled to complete the session. Shortly after, he was committed to Los Angeles's Camarillo State Hospital to the psychiatric ward. After his release in early 1947, Russell recorded four more sessions with Parker, two that winter and two more in New York City in the autumn. In

addition to Parker, Russell recorded single sessions of a small band comprised of players from Woody Herman's big band, as well as saxophonist Dexter Gordon. Russell ceased recording new material in 1948, instead reissuing Parker material through 1954 on LPs in various forms. In 1954, Russell sold his Dial recordings to the Concert Hall record company. Russell later wrote a history of jazz in St. Louis (1967), and a biography of Parker (*Bird Lives*, 1973). Parker's complete Dial sessions, along with his Savoy recordings from the same period and live and amateur recordings, were released on an eight-CD set in 2002 (Atlantic 92911).

CARL BENSON

DIAMOND (LABEL) (I)

A disc record produced by the Diamond Record Co., of Chicago, from about 1902 to about 1906. The discs had various spindle hole sizes, including the standard 9/32 inch, and 9/16 inch. Masters came from Columbia. The same company made a player with a half-inch spindle, resembling those of the Standard Talking Machine Co. [Rust 1978.]

DIAMOND (LABEL) (II)

A disc issued in England during 1915–1918, custom pressed by Pathé Frères, who absorbed the business later. It was not an imitation of the Edison Diamond Disc, and looked nothing like it. The name was later changed to Pathé Diamond Record.



Chicago-based Diamond label, made c. 1902–06. Courtesy Kurt Nauck/Nauck's Vintage Records

DIAMOND (LABEL) (III)

DIAMOND (LABEL) (III)

A record made in the 1930s in England by Diamond Universal Gramophone Records, Ltd. [Rust 1978.]

DIAMOND (LABEL) (IV)

An American independent label established in 1944, issuing popular material, spirituals, and light classics. "Miserlou," by pianist Jan August, was an early best seller. I.R. Gwirtz was the first president of the firm.

See also Edison Diamond Disc

DIAMOND COMEDY FOUR

Also known as the Diamond Four. An early recording group, heard on Berliner discs ca. 1896. Members were Albert Campbell, Steve Porter, James K. Reynard, and Will C. (Bill) Jones. They made cylinders for Edward B. Marks and Joe Stern, New York music publishers, in the 1890s. Their material was humorous and novelty numbers, including a cat fight and a steamboat imitation.

DIAMOND STYLUS CO., LTD

A firm established in 1950 in Colwyn Bay, Wales, said to be the world's largest producer of diamond-tipped styli. The output was 50,000 per day in 1975. About 70 percent of the goods are exported. A specialty was the low priced stylus with diamond used only for the tip, which is bonded to a metal shaft. [Borwick 1975.]

DIAPASON CATALOGUE

The trade list of classical recordings currently available in France.

DIAPHRAGM

A membrane, in one of the components of a sound system, that vibrates in response to the incoming signal. In the cylinder phonograph this membrane was part of the recorder or of the reproducer; in the disc gramophone it was part of the counterpart soundbox. When a record was being made, the vibration of the diaphragm resulted from sound waves produced by the voice or instrument directed at it. When the record was played back, it was the stylus that created the vibration impulses. In early recording the preferred material for a diaphragm was glass, with various thicknesses used for different situations: a thin membrane was suitable for recording a violinist, while a thick one was needed for a band. As the

vibrating membrane does not produce a sound of great volume, it was soon attached to a recording horn. By 1909 Victor and Columbia were using mica, imported from India, for their membranes; copper and aluminum were other common materials. Instruments often had adjustable gaskets to hold the diaphragm in place, and to vary the quality of output signal. Playback machines might have detachable soundboxes, each with a different diaphragm, such as one of mica for singing and violin music, and one of a larger diameter — made of alloy — for band music. The "Zora diaphragm" advertised by H. Lange's Successors of London (*TMN*, April 1908), was adaptable for playback with either a needle or a sapphire stylus. Modern diaphragms are made of mylar or other tough plastics.

In addition to the components cited above, both microphones and headphones utilize these membranes. [Copeland 1990; Waltrip 1990.]

DICKSON, WILLIAM KENNEDY (1860–1935)

British inventor. He came to the U.S. and in 1882 began working for Thomas Edison; he became laboratory chief and assisted in electrical research. In 1888–1889 he developed Edison's idea for combining the phonograph with motion pictures. Dickson wrote in his 1895 *History of the Kinetograph* (the first textbook on cinematography), that "the establishment of harmonious relations between Kinetograph [the camera] and Phonograph was a harrowing task, and would have broken the spirit of inventors less inured to hardship and discouragement than Edison's veterans." On 6 Oct 1889, Dickson showed the first motion pictures with any kind of sound added to them. They ran about 12 seconds, and included Dickson's voice speaking to Edison.

While the combination was still in the experimental stage, the camera alone was being demonstrated under the name Kinetoscope. By 1895 Dickson apparently solved the problem of sound and image synchronization, for he wrote in his *History* that "the inconceivable swiftness of the photographic succession, and the exquisite synchronism of the phonographic attachment have removed the last trace of automatic action, and the illusion is complete."

Although Edison did not vigorously pursue the commercialization of the device, he did produce about 50 machines (Kinetoscopes) and made successful short films. Dickson left Edison in 1897 to market his own Mutoscope. [Brown, A. 1976.]

See also Kinetophone; Motion Picture Sound Recording

DICTATING MACHINES

The original commercial use of the phonograph was to take down office dictation and courtroom proceedings. Edison's early machine used a cylinder four inches long and 2 1/4 inches in diameter for both entertainment and dictation (with space for about 1,000 words of speech). From 1890 the Edison machine used a cylinder six inches long and 2 1/4 inches in diameter for dictation. That became the standard size of records for business machines of all makes until acetate discs replaced cylinders in the 1940s. Graphophone cylinders, however, were six inches long and 1 5/16 inches in diameter.

See also **Edison School Records; Voicewriter**

DIDDLEY, BO (30 DEC 1928–)

American popular singer, guitarist, and songwriter, born Elias McDaniel in McComb, Mississippi. His family moved to Chicago where, by the age of 10, he was playing guitar in streetcorner bands. In 1951 he got a nightclub job, and then played with various rhythm and blues groups. His stage name came from an African instrument, the Diddley Bow. Leonard Chess auditioned him in 1954 and signed him for the Checker label. His first single, "Bo Diddley" (Checker 814; 1955), was well received. Diddley developed a style of blues with an African-like ostinato figure, a raw sound with a strident electric guitar. Several rock groups were influenced by him and performed his songs, including the Yardbirds and the Quicksilver Messenger Service. He had a number of chart singles



Bo Diddley album, c. mid-'60s. Courtesy Frank Hoffmann

in the late 1950s and early 1960s, notably "Say Man" (Chess 931; 1959). There were also several chart albums, including *Go Bo Diddley* (Checker LP 1436; 1959, reissued 1986). He was less prominent in the 1970s, but continued to perform and record. Diddley was among the earliest artists named to the Rock and Roll Hall of Fame. *The Chess Box* (19502; released 1990), a two-disc set, features 45 Diddley songs from 1955 to 1969.

DIFFERENTIAL AMPLIFIER

An electronic device that increases the difference between two input signals.

DIFFRACTION

The characteristic of a sound system that permits longer wavelengths to curve around obstacles.

DIFFUSOR

A diaphragm in the form of a shallow paper cone, used in Pathé phonographs. It resembled Auguste Lumière's pleated paper diaphragm used by the French Gramophone Co. (made by the Gramophone Co., Ltd., for Britain and export). Although the Lumière device was not really a cone, the mechanics of the two diaphragms were similar.

DIGITAL COUNTER

A device in a tape deck that displays, usually in three digits, the location on the tape reel that is being recorded or played back. To find a specific spot on a tape, the user engages fast forward or reverse and stops when the desired point is indicated in the digital counter window. In this context the term "digital" is not drawn from computer digital electronic technology, but from the arithmetic "digit."

DIGITAL RECORDING

A method of recording, introduced as a consumer product in the late 1970s, in which the signal to be recorded is converted to digital form, allowing the signal to be computer-readable. During the production part of the process, a computer/recorder examines the analog input thousands of times per second (the sampling frequency or sampling-rate process), and generates chains of on/off pulses that represent the analog signals. These are transferred into either disc or tape form for storage or duplication. During playback, a computer/player, incorporating a DAC (digital-to-analog converter) restores those pulses

DIGITAL TO ANALOG CONVERTER

back to the instantaneous signal values originally sampled, and special filters form analog curves of them. Thus, the initial audio signal is recreated exactly as originally sampled. This process preserves all the audio characteristics of the signal, while excluding any extraneous sounds or distortions such as hiss. Current digital recording and playback formats used for musical program material include the compact disc or CD, DAT, DVD, DVD-A, SACD, minidisc, and computer hard drives. Before the advent of actual digital discs, some LP recordings were mastered from tapes made with digital recorders.

See also **Video Recording**

REV. HOWARD FERSTLER

DIGITAL TO ANALOG CONVERTER

SEE DAC

DIME STORE (BUDGET) LABELS

SEE DEPARTMENT STORE LABELS

DIN DEUTSCHES INSTITUT FÜR NORMUNG

A German standards organization, founded in Berlin in 1917. It was formerly called Deutscher Industrie Normenausschuss (DIN). [Website: www.din.de]

DION (18 JULY 1939–)

Born Dion DiMucci in the Bronx, New York, Dion was the lead singer of the popular doo-wop group The Belmonts before branching out on his own. The group began performing on New York's street corners, and was signed to the new Laurie Records label in 1957. They had eight top hits from 1958 to 1960 before Dion left, including "A Teenager in Love" (#5, 1959; Laurie 3027), and "Where or When" (#3, 1960; Laurie 3044). After going solo, Dion became one of the most popular singers on the charts thanks to his back-to-back 1961 hits, the number one "Runaround Sue" (1961, Laurie 3110), and its followup "The Wanderer" (#2, 1961; Laurie 3115). Wooed by the larger Columbia label, Dion left Laurie in 1962, scoring immediately in early 1963 with the number two hit "Ruby Baby" (Columbia 42662), and later that year with "Donna the Prima Donna" (#6, Columbia 42852), and "Drip Drop" (#6, Columbia 42917). However, the hits dried up, and Dion battled drug addiction through the mid-1960s. He even recorded an album of acoustic blues

for Columbia, but it failed to sell. In 1967, he reunited briefly with the Belmonts, and then returned to the charts on his original label, Laurie, with the social-protest anthem, "Abraham Martin and John" (#4, 1968; Laurie 3464). Dion has never again achieved great success, and has veered between recording gospel music and rock 'n' roll. Nonetheless, many artists cite him as a key influence, being among the first to proudly flaunt his tough-guy image and New York accent in the era of squeaky-clean teen idols like Fabian and Frankie Avalon. Dion was elected into the Rock and Roll Hall of Fame in 1989. Dion's Laurie recordings have been reissued on various compilations domestically and abroad, on Arista, Capitol, Collectables, Ace, and other labels. Compilations of his Columbia recordings were reissued on CD as *Bronx Blues* (Columbia/Legacy 46972; rel. 1991), and on a two-CD set, *The Road I'm On* (rel. 1997; Columbia/Legacy 64889).

CARL BENSON

DION, CELINE (30 MAR 1968–)

Celine Dion became one of the most successful pop singers of the 1990s, reputedly selling more than 100 million albums. Although she underwent a physical transformation in the late 1980s aimed at enhancing her marketability, Dion's magnificent voice — an instrument perfectly suited for melodramatic ballads — has been the key to her worldwide popularity.

Born in Charlemagne, Quebec, Dion grew from a regional to an international recording star while still a teenager. She finally cracked the American market with the release of *Unison* (Epic 46893; 1990; #74). She would go on record 16 Top 40 singles in the 1990s, including the number one hits "The Power of Love" (550 Music/Epic 77230; 1993), "Because You Loved Me" (550 Music/Epic 78236; 1996; from the film *Up Close and Personal*), "My Heart Will Go On" (550 Music/Epic 78825; 1998; from the film *Titanic*), and "I'm Your Angel" (Jive 42557; 1998; duet with R. Kelly). Other singles reaching number one on the adult contemporary charts included "If You Asked Me To" (Epic 74277; 1992), "It's All Coming Back to Me Now" (550 Music/Epic 78345; 1996), "All by Myself" (550 Music/Epic 78529; 1997), "To Love You More" (cut from album *Let's Talk About Love*), and "That's the Way It Is" (cut from album *All the Way...A Decade of Song*). She became a fixture on movie soundtracks, charting with songs from *Beauty and the Beast* and *Sleepless in Seattle*.

The commercial success of Dion's albums was even more impressive; she released at least three dozen titles, a substantial portion of which were either

in French or geared to foreign markets. Her biggest sellers — all of which were issued in the U.S. — included *Celine Dion* (Epic 52473; 1992; #34; certified gold), *The Colour of My Love* (550 Music/Epic; 1993), *Falling Into You* (550 Music/Epic; 1996; #1), *Let's Talk About Love* (550 Music/Epic 68861; 1997; #1), *These Are Special Times* (550 Music/Epic; 1998), *All the Way...A Decade of Song* (550 Music/Epic 63760; 1999; #1), and *The Collector's Series, Vol. 1* (550 Music/Epic; 2000).

Her recorded work has won numerous awards, most notably, a Grammy and Oscar for the theme song to *Beauty and the Beast* (Epic 74090; 1992; #9; duet with Peabo Bryson), Grammys for best pop album and album of the year with *Falling Into You*, and an Oscar for best original song with "My Heart Will Go On."

FRANK HOFFMANN

DIPLOMA (LABEL)

A record sold in London by Blum and Co., Ltd., from 1911 to 1917. An August 1911 advertisement promised "over 350 well-known titles by well-known artistes." Diploma material was from Edison Bell matrices, pressed by the Edisonia Works. Litigation with the Kalliope Musikwerke AG, following an agreement of May 1912, led to the issuance of Diploma records by both Blum and Kalliope, and a dispute that was not resolved until the beginning of World War II, when Kalliope ceased operating in Britain. Columbia Graphophone Co., Ltd., founded in February 1917, acquired the Blum trademarks and premises. Perhaps the most famous of the Diplomas was an account of the Robert Falcon Scott expedition to the South Pole (May 1913). [Andrews 1988/10.]

DIPOLE LOUDSPEAKER

SEE LOUDSPEAKER

DIPPEL, ANDREAS (30 NOV 1866–12 MAY 1932)

German tenor, born in Kassel. He was with the Bremen Stadttheater from 1887 to 1892, then had his Metropolitan Opera debut on 26 Nov 1890. He sang 150 roles in the major world opera houses, specializing in Wagner. In 1908 he was administrative manager of the Metropolitan Opera. He directed the Chicago Opera from 1910 to 1913. Dippel was heard on Mapleson cylinders; then he made cylinders for Edison's Grand Opera Series of 1906, including the

major tenor arias (all in German) from *Martha* (#B2), *Huguenots* (#B15), *Queen of Sheba* (#B24), and *Lohengrin* (#B36). He died in Hollywood where he had been working as a vocal coach.

DIRE STRAITS

Dire Straits are a testament that a band can be out-of-step with prevailing fashions and still find success. Their laid-back blues-rock, accented by subtle, often sly, lyrics and Mark Knopfler's Dylanesque vocals, was nearly overwhelmed by the flood of disco and punk (later, postpunk) recordings beginning in the late 1970s. Extraordinary musicianship (highlighted by Knopfler's peerless lead guitar work) and subtle studio production work did enable the band to find commercial success, although the success of their album releases varied to a considerable degree.

The driving force behind Dire Straits was lead singer/guitarist/songwriter Mark Knopfler, who decided to go into music full time after several years as a teacher. He assembled the band during 1976–1977; the final lineup included his brother, David, on rhythm guitar, bassist John Illsley, and drummer Pick Withers. After having their demo tapes rejected by virtually every label in England, Phonogram Records signed them in 1978 upon hearing "Sultans of Swing." Newly recorded (Warner Bros. 8736; 1978; #4 US), the single first became a hit in Holland, and then in much of Europe and the United States. With Warner Bros. acquiring their U.S. distribution rights, the band's first two LPs, *Dire Straits* (Warner Bros. 3266; 1978; #5 UK, #2 US), and *Communicue* (Warner Bros. 3330; 1979; #5 UK, #11 US), were awarded gold records by the RIAA (the former ultimately selling more than 11 million copies worldwide). Furthermore, *Billboard* would designate them number one in its new LP artists category for 1979.

With the release of *Making Movies* (Warner Bros. 3480; 1980; #4 UK, #19 US), and *Love Over Gold* (Warner Bros. 23728; 1982; #1 UK, #19 US), the band's limitations — most notably, Knopfler's monochrome vocals and undistinguished melodies with an emphasis on minor keys — led to a decline in sales. Apparently considering new directions, the band treaded water with a couple of transitional releases, the retro EP, *Twisting by the Pool* (Warner Bros. 29800; 1983; #53 US), which celebrated Knopfler's love of the twangy rock 'n' roll popularized by the Shadows and the Ventures, and the live *Alchemy* (Warner Bros. 25085; 1984; #3 UK, #46 US).

Brothers in Arms (Warner Bros. 25264; 1985; #1 UK, #1 US) became the band's most artistically and commercially successful album, eventually selling

DIRECT CUT

more than 26 million copies on the strength of superb material — including three hit singles: the MTV-friendly “Money for Nothing” (Warner Bros. 28950; 1985; #4 UK, #1 US), the Cajun-inflected “Walk of Life” (Warner Bros. 28878; 1985; #2 UK, #7 US), and the reflective “So Far Away” (Warner Bros. 28729; 1986; #19 US) — pioneering digital production work tailored to the emerging compact disc (CD) medium. Perhaps recognizing the limitations of the group format as well as the futility of trying to top *Brothers in Arms*, Knopfler’s decided to concentrate on outside projects, most notably, producing albums for Aztec Camera and Randy Newman, writing “Private Dancer” for Tina Turner, scoring various films (*Local Hero*, 1983; *Cal*, 1984; *Comfort and Joy*, 1984; *The Princess Bride*, 1987; and *Last Exit to Brooklyn*, 1989), session work for Joan Armatrading, a recorded collaboration with Chet Atkins — *Neck and Neck* (Columbia 45307; 1990; #41 UK; received three Grammy awards) — and a release as part of the country-oriented Notting Hillbillies, *Missing... Presumed Having a Good Time* (Warner Bros. 26147; 1990; #2 UK, #52 US).

Two more Dire Straits LPs — *On Every Street* (Warner Bros. 26680; 1991; #1 UK, #12 US), a return to the group’s funky, laid-back style, and the live *On the Night* (Warner Bros. 45259; 1993; #4 UK) — would appear in the early 1990s. Perhaps due in part to the comparatively limited interest they generated, Knopfler has gone on to record a couple of solo albums and compose for more films. In 2000 he would receive the Order of the British Empire medal for his contributions to the country.

FRANK HOFFMANN

DIRECT CUT

SEE *DIRECT TO DISC*

DIRECT DISC RECORDING

SEE *DIRECT TO DISC*

DIRECT FIELD

The listening position in a room where the direct sound from a speaker, a set of speakers, or a live performance is louder than the sound reflected from nearby room boundaries. Normally, you would have to be very close to the sound source for this to occur at all audible frequencies.

See also **Critical Distance; Reverberant Field**

HOWARD FERSTLER

DIRECT INJECTION

A process of recording an electronic instrument by wiring it directly to the tape recorder. The signal is sent directly to the tape without the use of a microphone.

DIRECT TO DISC

Also known as direct cut, direct-disc recording, or direct recording. This was the original method of disc production, in which the signal was inscribed directly on a master. In this process the cut disc itself was termed a direct disc if it was the actual record to be played back, rather than a master used to press multiple copies. With the availability of tape recording as an intermediary between signal and master, great advantages were gained over direct to disc: editing became possible, and also enhanced control over groove modulation. Consequently, the commercial recording industry accepted the use of tape as an intermediary for almost all purposes. However, during the 1970s some direct-to-disc masters were produced by outfits like Sheffield. The supposed advantages included a certain spontaneity in the performance, greater dynamic range, reduced wow and flutter, and the omission of tape hiss and other tape-related distortions. The rise of digital recording and disc-playback systems has rendered direct-to-disc recording superfluous.

See also **Instantaneous Recordings**

REV. HOWARD FERSTLER

DISC

This article, complementary to the entry for **CYLINDER**, consists of seven sections: 1. Terminology; 2. History of the format; 3. Materials and manufacture; 4. Sizes, sides, speeds; 5. Grooves; 6. The industry; and 7. The repertoire.

1. *Terminology.* Disc is frequently spelled “disk,” most often in the area of digital technology, but sometimes in reference to phonograph records as well. In the present work “disc” is used for the formats of sound recording. The earliest term for a flat circular object employed to receive and retain sound signals was phonautogram, from the Phonautograph invented by Léon Scott de Martinville in 1857. Scott’s device — which preserved a visual image of the sound waves only, without audio playback capability — actually used a cylinder rather than a disc. It was Emile Berliner who applied the term to his own invention of 1887, the gramophone. Berliner’s first patent specification refers to the phonautographic recording. Later he called the disc a plate. In Thomas Edison’s sketches of 1878 a

disc was illustrated as a recording format, also named plate. Edison's working format was the cylinder, known also as a phonogram, but usually identified as a record. Both phonogram and record were later used as synonyms for disc.

Modifiers are sometimes needed to specify the particular use of record as part of a sound system. A gramophone record is unambiguously a disc in such a system; but a phonograph record may be either a cylinder (the original usage) or a disc (usage after the end of cylinder manufacture). When patent complications forced Eldridge Johnson to avoid the term gramophone as a name for his new product of 1899, he named it simply the Eldridge R. Johnson Record, and then Victor Record. Phonorecord is a term that encompasses the disc, cylinder, and tape formats. CD is a common abbreviation for the digital compact disc.

Even within the realm of disc recording, the word itself changes meaning in context. The original disc is the one that receives the initial analog impression of the signal or the taped version of the signal (*see* section 4, below). Berliner's original discs were made of glass at first, then of zinc. If the original disc is used for signal playback without further processing, it is an instantaneous disc or an acetate. In commercial recording the original disc does not have a standard name, though it is often identified as a lacquer disc — because it is an aluminum blank with a lacquer coating (or just lacquer) — a blank, a wax, an acetate, a master, or a master lacquer. In stricter terminology, the master is the copper or nickel shell that is electroplated from the original disc, with the groove patterns in reverse. Thus the original disc is a positive and the master is a negative — having ridges instead of grooves. The master may be named a metal master, or a matrix. (Two plural forms of matrix are in use: matrixes and matrices.)

Through a second electrolytic process the master produces another positive, a copy of the original disc known as the mother. In further electrolysis the mother is coated with a copper shell, which is then removed. This is the matrix or stamper — a negative that is actually used to press copies of the original. The very last disc, the one put on sale, is called the pressing. This is a complex tangle, in which expert writers may use the terms differently; *see*, for example, the article "Matrix number" in the *New Harvard Dictionary of Music*, or Bachman 1962, where the confusing term master-matrix is introduced. Further refinements of these terms are found in the separate articles about them. [Bachman 1962; Borwick 1987/1; Guy 1964.]

2. *History of the format.* Disc recording began with the phonautograph of 1857: Scott de Martinville's invention that preserved analog tracings of sound

waves. Although the familiar version of the phonautograph is a cylinder machine, Scott used either a flat sheet (1857) or a cylinder (1859) to hold the lamp-blackened paper that preserved the lateral lines emerging from the diaphragm. The possibility of reproducing the original sound from the tracings may have occurred to Scott, but he did not give the idea practical form, so the earliest gramophone or phonograph remained mute. Twenty years later Charles Cros proposed in a famous paper that with some adjustments the phonautograph — disc version — could play back sound as well as preserve it.

Thomas Edison's work on sound recording appears to have been independent of these French experiments. His 1877 endeavors — focused at first on amplifying mechanical energy in telephony — utilized paper discs, moving tapes, and eventually cylinders. When he finally requested his American patent for the tinfoil phonograph (24 Dec 1877) he described both cylinder and disc machines, and he did make experimental discs in 1878. But he was not satisfied with the variations in groove speed in disc rotation, and his next experiments — a decade later — concentrated on the cylinder format.

Another French inventor, Saint-Loup, went forward with the Cros idea and developed a production model of the disc player; it was described in an 1879 article (quoted in Chew 1982) and put on sale by the instrument maker Ducretet et Cie. for 300 francs. Ducretet also offered a hand-driven tinfoil cylinder machine, at 100 francs. It is not known whether Ducretet was producing these sound machines legally or by ignoring the Edison patent and the Cros French patent of 1878.

The work of Chichester Bell and Charles Sumner Tainter was, like Edison's, multimedia in nature. They were also concerned about groove speed variations in the disc, and in 1887 Tainter applied for a patent on a device that would hold surface movement beneath the stylus at a constant speed. But the road Bell and Tainter finally took was cylindrical, so they do not appear again in the history of the gramophone.

Meanwhile, Berliner had been studying the phonautograph in the collection of the Smithsonian Institution in Washington, D.C., without the benefit of knowing Cros's paper or the Ducretet instruments. He discarded the cylinder in favor of a glass disc 125 millimeters (five inches) in diameter, and from this inspiration the gramophone was born (*see* section 3, below.) Although it took Berliner until 1894 to produce commercial records and playback machines, he was the first to do so. His discs grew to seven inches in diameter, stamped from electrotyped matrices. They gave two minutes of playing time.

Within a decade commercial discs had increased further in size, up to 14 inches (even 20 inches on

occasion), and in playing time, up to five minutes. The 10-inch and 12-inch size prevailed, and in those manifestations the gramophone record persisted up to the long-playing era. Improvements were made constantly in noise suppression, though surface hiss was never entirely eliminated on pre-LP discs. And the introduction of electrical recording in 1925 allowed vast gains in fidelity of reproduction. The advent of the microgroove long-playing record in 1948 seemed to mark the ultimate development of the format; but stereophonic recording offered a further advance. And finally — or so we suppose today — the compact disc (CD) stepped out of the computer industry to give still another aspect to the recording “plate.” [Chew 1981; Chew 1982; Cros 1877; Ford 1962; Koenigsberg; Lenoir 1877.]

3. *Materials and manufacture.* “By 1895, Berliner had developed a system utilizing many ideas of his own and others.... The system stood up as the industry standard for half a century, thus Berliner deserves a mantle as the father of disk recording and reproduction” (Bachman 1962).

In essence, Berliner’s system translated an audio signal into an analog groove pattern on a disc surface via a recording horn, a diaphragm, and a needle (later called a stylus). His method was lateral recording, meaning that the groove pattern was lateral (side-to-side; sometimes called needle-cut). That method contrasted with the vertical-cut method (up-and-down; also known as phono-cut or hill-and-dale) employed on cylinders. In choosing to cut his grooves laterally, Berliner followed the practice of Scott (the phonograph) and Cros. It is interesting that Bell and Tainter experimented with lateral recording in wax during 1881–1885, but their patent specifications of 1886 utilized the vertical-cut process only.

Although lateral-cut became the industry standard, there was a considerable manufacture of vertical-cut records in the early years. One reason was simply the preference held by certain industry leaders such as Edison, who carried the idea from cylinders to his Diamond Disc of 1912, though he had tried out lateral-cut and described that method in his first American patent. Another reason was the legal grip on lateral recording achieved by Columbia and Victor in their patent-sharing agreement of 1902; this maneuver effectively compelled other producers to follow the hill-and-dale approach. As a consequence, vertical-cut discs were made widely for 20 years, beginning with the Columbia toy graphophone wax discs issued in the U.S. in 1899 and in Britain in 1900. Stollwerk’s curious chocolate record was vertical-cut (1903), and so were the 1904 records of the Neophone Co., Ltd. Pathé made 11-inch vertical-cuts from 1906. In Britain in 1908 there appeared the vertical-cut Edison Bell,

Clarion (of which some were lateral-cut), Musogram, and Phono Disc. The year 1911 saw the Aerophone and Marathon; 1912 the Edison Diamond Disc; 1915 the Diamond-Double and Okeh. Vocalion (1917) and Pathé’s edge-start disc (1918) complete the list of hill-and-dale discs. A switch from vertical to lateral occurred after the expiration of Victor/Columbia patents in 1919. Okeh, Pathé, and Vocalion had all changed over by 1920. A vestige of vertical-cut recording remains with certain toy dolls and other novelties, and in stereophonic discs, which consist of two vertical tracks at right angles to one another, each angled 45 degrees in respect to the record’s surface.

In the beginning Berliner traced the audio pattern on a coating of lampblack that he had applied to a glass disc. He then etched the pattern so that it could be transferred to copper or nickel, creating a master and leading to the chain of transfers, positive and negative, which resulted in a stamper (*see* section 1, above). In fact, Berliner had first coated his glass with printer’s ink. The needle was positioned beneath the disc, allowing the particles it made to fall away instead of clogging the groove. From glass Berliner moved to zinc as the base for the recording disc, coated with a fatty film. The stylus itself was of phosphor-bronze. Zinc had a greater noise level than the wax being used in cylinder recording, and Berliner was aware of this. However, he was concerned about patent litigation if he took the wax idea from Edison. His collaborator Eldridge Johnson was not deterred by this nicety, and went ahead with wax originals; he made the earliest disc recorded in wax on 2 Feb 1899 (a pressing is in the Gramophone Co. museum).

Wax was quickly established in the disc industry and remained throughout the 78-rpm era the material used for cutting. This substance was either made of carnauba wax, derived from the Brazilian palm *copra cerifera*, brittle with a high melting point; or a mineral wax made from brown coal by distillation and high pressure. A fresh recording blank was about two inches thick, and would be shaved for reuse after each cut, down to a half-inch thickness. A later alternative method involved flowed wax on glass or metal discs. Lacquer-coated metallic, glass, or fiber discs (hence the name “lacquer” that is sometimes applied to the original disc) were also used. The development of the flowed-wax process resulted from research at the Bell Telephone Laboratories in the 1930s, research aimed at overcoming pre-echo distortion in vertical-cut transcription discs. The flow-coat was a thin layer of wax on the backing plate.

In the pre-electric period, the signal (music, speech, etc.) was brought into the system by means of mechanical energy alone. The recording needle was made of bronze, and then later of sapphire. When a zinc base

was used, the needle cutting the filmy coating exposed a wavy line on the zinc. The zinc was then etched with chromic acid, producing a groove, and a record that could be played back. However, it was not played back, but was used to produce a number of transfers (described in section 1, above), ending with a matrix (stamper). A rich procedure ensued, to create the final pressings. It is vividly described in a 1918 book, which is worth quoting for its detail:

"The first operation in pressing is to knead the composition on the warm bed plates (steam heated) and divide it into lumps like patties, approximately in size which experience has shown to be sufficient, and not more than sufficient to produce a full record when pressed flat. About half a pound of ordinary material is sufficient for a ten-inch disc of average thickness. The *modus operandi* is as follows: the dies, with the matrices fitted therein, are well warmed on the bed-plate at the same time as the material. In double sided record pressing, there is a pair of steel dies each fitted with a matrix, the under die having a pin projecting through the matrix to engage in a corresponding recess in the upper die. The paper label, which serves to indicate the title and number of the particular record, has also a hole in its centre, and it is placed face downward against the matrix in each case. The pin serves to keep the label central. This done, a lump of composition is next placed in the centre of the matrix and covering the back of one of the labels. The second half of the die is then brought into contact with the material, the whole being boxed in, as it were, ready for the press. The dies, of course, are furnished with stops to ensure the desired thickness in the record. By the application of the power the ram is slowly set in motion, upwards, to effect a squeeze between the dies, which, however takes but a few seconds to effect.... The circulation of the cold water through the press soon chills the impression, and the waiting time is usually occupied in preparing the next record for similar treatment.... After this operation is finished, the record is transferred to a trimming machine.... A workman pressing, say, an average of 250 records per day is considered a good man" (Seymour 1918; reprinted in *APM* 1973).

The composition referred to, also known as the biscuit, had shellac as a major ingredient: 22 percent, according to one description; with 2 percent copal, 35 percent silica, 35 percent pyrites, and 6 percent carbon black for coloring (Ford). Shellac could also contain such fillers as limestone or slate, pigment lubricants (e.g., zinc stearate), plus binders and modifiers (e.g., ongo gum and vinsol). Other materials included in biscuits were "china clay or Fuller's earth, with cotton flock... for binding. Sometimes desiccated asbestos... in place of cotton. Another method, however, consists

in utilising waste material between two thin sheets of rice paper coated with pure shellac" (Seymour). Lamination is the name of the process, in use since 1906 for record manufacture (by Columbia first, with the idea credited to Guglielmo Marconi). In the lamination process two or more layers of material are compressed under heat to make a single fused product. Heavy kraft paper was the core layer in the early laminations, with shellac as the coating layer.

This discussion has dealt with manufacture of acoustic 78-rpm discs. With the invention of electrical recording the signal input stage of the process changed, but from the point where the original disc had been cut the remaining steps were substantially the same, with some automation introduced over the years to speed it all up. New techniques were needed to handle long-playing records, stereophonic recording, and compact discs (CDs); these are taken up in the respective articles. [Bachman 1962; Borwick 1987/1; Ford 1961; McWilliams 1979; Seymour 1918; Watts 1979]

See also Acoustic Recording; Recording Practice

4. *Sizes, sides, speeds.* Berliner's earliest discs, for the 1889 toy gramophone, were five inches in diameter; they were recorded on one side only, and turned at about 70 rpm. The first commercial discs, Berliner's of 1894, were seven inches in diameter, and this was the size employed in Europe and America until 1902. A seven-inch disc rotating at 70 rpm would play two minutes; a slow speed cylinder of the time would last three minutes; thus a larger disc was called for. In 1901 the International Zonophone Co. was producing nine-inch discs, and in September 1901 Zonophone began to offer 10-inch records. Victor's first 10-inch records also appeared in 1901, on their Monarch label; Victor continued with seven-inch discs, too, keeping the Victor label for them. Columbia offered 10-inch discs in 1902, for a dollar, while marketing seven-inch discs as well, for \$.50. A year later Victor dropped the seven-inch size altogether, moving on to eight inches (\$0.35), 10 inches (\$1), and 12 inches (\$1.50). Some 12-inch Victors were issued earlier: "it would seem that perhaps as many as 150 twelve-inch recordings were made between 30 December 1901 and 30 December 1902. We have no way of knowing how many of these were published" (Fagan 1983). In Britain the Gramophone Co. sold 12-inch records in 1903.

During the period 1900–1925 disc speed by most manufacturers varied from 70 rpm to 82 rpm. Some early Berliners and G-&-T discs played at around 60 rpm. Most Berliners played at 75 rpm or slower. But the Neophone Co., Ltd., and Pathé Frères issued records in Britain and France between 1905 and 1920

that played at 78, 80, 90, 100, 120, and 130 rpm; their sizes were 10, 12, 14, 16, and 19 1/2 inches.

Eldridge Johnson experimented with double-sided records as early as 1900. International Zonophone released the industry's first double-sided discs in 1902, for sale in Brazil. Columbia made a commercial effort in America with 10-inch double-sides in 1904, priced at \$1.50. In the same year Odeon issued double-sides in Europe, and within four years most firms were pressing both sides of their discs.

Size standardization arrived gradually, amidst various failed innovations such as Victor's 14-inch record of 1904, which ran at 60 rpm and played up to six minutes. Columbia had one like it, and Fonotipia offered a similar product in 1905. These items weighed a pound each, and had only short numbers on them, somewhat negating the rationale of the longer playing time; after a year they were all withdrawn. The eight-inch size was dropped by Victor around 1908 as the major American companies settled on 10-inch and 12-inch records for their releases. That was the situation of the mass market until 1949. Along the way, there were 16-inch, 33 1/3-rpm discs — the first LPs — made by the Vitaphone Co. for use as motion picture sound components (1926). Edison announced his 12-inch LP in the same year, one that played 20 minutes per side; it was not successful because the grooves were too thin for the heavy tone arms of the day. Victor failed with a 1931 LP (not a microgroove) for like reasons. Then there were numerous specimens of small records issued throughout the acoustic period, with diameters of six inches or less, many for children or as advertising promotions.

The "war of the speeds" between Columbia and Victor in 1949 was also a contest of diameters. Columbia's LP was a 33 1/3-rpm disc available in 10-inch and 12-inch sizes. Victor offered a seven-inch disc at 45 rpm. LPs and 45s were vinyl, and both had the same groove dimension. As those two formats became established as the industry norms — the 78-rpm record was not mass produced after 1957 — no changes were forthcoming in the size or playing speed of discs until the whole technology changed with the compact disc (CD). [Bayly 1974; Bayly 1976; Corenthal 1986; Fagan 1983; Gelatt 1977; Haines 1973; Koenigsberg.]

5. *Grooves.* The wonder of the disc record groove is usually described simplistically. To say that sound waves are cut into analog patterns on a disc surface, or that a groove is the track inscribed by the cutting stylus, is correct; but it suggests an image of compression that is quite misleading. A bundle of sound, like a spoken syllable or an orchestral chord, is not transcribed in a single spot on the record surface, but in a cluster of spots. This cluster is a link in the chain that is the record

groove. On a 12-inch 78-rpm disc, the groove is approximately 244 yards long, or would be in a pristine state. As recording takes place the spiral path is undulated to account for the pitch, loudness, duration, and timbre of each sound; thus the final groove length is more like 480 yards. Average speed of the stylus over the groove is about 32 inches per second, if the turntable is revolving at 78 rpm.

The appearance of a groove when a single note is recorded in it is defined by many factors. A sound wave generated by the sounding of a musical note, or tone, is possessed of four basic attributes: pitch, amplitude, timbre, and duration. Pitch is shown in the groove by the periodic repetition of cyclic patterns: the number of cycles (or Hz) determining the place of the tone in the audio frequency range. The patterns themselves, the vibrations, have a size that depends on the intensity of the sound signal; the size, or amplitude, varies with the intensity of the sound, while the cyclic frequency is constant as long as the pitch remains the same. Timbre — sometimes referred to as tone quality — results from the characteristics of the instruments or voices that produce tones. In the sound wave, and its analog in the groove shape, the timbre results in distinctive shaping of the cyclic curves. Duration is not exactly a quality of the tone, but it does affect the groove appearance by determining its length. A tone lasting one-fourth of a second takes up eight inches of groove space, and shows a regular pattern of curves diminishing in size as the tone fades.

At this point it should be restated that the groove in a record (disc or cylinder) may be vertical or lateral (*see* section 3, above). Its shape in either case will be the same in terms of movement on and away from its center line.

Groove shape is complicated by the sounding of complex tones: the kind usually produced by singers and instrumentalists, as opposed to the pure tones produced by tuning forks. Complex tones have perceptible patterns of harmonics, often called overtones or partials. With the presence of harmonics the wave shape is much elaborated. Yet up to this point it is imaginable that the groove shape might be "read" and analyzed to determine by inspection what the sound source could have been. (One can expect certain patterns of harmonics from certain instruments, regardless of the pitches they play.) But groove shape becomes vastly more intricate when it carries the impulses produced by more than one instrument or voice simultaneously. Each source contributes its own frequency, amplitude, and timbre characteristics to the composite shape of the line. The idea of reading or analyzing such a shape to determine exactly what instruments were involved is forbidding, though one always assumes a computer can be taught to do anything. It is even more stunning to

realize that the human ear is able to do just this: read and analyze the squiggles on a groove and make correct judgments about the nature of the sound source, and to do this instantly without apparent effort.

Few attempts were made to standardize the shape of the groove in discs until the arrival of electrical recording in the mid-1920s. By 1935 consensus in the industry produced grooves of a V-shape, with an included angle of 80–85 degrees and a bottom radius of 0.002 to 0.003 inches. At the top of the groove, the width was 0.004–0.006 inches. The actual depth of the groove was about 21 mils in the mid-1930s, as compared with four mils in 1908, and 25 mils in the standard British disc of 1962.

Although there is obviously only one groove on a record side, the number of turns or spirals it makes are often named “grooves.” The number of turns on a standard 78 varied from 90 to 120 per inch (38–48 per centimeter). The ridge between turns was about 0.004 inch across.

Microgroove discs — usually termed long-playing records, or LPs — are aptly named, since the grooves are much smaller than the 78 grooves. LPs have a bottom radius of less than 0.00025 inch (0.0064 millimeters), and a top width of no less than 0.0022 inch; depth is about 0.00125 inch. The included angle is about 90 degrees. There are about 200–300 turns per inch.

The groove of a stereo disc has to carry two channels of signal information. It does so by inscribing each signal on one side of the groove, one arm of the V, with the axis of operation at 45/45 degrees.

See also **Hearing**

6. *The industry.* Commercial production and sale of disc records, today a multi-billion-dollar international operation, began modestly in 1894 in the Berliner Gramophone Co. of Philadelphia. In America the new industry was soon dominated by Berliner himself and his early associates Eldridge Johnson and Frank Seaman; both of those men split with Berliner to set up their own firms. In Europe the Berliner interests were represented by the Gramophone Co. in Britain and Deutsche Grammophon Gesellschaft (DGG) in the inventor’s native Hanover. All those pillars of the disc enterprise were functioning before 1900, delineating the American competitive situation which — with the addition of Columbia in 1901 — would remain operative for many years to come.

Major challenges to the new entrepreneurs were the presence and public acceptance of the cylinder record (in America more than in Europe, where the cylinder had not taken a strong hold), manufacturing difficulties with the discs themselves (*see* section 4, above), and the primitive state of the disc playing machine. The change from rubber to a shellac material made by

the Duranoid Co. for the final pressings brought good results, and remained the basis of disc composition through the 78 era.

A key invention that made the disc player saleable was the spring-wound motor. Electric motors were in use, but they did not yet provide a steady motive power. The first Berliner players had to be hand-cranked as the turntable revolved. Levi H. Montross patented a spring motor record player (application filed 1896) that was used by Eldridge Johnson. Johnson invented an improved governor for it, using it in his Improved Gramophone. That machine was successfully promoted by Seaman, who had exclusive sales rights for Berliner. In 1898 Seaman was selling 600 machines a week at \$15–25 each, for a total year’s sales of \$1 million. Machine parts made in Johnson’s shop were sent to London for assembly and sale by the Gramophone Co. (established 1898). The British firm made its own recordings, in a studio set up by Fred Gaisberg; actual pressing of the records was done in Hanover. Gaisberg developed a substantial catalog through energetic recruitment of popular artists, and the Gramophone Co. was offering 5,000 selections by 1900.

Legal contests over patent rights were pervasive, especially on the American side. Berliner brought a successful suit against American Talking Machine Co., for infringement — by its Vitaphone Co. — of his patents. Then a bizarre scenario emerged from the opportunistic mind of Seaman. He had organized two firms: the National Gramophone Co. (1896), a sales agency for Berliner products, and the Universal Talking Machine Co. (1898). The latter brazenly entered into competition with the former, by producing a clone of the Improved Gramophone under the name Zonophone. The Berliner Gramophone Co. then broke with Seaman, refusing to send him any more products to distribute, unilaterally abrogating their contract. Seaman protested this action in court, and eventually there came a curious court decision, in which Berliner Gramophone Co. and Eldridge Johnson were denied the right to the trade name “gramophone.” Seaman was sued by the graphophone (cylinder) interests for infringement of the Bell-Tainter patents, bringing about a consent agreement in which Columbia gained the assets of the Universal Talking Machine Co. and was able to market disc players with the Zonophone name.

Berliner decided to concentrate on the Canadian market, where the prohibition against use of “gramophone” did not apply. But Johnson took another way around the barrier, by creating his own Consolidated Talking Machine Co. (July 1900) to make machines, plus discs under the label name “Eldridge R. Johnson Record”; then in December 1900 he registered the trademark “Victor Record.” In October 1901 his firm became the Victor Talking Machine Co. Johnson and

Victor had strong interests in Europe, with a large stake in G&T (established as the Gramophone Co. in April 1898; original name restored November 1907). Seaman apparently took no further active part in the industry after the demise of his third firm, National Gramophone Corp., in 1901. He accepted an out-of-court settlement, for his suits against Johnson and Berliner, of \$25,000 from Victor in 1903, and was heard from no more. Frederick Marion Prescott established International Zonophone Co. in Berlin in 1901, and sold Zonophone products. The Gramophone Co. took over that firm in 1903.

A new participant in the disc industry was introduced in late 1901: Columbia Phonograph Co., until then a cylinder firm. The Globe Record Co., a subsidiary of the Burt Co., pressed discs for Columbia in October 1901, with the label name Climax. Eldridge Johnson purchased Globe in January 1902 from Burt, and transferred it to Columbia as part of a pivotal agreement between Victor and Columbia interests to achieve patent peace. (Climax was sold in Britain as well, beginning in 1902.) Other elements of that agreement included the licensing of Vitaphone discs, and the pooling of patents concerning wax-cutting methods and floating soundboxes. Those agreements left Victor and Columbia with exclusive American rights to make lateral-cut records. This monopoly on the prime manufacturing method gave the two firms the basis for their decades of rivalry — undisturbed by serious competition until the relevant patents expired.

Meanwhile, in Europe, the Gramophone Co. was prospering. It showed profits of \$79,348 in 1901; \$137,268 in 1902; and \$252,285 in 1903. The 1902 Red Label catalog of classical works was highly popular (*see* section 8, below). Disc prices were 2s 6d for seven-inch discs in 1903; 5s for 10-inch Concertdiscs; and 10s for Red Labels. Specialty labels for great stars, such as Nellie Melba, were issued under their names at premium prices. The company spread across two continents: by 1910 it had factories in Riga (for the Russian market), France, Austria, Spain, and India. There were sales shops in major cities everywhere. From 12 Dec 1900 to 17 Nov 1907 the firm had the name Gramophone & Typewriter, Ltd. (G&T), following a misguided effort at diversification.

Some competition for the Gramophone Co. appeared in 1904, as Prescott (from Zonophone) went to Berlin and founded the International Talking Machine Co. mbH, marketing Odeon products, while in Milan the Società Italiana di Fonotipia firm got started. Victor borrowed from Gramophone the idea of a Red Label series for major operatic and classical artists, and began to issue its famous Red Seal series of great music; it soon outdistanced Columbia in the race

for the American market, posting \$12 million in sales during 1905.

Johnson's promotional concept for Victor was that it should become indelibly associated in the minds of the public as the source of highest quality products. He did not hesitate to ask for amazing prices: his first Victrola machine, with enclosed horn and mahogany finish, was sold as a fine musical instrument — for \$200, or about \$2,000 in today's equivalent. Victor records sold for different prices depending in part on the repute of the artists and how many were represented on a disc; a solo by Enrico Caruso was \$3, the Quartet from *Rigoletto* was \$6; in today's prices those records were selling for \$30 and \$60 each. But the Victor catalog also held many lower priced discs (\$1.50) featuring lesser known performers.

Columbia did well with its black and silver discs, but their much-promoted Marconi Velvet Tone record (1907) was not successful. A copy of the Victrola player, the Grafonola, was designed to look like a piece of furniture, rather than a unique musical instrument; the public did not fully accept it. Columbia was handicapped further by its unimaginative classical repertoire. While Victor — through superior promotion and a disc of better technical quality — was becoming a national institution in the U.S., as Gramophone Co. was in Britain, Columbia was slow in finding a key to meaningful competition. It reentered the operatic repertoire in 1908 (having made a false start in 1903) by acquiring rights to press Odeon and Fonotipia masters in the U.S. — dissolving the arrangement after two years — and scored some gain by converting all production to double-sided discs. Odeon had been the first label in Europe to appear in double-side format, in 1904. The Odeon, 27 centimeters in diameter (about 10 3/4 inches), sold for 4s in the U.K. Odeon produced other sizes, offering 30 centimeters (12 inches) in 1908 and 25 centimeters (10 inches) in 1912, while continuing the early 20-centimeter size.

The situation of the industry in 1910 was one of clear domination by Victor and the Gramophone Co. Both firms were preeminent in advertising as well as production and repertoire: the famous Nipper symbol had become known around the world. But the next few years before the World War I saw a number of newcomers. Carl Lindström AG in Germany acquired the stock of Odeon, Beka, Dacapo, Lyrophon, Jumbo, Jumbola, Favorite, and Fonotipia, and became a worthy rival to the Gramophone Co. Pathé Frères remained a factor, although the firm lost ground steadily until it switched from vertical-cut discs to lateral recording in 1919. In America a superior new product, the Edison Diamond Disc, went on sale in 1912. Although it was vertical-cut, sound quality was excellent. Edison managed to sign up some great

singers (Claudia Muzio, Maggie Teyte, and Giovanni Martinelli among them), but his catalog was not designed to take advantage of their gifts. Edison's unsophisticated musical taste dictated the creation of a minor repertoire, and prevented him from taking an appropriate share of the market, despite masterly promotion, for example, through tone tests.

Significant improvements in recording techniques were made constantly by many manufacturers. In playback equipment there was also steady progress. Eldridge Johnson's invention of the tapered tone arm (U.S. patent application filed 12 Feb 1903), was widely imitated, often illegally. Steel needles were improved and offered in varied shapes to give degrees of loudness as early as 1906; and fiber needles were available before 1910 to diminish surface noise. Edison's Diamond Disc required a diamond stylus that was advertised as producing "no perceptible scratch." "Multiplaying jewel needles" were advertised by the Sonora Phonograph Co. in 1916. Although electric motors drawing on alternating ("mains") current were still not perfected, there were electric attachments for disc players that would wind up the machines automatically (advertised first in 1913). The spring motor phonographs could play as many as eight 10-inch discs with a single winding. Battery-powered motors were in use as well; indeed, Edison had demonstrated one as early as 1888. Devices to achieve an automatic stop after a record was played were available around 1911 or earlier. Record players abandoned their characteristic external horns in favor of internal folded horns, even in table models; the Victrola (1906) was the prominent example of the new style. Volume control knobs appeared on many gramophones, such as the 1916 Sonora.

It became possible to record a full symphony orchestra and play it back with reasonable fidelity, and various symphonic movements were available around 1910, beginning with the first large-scale orchestral recording: Odeon's *Nutcracker Suite* of 1909. European companies were several years ahead of the Americans in building symphonic repertoire. But the American producers took quick advantage of the dance craze that began in America in 1913 and swept into Europe. Columbia took the lead in this area, and also in the recording of jazz and original cast musicals. Under the guidance of Louis Sterling, the London branch of Columbia began to improve its profit picture after 1910. That branch became the Columbia Graphophone Co., Ltd., in 1917.

Victor, Columbia, and Edison dominated the American industry in 1914, with Victor and Columbia dividing the major sales of lateral-cut records and keeping the prices high: \$.75 for 10-inch discs, and more for 12-inch and special releases. Columbia also

pressed records for other companies, "but always in such a way that the records could not compete directly with Columbia's own" (Brooks 1979), for example, the Standard, Harmony, United, and Aretino labels with large spindle holes, the single-sided Oxford sold by Sears, Roebuck, and Co., and the Lakeside label of Montgomery Ward. Even those were not great bargains (\$.30 for an Oxford). The public was ready for a truly low-priced record, and it came in 1914 under the name Little Wonder. Those were 5 1/2-inch records, masters and pressings by Columbia, selling for \$.10 each. A reported 20 million were sold in two years, and the firm continued until 1919.

In 1919 the Victor/Columbia grip on lateral-cut disc production was loosened as the relevant patents expired. New manufacturers entered the field, among them Brunswick, Gennett, Paramount, and Vocalion. A boom period ensued, lasting until the economic recession of 1921 and the rise of radio broadcasting after 1922. The industry was hard hit by radio: in the U.S. sales of all talking machine products reached \$158 million in 1921, but fell to \$98 million in 1922. Columbia was actually insolvent in 1923, but was reorganized as Columbia Phonograph Co., Inc. in 1924. It was acquired by Sterling for Columbia Graphophone Co., Ltd. in 1925.

Victor's sales started to slip in 1921 (\$51 million), falling to \$37 million in 1924. Still there were 7 million talking machines in use in America in 1922, and popular music was a thriving element in the repertoire despite the enticing competition of radio. The first million-selling record, by Paul Whiteman, came from Victor in 1920.

To counter the inroads of radio into their sales, gramophone makers began to make machines with radios included, or with room to insert a radio. Prices of records were cut. But there seemed to be no way to stop the fall in record sales; in the U.S. the annual figures were \$105.6 million in 1921; \$92.4 million in 1922; \$79.2 million in 1923; \$68.2 million in 1924; \$59.4 million in 1924. Then a turnaround came, based on the dramatic introduction of electrical recording and the orthophonic-type gramophones to play the records made by the new technique.

Electrical recording, using microphones in place of the acoustic recording horns, allowed the recording studio to become a concert hall. It also expanded the audio frequency range of records, taking the upper limit from about 3,000 Hz to about 8,000 Hz. Following the first commercial issues on the Autograph label, Victor and Columbia began to release electrics in April 1925; but in order to retain some sales value for their acoustic record stockpiles both companies refrained from announcing their new process. June 1925 saw the earliest HMV

(Gramophone Co.) electrical release, two fox-trots on a pressing from American Victor. Then, on 2 Nov 1925, so-called Victor Day, the electric records were demonstrated to the public on the orthophonic player. In the same year Brunswick brought forth the first all-electric phonograph, the Panatrope, and the industry was able to depart from the acoustic era. The Panatrope replaced the old acoustic soundbox with a cartridge (pickup) containing a small electrical generator. Side-to-side motion of the stylus in the cartridge generated a matching electrical current, which passed through an amplifier into the loudspeaker — fundamentally the same process in use today. It is true that the new systems were vulnerable to distortions in the wider frequency range; and it was concern about those distortions that kept Edison out of the electrical parade. So the great inventor ironically fell behind in his own area of expertise, failing to produce an electric record until 1927.

From 1926 to 1929 a financial revival occurred in the U.S. and European industries. In America record sales were again growing each year: \$70.4 million in 1926 and the same in 1927; \$72.6 million in 1927; \$74.8 million in 1929. Seven different labels in the U.S. and Britain had electrical recordings on sale by 1926: Victor, Columbia, Gramophone Co., Parlophone, Regal, Zonophone, and Brunswick. Not long after there were also Vocalions and Crystalates. Pathé's electrically recorded Actuelle label appeared in spring 1927. Consolidation of radio and record interests began in the mid-1920s. The National Broadcasting Co. (NBC) went to RCA in 1926 (three years later, RCA purchased the Victor label), and the Columbia Broadcasting System (CBS) went to Columbia in 1927. It seemed that the record industry might be able to control parts of the radio industry. Victor began to record major orchestras in their resident concert halls. HMV and British Columbia recorded complete operas in profusion. And Deutsche Grammophon Gesellschaft (DGG) in Germany, which had achieved independence from the Gramophone Co. after World War I, came into prominence with full-length orchestral works by the Berlin Philharmonic Orchestra and others. The future seemed unlimited.

However, with the Wall Street crash of October 1929 and its universal aftershock, chaos replaced burgeoning prosperity in the record industry. American disc sales fell to \$46.2 million in 1930, to \$17.6 million in 1931, \$11 million in 1932, and \$5.5 million in 1933. What had been the world's largest corporation became a subsidiary, as RCA (Radio Corporation of America) acquired the Victor Talking Machine Co. in January 1929. Edison ceased production of entertainment records and players (he continued making radios and dictating machines). The Gramophone Co. made a

belated, desperate entry into the radio business in 1929 by acquiring Marconiphone, Ltd., a division of the Marconi complex of companies. Brunswick sold its record/phonograph division to Warner Bros. who passed it on a year later to the American Record Corp. American Columbia was acquired by radio manufacturer Grigsby-Grunow, from which it also passed into the hands of the American Record Corp.

A brilliant strategy saved the British industry from demise: the merger in March 1931 of the ancient rivals, Columbia (International), Ltd. and the Gramophone Co. They became elements in the new EMI, Ltd. Since Columbia (International) already controlled Carl Lindström, the record business of French Pathé Frères, Parlophone, and some other interests, nearly all the major firms in Europe were combined. (U.S. Columbia was not included in the merger.) EMI began to provide matrices for the enfeebled American firms. It also led the way into a new market by starting to issue society records.

Victor demonstrated a long-playing record (not a microgroove) in 1931. It was a 10-inch or 12-inch disc running at 33 1/3-rpm, just like the later Columbia microgroove. But it was poorly timed in market terms: requiring a \$247.50 player to reproduce it. Critical reception was favorable, but the public had no funds to invest in it. Columbia in Britain produced, at this time, a 33 1/3-rpm center-start disc for use in theaters and motion picture houses. These were used to present the national anthem at the close of each evening, and to provide intermission entertainment — not to accompany the performances.

Only 6 million discs were sold in the U.S. in 1932 (as opposed to 104 million in 1927); and only 40,000 phonographs (987,000 in 1927). But some economic improvements in the U.S. were noted in 1933, and record sales began to rise slightly. Victor was under control of RCA, but the executives at the radio firm had the acumen to recognize the potential of the phonograph even in depressed times. Edward Wallerstein left Brunswick in 1932 to take over the RCA record branch, and became one of the rejuvenators of the industry in America. He produced the first cheap turntable that could play through a radio — it sold well at \$16.50. He also moved with determination to recreate the old Victor prestige by signing up great classical artists. Victor had special success with Arturo Toscanini. Another man who deserves credit for pulling the industry out of despondency is Jack Kapp, who founded Decca Record Co. in 1934 on the premise that cutting record prices in half would bring them within reach of the financially pressed consumer. Kapp, another former Brunswick executive, set a \$.35 price on his records, competing with the Victor \$.75 standard price of the time. Bluebird and Okeh were

also selling at \$.35, but Kapp assembled a roster of popular artists they could not match, such as Bing Crosby, Jimmy Dorsey, and Louis Armstrong. In 1935 American disc sales climbed to \$8.8 million, and in 1936 to \$11 million.

Radio, the old rival, began to help the record companies in the mid-1930s. Broadcasts of concerts sparked the consumer appetite for classics, and the Texaco Co. broadcasts of the Metropolitan Opera — still on the air, the longest running radio program — built interest in operatic recordings. On the pop side, the rise of the jukebox created a new market in the U.S. (not much in Britain). By 1940 there were 350,000 jukeboxes in operation. Sales of more than 100,000 copies of a pop disc became common. CBS, under president William Paley, was encouraged by these signs to revive its nearly defunct parent, Columbia Records. Paley bought it from American Record Corp. and brought Wallerstein from RCA to head it. U.S. record sales in 1937 moved up to \$13.2 million, and 1938 brought in \$26.4 million. A year later there was \$44 million in sales. Decca made 19 million records that year, standing second only to RCA. The American situation was at its strongest point since 1930.

However, for the recording artists there were substantial problems, as many musicians were being replaced by jukeboxes, and live performers were no longer employed in moving picture houses; furthermore, the rights of musicians in recordings played on the radio were not clearly established. The major licensing organization, the American Society of Composers, Authors, and Publishers (ASCAP), introduced a schedule of fees to be paid to musicians whose records were played on the air. Broadcasters set up a rival and more compatible organization, Broadcast Music, Inc. (BMI) in 1940. Unrest culminated in the strike of 1942 (see below).

The outbreak of World War II in Europe disrupted the industry there, but in the U.S. profits continued to rise. Both Victor and Columbia cut prices on their best 12-inch records from \$2 to \$1, with satisfying public response. All major American orchestras were contracted to record for Victor's Red Seal or Columbia's Masterworks series. Decca continued to reign in the pop field, but other companies had good market shares there. This was the peak of the Big band era, and there were outstanding ensembles in profusion. Sales of \$48.4 million were posted for 1940, and rose to \$50.6 million in 1941. Then wartime restrictions on shellac began to make problems. Used records had to be recycled, via dealer scrap drives and trade-in programs. Disc surfaces got noisier. And in July 1942 a ban on recordings by members of the American Federation of Musicians created havoc for two years, holding down

the sales curve. The year 1942 saw \$55 million in sales, and 1943 and 1944 each brought \$66 million.

British recording had enjoyed technical superiority through the 1930s, but World War II obstructed developments there. The rationing of shellac (imported from India) led to a highly restricted production; the total output from British companies was a mere trickle (Cooper notes that in one issue of *Gramophone* there were just five new issues listed for the month). Then in 1944–1945 Decca in Britain introduced its full frequency range recording (ffrr) system, an outgrowth of military research. That system initiated — with its rendition of *Petrouchka* by Ernst Ansermet — the age of high fidelity. With the war's end the shellac shortage disappeared, and consumer spending climbed quickly. The industry in Britain was virtually monopolized by Decca and EMI in 1945, but there was a sudden rise of independents — among them Tempo, Esquire, Oriole, London Jazz, Delta, Tailgate, and Jazz Collector.

American sales in 1945 rose 65 percent, to \$109 million, then doubled the next year to \$218 million. While disc sales continued to rise (275 million were sold in the U.S. in 1946; 400 million in 1947) there was a new competitor in magnetic recording. Tape came into use for prerecording radio shows (beginning with Bing Crosby's in October 1946), replacing transcription discs, and then moved into the home market. The new medium made higher frequencies available and eliminated surface noise considerations. At the same time Ampex Corp. produced the first tape-recording machine with quality standards suitable for studios; within a few years original recordings were all being made directly to tape rather than to disc, with disc transfer later in the process.

Magnetic tape might have had a serious impact on the disc industry if there had been time to develop an extensive prerecorded repertoire and to produce a gadget to thread the tapes. But before those advances could transpire, Columbia held a lavish demonstration in June 1948 at the Waldorf-Astoria Hotel of its long-playing record (LP). The LP microgroove records were made of polyvinyl chloride rather than shellac, and produced negligible surface noise. Vinyl, as the material was called, was also cheaper than shellac, and in the U.S. it was more readily available, since it was derived from petroleum. The slower playing speed of LPs permitted up to 25 minutes of uninterrupted music per side. Coupled with inexpensive turntable attachments — \$29.95 at first, then down to \$9.95 — the LP record was an instant sensation. Yet market results were disappointing, because of an economic recession and because the public was put off by the "war of the speeds" in which Victor's 45-rpm disc was offered as a rival to the LP. Columbia had generously made rights

to the LP available to all other firms, and many were quick to accept. Only Victor refused, since they had invested heavily in the 45. Consumer uncertainty brought the American record sales figure down to \$189 million in 1948, and to \$173 million in 1949.

The war of the speeds ended in February 1950, as Victor marketed its first LP. But it held onto the 45 as well, ingeniously focusing the format on pop music; and the industry followed, using LP for classics and 45 for pop. A blossoming of new companies occurred in the U.S. and Europe. In the initial LP catalog of 1949 — progenitor of the Schwann catalogs — there were 11 labels listed, including a number of new ones: Allegro, Artist, Capitol, Cetra-Soria, Columbia, Concert Hall, Decca, London, Mercury, Polydor, and Vox. British Decca took up the LP in 1950, but EMI held out with 78s until October 1952, for reasons difficult to appreciate from today's perspective. The greater frequency range of LPs, 20 to 20,000 Hz, achieved with the use of tape in recording studios for capturing the original signal, led to peaks of enthusiasm for high-fidelity. Heathkits and other do-it-yourself packages enabled amateurs to construct their own amplifiers, tuners, and turntables. Audio fairs appeared, celebrating the latest manufactured advances. U.S. disc sales climbed back up to \$189 million in 1950. The next five years were marked by the proliferation of labels, the enormous growth of recorded repertoire (*see* section 7, below), and technical improvements. Mail-order buying became highly popular, exploiting the fact that LPs could be mailed without being broken in transit; one of the leading exponents was the Musical Heritage Society, which concentrated on the Baroque repertoire and lesser known works of other periods. U.S. sales of LPs grew to \$277 million in 1955, and \$377 million in 1956. The standard 78-rpm disc disappeared from commercial production by 1957.

Another revolution in the industry was occasioned by the introduction of stereophonic recording (stereo). It began with tape, as EMI introduced domestic stereo tapes in 1955. Stereo discs went on sale in the U.S. in 1958, after a demonstration by Westrex in late 1957. In fact, the history of stereo shows various earlier "introductions" in both disc and tape format, but always with commercial obstacles. One such obstacle, the need for consumers to buy new playback equipment to handle stereo discs, was eliminated with the compatible stereo disc, which could be played without damage on standard monophonic equipment. Thus the record buyer could acquire stereo records and defer the purchase of stereo equipment. Sales of stereo and monophonic discs reached \$511 million in the U.S. in 1958, then \$603 million in 1959. The *Schwann Long Playing Record Catalog* listed 25,000 records on 425

monophonic labels and 154 stereo labels in 1960. At \$4.98, the typical stereo disc was selling for a dollar more than the monophonic version of the same recording.

America in the 1950s was the setting for a tidal change in popular musical taste — a change that shifted the balance of the record industry. Until the end of the Big band era listeners of all age groups tended to prefer the same pop singers and instrumental groups. The rise of rhythm and blues (R&B) in the middle of the decade created some age-related divisions; R&B was considered to be "race music," thought by many white adults to be unsuitable for their children—who were drawn to it. At first the major labels — notably Columbia — kept a distance from the new sounds, even as the style became rock, and stars like Bill Haley, the Crew Cuts, and Elvis Presley took hold among young people. Teenagers did not immediately give up the old idols, however; in a 1958 survey of high school students it was found that the favored singers were Pat Boone, Perry Como, and then Presley. But the charts reflected a gradual acceptance by younger Americans — and soon by their peers around the world — of rock music as their shared language. It was a language spoken by relatively few adults. But the big record labels learned it well. They developed aggressive A&R departments, and went after the performers of star quality. New independents, headed by Atlantic, Chess, Imperial, and VeeJay, gathered 45 percent of the market in 1956. Columbia took about half the remaining market share.

Technologically, the novelty of the period was multitrack recording, permitting a vast increase in the engineer's capability to control the sound of the final product.

With the arrival of the 1960s the musical scene and the industry that both followed and shaped it remained eclectic in character. In counterpoint to the rise of rock music recordings, mostly on 45s, there was great interest in comedy recordings like Vaughn Meader's album *First Family* (4 million sold), in folk music recordings, and country and western music recordings. There was also continued demand for classical music, encouraged by the richer quality of stereo. Aggregate sales rose each year: \$600 million in 1960; \$640 million in 1961; \$687 million in 1962. In 1962 the Philadelphia Orchestra became the first symphonic ensemble to sell a million records in a year. Another thriving area was the Broadway musical: Columbia's release of *West Side Story* was the top album of 1962, selling more than 2.5 million in original cast and soundtrack versions. The early 1960s also saw the leap to fame of many pop/folk groups, such as the Kingston Trio and the Limelighters, as well as soloists like Joan Baez and Harry Belafonte.

Fanzines emerged, following *Crawdaddy* (1964), and also "prozines" (*Rolling Stone*, 1967), to give jazz/rock fans another dimension in their experience.

The recording industry in the U.S. was dominated by Columbia, RCA Victor, Capitol, and Decca; they held about half the \$698 million market in 1963. MGM, Dot, London, ABC-Paramount, and Mercury took another 15 percent; and the remaining sales were shared by some 3,000 other labels. The market was dominated by popular music: in 1963 the pop genres (including jazz, musicals, soundtracks, and folk) accounted for almost all of the 45s sold, and for three-fourths of the LPs. New York was the center of the music business, with Nashville rising to second place as the country music capital of the nation. Los Angeles and Chicago were the other major locales for the industry.

All the record producers found it difficult to keep up with trends, and with a new fact of life in the pop field: hits did not last. Turnover on the recording industry charts was accelerating. In the 1950s a winning song might ride the charts for six months; by 1963 the average visit to the Top 40 list was down to 10 weeks. The firms were forced into a shotgun approach, issuing thousands of discs each year and profiting from only a small percent of them. Hardly any discs made the break-even sales point of around 35,000 copies sold. Rack jobbers created a sub-industry from unsold discs. Familiar record shops, unable to handle the pace, began to fade from the arena, and new outlets emerged in supermarkets, discount stores, drug stores, and so forth — more than 80,000 of them in the U.S. — to take in a third of sales.

The year 1964 brought the end of American domination over the popular song, as the "British invasion" spread from Liverpool to world supremacy. American record firms did not suffer from the incursion, since they had rights to American releases. During 1964 there were \$758 million in sales, with 90 percent of the market falling to pop/rock categories. On the classical side there was interest in charismatic opera sopranos Maria Callas and Leontyne Price.

Manufacturers of playback equipment got the benefit of the transistor; phonograph sales were between 5 million and 7 million items a year through the 1960s.

Record sales were growing in most countries. U.S. sales claimed half the world total, with Britain next and Japan third; during the mid-1960s Japan moved into second place. The American trend toward multiple outlets and low-cost closeouts was established in Europe. And the American practice of making illegal copies (pirated records) for sale also took root in other lands. U.S. sales moved up to \$862 million in 1965, and \$959 million in 1966. The Beatles remained the principal international performers; they made personal

appearances in Germany, Japan, and Italy, enlisting fresh armies of young record buyers. English and American songs were translated into other languages and became world hits; primarily these were rock numbers, but one was Frank Sinatra's "Strangers in the Night" of 1966, which made the charts in 20 countries.

American record sales passed the billion-dollar mark in 1967, and went to \$1.12 billion in 1968. Every kind of pop music was thriving, even the sentimental ballad (e.g., by Engelbert Humperdinck) and its war-protest sibling, the flower-power song. In 1968, 6,540 pop singles and 4,057 albums were released in the U.S. Country and western music prospered greatly, and gave signs of becoming the dominant popular style. But the most significant pop LP of the decade was the Beatles's *Sgt. Pepper's Lonely Hearts Club Band* — a loosely related set (aka concept album) of brilliant compositions that blended classical, rock, and electronic genres.

Rock festivals became sensational mass events in the late 1960s. A crowd of 300,000 attended at the Woodstock festival in August 1969, near Bethel, New York. Joan Baez, Ravi Shankar, and the Jefferson Airplane were among the performers. But rock music itself had so many splinter divisions as to be scarcely identifiable with the way it sounded at the beginning of the decade. Original cast musical records, notably the 1969 *Hair*, remained a strong category. American sales reached \$1.17 billion in 1969. Sales of LP albums rose rapidly, while 45 singles began to slide; this change reflected a new price structure that favored the LP.

American manufacturers of tape recorders finally saw their product gain in acceptance, essentially through introduction of the Philips cassette in 1963. Sales of tape players rose from 6.9 million in 1969 to 10.2 million in 1972; and sales of the prerecorded cassettes climbed quickly just as reel-to-reel tape sales collapsed. The little tape format became a formidable rival to the disc in the early 1970s, profiting especially from the development of noise reduction systems.

Jazz music did not have a huge market share during the 1960s, but important styles were established and major artists were recognized. In the early 1970s jazz and rock fused in the work of certain groups, such as Chicago and Blood, Sweat, and Tears.

The year 1970 marked the final dissolution of the Beatles, and the beginning of a general decline in the power of rock music. "Punk rock" — symbolized by the Sex Pistols band — emphasized visual orgiastics at the expense of musical depth, and brought much negative response. Pop festivals had begun to arouse strong public opposition because of their disruptive impact on local communities and because of the uninhibited behavior of audiences. Meanwhile soul music moved ahead in the charts, aided by the worldwide

success of the Motown labels and their artists, such as the Supremes. Standard pop songs were in demand again, and country music thrived. And nostalgia held an important place: it reached as far back as Scott Joplin's ragtime piano, but also touched more recent decades like the 1950s. Through all this skirmishing sales rose each year. In the U.S., LP albums accounted for \$1.203 billion, and 45s for 180 million in 1972. Figures for 1973 were \$1.246 billion for LPs and \$190 million for singles; for 1974 it was \$1.356 billion for albums and \$194 million for singles. Monthly Schwann catalogs were listing about 40,000 available records in each issue during 1974. Competition from prerecorded cassettes began to slip, as that medium experienced a 25 percent decline in sales in 1973.

In America the next few years brought the record industry to its zenith. Sales hit \$1.697 billion in 1975; \$1.908 billion in 1976; and \$2.44 billion in 1977. There were 77.6 million phonographs in American homes, with 4.3 million sold in 1977.

The 1978 film *Saturday Night Fever* energized the disco music style and helped to produce a national passion for discotheques; its soundtrack album became the biggest seller of all time. Along with the soundtrack of *Grease* — another film with disco music — sales of 27 million were achieved. "Categories are shattered and sales and attendance zoom across all demographic lines as the audience for recorded and live music expands beyond the industry's expectations" (Davis 1979). There were 295 gold and platinum albums, and 71 equivalent singles in 1978, the year in which American sales reached \$4.1 billion. Among the leading mainstream pop artists of the mid-1970s were Bob Dylan, Bruce Springsteen, Linda Ronstadt, Olivia Newton-John, Stevie Wonder, Barbra Streisand, and Rod Stewart. Principal country stars included Waylon Jennings, Crystal Gayle, Dolly Parton, Willie Nelson, and Kenny Rogers. The Bee Gees, who made a successful national tour in 1978 and whose songs were heard on the *Saturday Night Fever* soundtrack, dominated the groups. On the classical side Luciano Pavarotti emerged as the hero of operatic fans, with two of the Top 10 classical albums in 1977.

Considerable analysis has been attached to the sudden fall in American record sales that occurred in 1979 (Denisoff 1986). Diminishing quality of pop music, growing competition from cassettes and from video, great losses to the industry from pirating — all these factors had a role. Sales fell to \$3.67 billion; the drop was only about 9 percent from the previous year, but it was the first decline in sales since 1960, and caused widespread consternation. Two labels were absorbed by larger ones: ABC-Dunhill by MCA, and United Artists by EMI.

One business failure of the 1970s was the attempt to find a public for quadrasonic sound. Although the technology was solid, and equipment was standardized, the companies did not agree among themselves on recording standards, and a promising advance was allowed to dissolve. Consumers proved unwilling to invest in an unsettled product.

A slight recovery in U.S. sales was seen in 1980 (\$3.9 billion), and 1981 (\$4 billion), but 1982 brought another fall, to \$3.6 billion. The compact disc (CD) was introduced in 1983, leading to a climb in annual dollar sales throughout the industry — a climb that continued to the end of the decade. Sales in 1983 moved up to \$3.8 billion. In both 1984 and 1985 the sales total was \$4.5 billion, with CDs taking an ever greater share of the market (\$930 million in 1986). Because the early cost of a CD — \$12 to \$20 — was 50 percent to 100 percent higher than that of an LP or cassette, dollar volume grew even though item sales did not. (Sales of units declined from 1985 to 1986 by 5 percent, to 618 million.) In 1986 for the first time the sales of CD players surpassed sales of turntables, and the sense of the industry was that LP production was in a terminal phase. CBS converted its Pitman, New Jersey, plant from LP to CD manufacture, producing 20 million CDs per year. Record sales of 1986 (all formats) in the U.S. came to \$4.7 billion. By 1989 the total sales were \$6.46 billion.

Stunning acquisitions marked the late 1980s. Both of the great American pioneer companies passed to foreign ownership: RCA Records was bought by Bertelsmann AG in 1986, and CBS Records was bought by Sony Corp. in 1988. In November 1990 Matsushita announced the acquisition of MCA, Inc. for \$6.5 billion; the largest purchase of an American firm by a Japanese company. The third-largest American label at the time, PolyGram, was owned by the Dutch conglomerate Philips; it was combined with MCA as part of the Universal Music Group in 1998. Capitol-EMI is British owned, although it has been looking for a partnership/new owner since the late 1990s. The principal U.S. firms are under foreign control. WCI, a major conglomerate, had taken over several leading labels by 1983 (Reprise, Atlantic, Elektra, Nonesuch), and controlled one-fourth of the American record market. Although the end-of-decade boom was fairly pervasive in the American industry, some firms were not able to participate in it; one old name that dissolved in bankruptcy was JEM, in 1988.

Variety announced the triumph of the CD, saying that it "finally outpaced sales of the vinyl record in '88, making the digital revolution a success." In 1988 the three-inch CD was launched; and sales of CD players leaped by 45 percent over 1987. In 1989 CD sales accounted for 55 percent of the American market, and

LPs for less than 5 percent. A threat to the CD prosperity was seen in the introduction of DAT, whose perfect copies of CD material were thought to encourage commercial bootlegging.

Independent labels did not fare happily with the arrival of the CD. Their share of the American market dwindled to 7 percent by 1990, down from about 26 percent in 1978. The high cost of producing CDs was the decisive factor in the deteriorating situation of the independents.

The leading performers in terms of sales at the beginning of the 1990s were Michael Jackson — who sold 36 million copies of his album *Thriller* — Bruce Springsteen, the group U2, Aretha Franklin, Paul Simon, Madonna, Barbra Streisand, Garth Brooks, Whitney Houston, and Pink Floyd. CBS and Warner headed the list of profitable labels. Youthful performers such as Mariah Carey, the Backstreet Boys, and Britney Spears dominated the latter part of the decade.

[Sources for U.S. data: RIAA figures as reported in *Statistical Abstract*, *World Almanac*, *Information Please Almanac*, and *Variety*. Other principal sources: Andrews; Brooks; Brooks 1978; Brooks 1979; Cooper 1980; Davis 1979; Denisoff 1986; Fabrizio 1977; Fabrizio 1980; Fagan 1983; Gelatt 1977; Koenigsberg; Lambert 1983; Read 1976; Rust; Rust 1978.]

See also Dance Music; Musical Theater Recordings; Orchestra Recordings; Sound Recording Periodicals

7. *Repertoire*. As with the rival format (see CYLINDER, 7) the content of early discs emphasized the voice and brass instruments. Before 1893 the Berliner five-inch "plates" on sale in Europe were presenting songs in three languages, recitations, poems, comic monologs, and solo or ensemble piece by cornets, trombones, and bugles. Berliner's first commercial seven-inch discs, made and marketed in the U.S., appeared in 1894 with a repertoire of sparkling variety. The tenor Ferruccio Giannini (father of soprano Dusolina Giannini) made records for Fred Gaisberg in Philadelphia, including condensed arias from *Rigoletto*, *Traviata*, *Trovatore*, and *Cavalleria rusticana*, plus some songs. (On Berliner #930 he was heard in the "Miserere" in a duet version with a cornet!) Other American Berliners from before 1898 featured whistling, popular songs, banjo, vocal quartets, xylophone, saxophone, and pioneer attempts at orchestral recordings. In 1897–1898 the Sousa Band began to record for Berliner.

When Gaisberg went to London in July 1898 he initiated a remarkable series of recordings, for Berliner at first, then for the Gramophone Co. By the end of 1898 he had put to wax more than 1,000 sides, including orchestral marches, overtures, waltzes, polkas, and

transcriptions from opera; every kind of song, and hits from the musical theater — including Gilbert and Sullivan operas as well as London West End successes like *Florodora* (staged 1899; hit songs recorded Oct 1900). He also recorded the ever-popular instrumental solos and duets, with string recordings added to the brass recordings late in the year. Gramophone artists were often the same people who were making cylinders. Not many of their names are known today, aside from their contributions to early recordings. Among the most prolific Berliner performers were Albert Hawthorne (monologist), Will Bates (cornetist), Frank Lawton (whistler), Tom Bryce (singer), Burt Shepard (comedian/singer), the Trocadero Orchestra, Russell Hunting (comic monologist), Charles Foster (singer), Vess L. Ossman (banjoist), and George J. Gaskin (singer). Among those recording for G&T (Gramophone & Typewriter, Ltd., the name used by the Gramophone Co. from 11 Dec 1900 to 17 Nov 1907) were the Band of the Coldstream Guards, Olly Oakley (banjoist), and Stanley Kirkby (baritone). A few discs were made by Harry Lauder, and some by the United States Marine Band.

Eldridge Johnson, heading the Consolidated Talking Machine Co. in 1900, and then the Victor Talking Machine Co. from October 1901, had a catalog of recordings similar in character to those being done by Gaisberg. Among the star performers were soprano Bessie Abott, tenor Jesus Abrego, baritone Mario Ancona, the Mexican Banda de Policia, tenor Henry Burr, soprano Emma Calvé, baritone Giuseppe Campanari, tenor Enrico Caruso, tenor Arthur Collins, baritone Emilio De Gogorza, baritone Samuel H. Dudley, soprano Emma Eames, soprano Johanna Gadske, the same Ferruccio Giannini who sang for Berliner, baritone Byron George Harlan, the Haydn (also Hayden) Quartet, contralto Louise Homer, soprano Ada Jones, bass Marcel Journet, tenor Edouard Le Bel, flutist/cornetist Jules Levy, tenor Harry Macdonough, soprano Nellie Melba, contralto Corinne Morgan, tenor Billy Murray, banjoist Vess Ossman, baritone Leopold Picazo, bass Pol Plançon, Pryor's Band and Pryor's Orchestra, contralto Ernestine Schumann-Heink, baritone Antonio Scotti, soprano Marcella Sembrich, Sousa's Band, baritone/comedian Len Spencer, baritone Frank C. Stanley, monologist Cal Stewart (doing Uncle Josh), United States Marine Band, various Victor ensembles (especially the Victor Orchestra), tenor Evan T. Williams, and bass Herbert Witherspoon. All of these were cutting discs before 1908, many of them using pseudonyms. Obviously, the Victor cast had more great names than Gaisberg was able to assemble at first; but by 1902 the Gramophone Co. had begun to issue its Red Label discs, with such artists as Calvé,

Caruso, Victor Maurel, Plançon, Charles Santley, Scotti, and tenor Francesco Tamagno. Personality labels from the Gramophone Co. were named for Melba (1904), and Adelina Patti (1906).

Opera was the genre of excitement and competition in the first decade of the century (although the popular modes remained strong). All major arias and ensembles of the standard repertoire operas were available, most of them in many versions. Complete operas (with numerous omissions) began to appear in 1907–1908, with the Gramophone Co. issues of *Fledermaus* and *Faust*; the American companies offered no competition for these ambitious efforts. Columbia, a late starter, signed some Metropolitan Opera singers in 1903 (Campanari, Edouard de Reszke, Schumann-Heink, Scotti, Sembrich). Victor Red Seal records, at first pressed from Gramophone Co. Red Labels, then (1903) made in New York studios, helped make the company a national institution.

Recordings of piano music were not numerous in the early period, because of the difficulty in getting any sort of fidelity in reproduction. HMV (Gramophone Co.) issues from 1910 to 1914 included performances by the eccentric Vladimir de Pachmann, as well as Wilhelm Backhaus and Ignace Paderewski. Eugène d'Albert recorded some short pieces for Odeon. None of the extended works in the piano repertoire was addressed in these recordings, aside from a cut version of the "Moonlight Sonata" in 1910 by Mark Hambourg.

A few renowned violinists were recorded by HMV before World War I: Mischa Elman, Josef Joachim (in his 70s), Fritz Kreisler, Jan Kubelik, Maud Powell, Pablo de Sarasate, and Josef Szigeti. Many other violinists made disc records as well, beginning with Charles D'Almaine on Victor from 1900 to 1907.

"The orchestra came last" is the title of a chapter in Gelatt 1977; for technical reasons it took some time before a sizeable group of symphonic players could perform at once for the recording horn. The orchestral repertoire was not seriously explored by the major companies until the five years before World War I. It was the British and continental producers who led the way: the first large scale symphonic recording was the 1909 *Nutcracker* by Odeon (on four double-sides), followed by the Odeon four-record *Midsummer Night's Dream* in 1910. In 1911–1912 HMV offered *Finlandia*, another *Midsummer Night's Dream*, *Marriage of Figaro Overture*, *Leonora Overture No. 3*, *Peer Gynt Suite*, and a drastically cut version of the Schubert "Unfinished Symphony." These discs were made by conductors and orchestras of minor rank, some of them formed specifically for record making. One of the latter, the Grosses Odeon Streichorchester, produced an eight-sided Beethoven Fifth Symphony

and a 10-sided Beethoven Sixth Symphony in 1913 (conductor not identified). These were uncut, and the original instrumentation was used except for the occasional substitution of bassoons for string basses.

The year 1914 was a landmark: in February HMV issued (in Germany) a complete Beethoven Fifth Symphony on four double-sides, played by the Berlin Philharmonic Orchestra under Arthur Nikisch, one of the most celebrated conductors of his time. The event — a recording by a great orchestra and great conductor — was itself the landmark; the actual recording, which was made with reduced forces (six violins, two violas, no tympani, no basses!), has received heavy criticism. All this symphonic fervor passed over the heads of the American companies. As late as 1913 the Columbia and Victor catalogs had only scattered symphony movements, usually abridged.

During World War I the record companies kept up their output of cut and distorted serious music; but they were also caught in the new popular music crazes: dance music (from 1913), and jazz (from 1917). The musical stage received growing attention by the record companies in the early 1900s, especially in London. Victor combined this trend with the discovery of Hawaiian music (first recorded by the American Record Co. in 1905) by recording a musical show set in Hawaii (1912). Al Jolson began his career as a star on both stage and records. World-class orchestras and conductors began to make recordings regularly after the Armistice. HMV contracted Thomas Beecham for a few discs, plus Landon Ronald, Albert Coates, and Edward Elgar; Columbia signed Henry Wood and Felix Weingartner, along with Beecham. DGG started to offer uncut symphonic work by the Berlin Philharmonic Orchestra; Victor acquired Leopold Stokowski and the Philadelphia Orchestra, and then Arturo Toscanini. The mid-1920s brought a flood of complete symphonies, and also complete recordings of chamber music. Electrical recording brought increased acceptance by the public of symphonic masterworks, and also improved the capabilities of on-site recording — in such acoustically renowned halls as the Festspielhaus in Bayreuth and the Academy of Music in Philadelphia. And so by 1928 the repertoire on disc included most of the principal orchestral, chamber, solo, and operatic compositions that were familiar to concert goers. Those were at last available uncut and in their original instrumentation.

Economic setbacks in the 1930s were felt the hardest in U.S., where serious record making came to a near halt. In the U.K., however, the astute merger of firms into the EMI, Ltd., conglomerate provided a firmer base. Great solo discs were made, such as the landmark harpsichord performances of Wanda Landowska, the Beethoven sonatas played by Artur

Schnabel, and the incomparable Chopin of Arthur Rubinstein. There was also a move away from the standard repertoire into rich fields like the J.S. Bach organ works (Albert Schweitzer) — although the organ was still an elusive catch for disc producers — Delius (by Beecham), the Haydn quartets, and cello works by Pablo Casals. With the creation of society records (sets offered on subscription for a small group of enthusiasts), relatively obscure works found their way into the catalogs. In 1933 a seminal effort to record “old music” — the *Anthologie Sonore* — opened the ears of listeners to the sounds of the Middle Ages and Renaissance.

A review of Victor's 1940/1941 sales catalog shows how well the company had managed to catch up after the Depression, but also how much was left to be done in the classical repertoire. The catalog has about 250 art songs, and about 50 tone poems; there are three Beethoven symphonies, four by Dvorák, 11 by Haydn, two by Mahler, one by Mendelssohn, eight by Mozart, four each by Schubert and Schumann, seven (!) by Sibelius, two by Shostakovich. The Baroque was not yet discovered: Telemann and Schütz are absent, and Vivaldi has only seven pieces; *Messiah* appears only in abridged form. J.S. Bach is rather well represented, but only two of the cantatas are there, one French suite, and none of the cello sonatas. The Red Seal artist list had become an impressive array, including the world's leading names in all categories.

Columbia had made a good recovery from the Depression, as indicated in its 1943 sales catalog. All the Beethoven symphonies were listed, along with a symphony of Dvorák, nine by Haydn, one by Mahler, three by Mendelssohn, 10 by Mozart, four by Schubert, three by Schumann, one by Shostakovich, three by Sibelius, and three by Tchaikovsky. Vivaldi is represented by one sonata in a Respighi arrangement. Beecham's *Messiah* was “nearly complete” on 36 sides, but there were no complete Bach cantatas. As for artists, Columbia was never able to keep pace with Victor. But some outstanding performers appeared on the label, either through direct contract or through agreements with EMI: John Barbirolli, Beecham, Budapest String Quartet, Chicago Symphony Orchestra, Cleveland Orchestra, the Concertgebouw of Amsterdam, Emmanuel Feuermann, Walter Gieseking, Lotte Lehmann, the London Philharmonic Orchestra, Lauritz Melchior, the New York Philharmonic Orchestra, Rudolf Serkin, and Joseph Szigeti. Various artists were also “shared” with Victor, as they refused exclusive contracts.

Such was the repertoire and artist situation for classical music in the 1940s. The next tidal change came with the long-playing (LP) record at the end of the decade, which liberated Baroque and earlier music

from obscurity, and brought thousands of new names before the public.

Popular music of the 1920s in the U.S. was comprised primarily of jazz and dance music. In a fusion of those elements, the Big band era of the 1930s and 1940s saw the prominence of the swing style. All the American record labels participated in these movements. Many labels also produced material in the country field, which became important in the 1930s and has held a place through all the changes of taste. As the swing era faded after World War II, new popular styles replaced the Big band sound: rhythm and blues, then rock ‘n’ roll, bebop, disco, and varieties of rock. With the enormous appeal of rock stars like the Beatles, Elvis Presley, and the Rolling Stones, the 1960s and 1970s were decades in which the record labels depended on sales of rock material, especially to younger buyers. A few non-rock performers, such as Frank Sinatra and Barbra Streisand, did continue to hold the interest of the public through the 1970s. The 1980s were dominated by rock music. Multimillion sales of albums by such artists as Michael Jackson and Bruce Springsteen became common.

Opera recording reached a zenith in the 1970s and 1980s, with much of the credit due to new stars like Maria Callas, Luciano Pavarotti, and Leontyne Price. Complete opera recordings on compact disc, or CD (beginning in the mid-1980s), abound. There are, for example, 18 complete *Tosca* versions, and 11 *Tristan* versions. The standard instrumental repertoire is also represented fully, in multiple versions. Contemporary composers are numerous in the catalogs, but only the most prominent have all their major works on record.

The craze for early music that began with the LP record has continued into the CD era. Performance on authentic instruments of the composer's time has become an entire sub-industry, covering all periods through the 19th century. But the great world orchestras have continued to use modern instruments and have resisted the movement toward historical performance practice. The vast popularity on record of such orchestras may be in part attributed to a new wave of conductor superstars, like Leonard Bernstein and Georg Solti.

Reissues of classical and popular material from earlier eras has been another hallmark of the compact disc period. Many of these releases have been carefully produced to bring out sound qualities that were not perceptible in the originals.

The future of recorded repertoire seems to belong to the charismatic rock performers of today and to those who follow them. It does not appear that the classical realm has much new to offer, except a deeper exploration of the output of modern composers and

DISC JOCKEY

further reinterpretations of standard works in so-called authentic performances.

See also **Big Band; Blues Recordings; Christmas Records; Comedy Recordings; Country Music Recordings; Dance Music; Folk Music Recordings; Jazz Recordings; Literary Recordings; Military Band Recordings; Musical Theater Recordings; Opera Recordings; Orchestra Recordings; Rhythm and Blues (R&B) Recordings; Rock Music Recordings; Sonic Restoration of Historical Recordings**

DISC JOCKEY

Also DJ or deejay. A person who selects and plays records in a systematic program, either in a dis-cotheque or on the radio, usually adding personal comments on the music. Although the contemporary connotation relates the term to popular music, the earliest radio disc jockeys aired classical music. Christopher Stone was the first, in regular phonograph concerts on British Broadcasting Corp. (BBC) programs in 1927; he referred to himself as a "presenter."

In the U.S. the first radio programs of recorded music were simply announced like any other fare, and the personality of the announcer was not emphasized. (In fact, early radio announcers were anonymous, and their names were not given to listeners who asked for them.) The first structured presentations of popular music records on American radio were in the *Make Believe Ballroom* programs, hosted by Al Jarvis at KFWB in Los Angeles. Jarvis interjected his personality into the proceedings, and used the clever device of simulating a real ballroom atmosphere — with one band performing all the pieces on each program. The program moved to WNEW in New York, and led to various imitations. Radio announcers who played records, with or without stressing their personalities, were soon recognized as powerful figures in the market. By the 1950s there was such a concentration of power that a few disc jockeys in major markets could create a hit record or doom another to oblivion.

Performers began early on to pay bonuses to those announcers in order to have their discs spun. Not far down the road was payola, or outright bribery. The payola scandals of the late 1950s did lead to reforms. One was the development of Top 40 programming, in which the best-selling discs of the week were played (WTIX in New Orleans had the first of these). The announcer in that format, known as boss radio, did not have the power to select the material for the show. Deejays were relegated to giving continuity and "color" to the total program. Then the announcer regained some lost ground with the introduction of free-form programming, a format that gave the deejay

some latitude in choosing material. A wide range of content is typical of this format, including blues, jazz, spoken records, local talent, and folk songs as well as material from the charts. Boss remains the dominant mode of popular music broadcasting on AM radio in the U.S., while free-form is prominent on FM radio. Larry Miller of Detroit's KMPX-FM is credited with the invention of free-form. There were about 400 free-form stations in the U.S. during the 1970s; one was Mike Harrison's KPRI-FM in San Diego, where the content was identified as album oriented rock (AOR).

See also **Recording Industry Charts**

DISCMAN

A trademark name of the Sony Corporation for a portable CD player, an outgrowth of their earlier Walkman.

DISC NUMBER

Also known as the catalog number. The manufacturer's number that appears on the label of a disc recording.

See also **Album Number; Matrix Number**

DISCHI FONOTIPIA

SEE FONOTIPIA LTD.

DISCO MUSIC

Disco returned dancing to the forefront of pop music, and it did so with a verve and drive fueled, at least in part, on a disregard for many of the conventions held dear by rock enthusiasts. This perceived slight on the part of rock establishment would ultimately elicit a widespread negative reaction sufficient to drive the movement back underground.

The genre emerged out of an urban subculture in the early 1970s. Discos had been quietly serving its core audience for years. They originated as settings where one could dance to recorded music. The deejay deploying two turntables, a mike, and a PA system was a fixture in Black communities. Whites used a similar arrangement for dances featuring oldies in church basements and community centers. Discotheques such as the Peppermint Lounge helped popularize the twist and countless spinoff dances in the early 1960s. For a short time, even wealthy jet-setters found it hip to mix with the masses in New York hot spots.

By the 1970s, however, discos promised escapism and release. With music and lighting choreographed to

manipulate the mood of the dancers, the experience melded 1970s self-absorption with a 1960s sense of community. In this setting, the *person* playing the records was often more important than the *identity* of the records.

Along with urban Blacks, disco was championed early on by another semi-underground group, gay men. The genre appears to have received its impetus from gay venues such as The Loft and The 10th Floor on Fire Island and in Manhattan, because gay men had trouble securing live acts to perform at their social soirees. These places combined the functions of private clubs, dance parties, and avant-garde hangouts. In short, gay culture circumstances in the 1970s—, partially out of the closet but still not welcome in mainstream society— played a significant role in the evolution of disco.

In light of these social forces, disco may well have the first pop music form dictated by consumers; if dancers related to a record at these venues, it was classified as disco. The style was rooted in smooth Black urban pop best exemplified by Gamble and Huff's Philly Sound and the seductive raps of Barry White, Isaac Hayes, and the like. However, it also incorporated a quirky, unpredictable side: left-field oddities sometimes went on to mainstream success by way of the discos; e.g., Manu Dibango's "Soul Makossa" (Atlantic 2971; 1973), considered by some to be the first true disco hit. By 1974 the dance club scene was regularly responsible for breaking major hits; within another year it was helping determine the way records were made. Album-sized singles were introduced to fill deejay needs; these "disco singles" became so popular that a large number of them were released commercially. In addition, many pop recordings were issued in a "Disco Version," most notably new arrangements of show-biz oldies, rock chestnuts, soul classics, classical music's greatest hits, etc.

The Disco Version's extended length, use of musical drama, and emphasis on instrumental texture rather than vocal personality or verbal complexity predisposed the genre to a strong European influence. European composers and arrangers were instrumental in freeing disco from its tendency to cannibalize the past by developing forms that were more appropriate to its dance imperatives. Rather than lengthening conventional pop songs with gimmicks, studio wizards such as Munich-based Giorgio Moroder developed long, structured compositions calculated to fill an entire album side with music that ebbed and flowed in one beat-driven, but melodically varied, cut. Donna Summer's "Love to Love You Baby" (Oasis 401; 1975–1976), typified this approach with its avoidance of the widely used verse-chorus-instrumental break-verse-chorus format in favor of an extended track

suggesting a compressed movie soundtrack (perhaps even a classical music work) with its different movements. This spinoff form, known as Eurodisco, could be, in critic Ed Ward's words, as light (or shallow) as French pop, as dramatic (or pompous) as a German symphony, as cerebral (or cold) as experimental avant-garde music, or as minimalist (or repetitive) as a chant (or ad jingle).

Many producers formed "groups" specifically to record disco material. French producer Jacques Morali, himself gay, formed the group The Village People to cater to the gay community, dressing band members in "manly" uniforms designed to appeal to gay stereotypes (a fireman, construction worker, Indian chief, etc.) The group had their biggest hits in 1978–1979, including their signature "Macho Man" (Casablanca 922, 1978), and the campy number two hit, "Y. M. C. A." (Casablanca 945, 1978), and number three "In the Navy" (Casablanca 973, 1979). However, like many other novelty bands before them, they quickly disappeared off the charts.

Disco ultimately secured mainstream acceptance through the success of *Saturday Night Fever*. Released in 1977, the film cut across all demographic lines, while the soundtrack — featuring the Bee Gees and an assortment of minor dance hits — became the best-selling LP in pop music history to date. Up to this point, the disco scene had remained outside the pop mainstream because (1) few real discos existed anywhere other than in the major urban centers, (2) music that was specifically disco (in contrast to crossover hits) continued to be boycotted by many pop radio stations, and (3) the absence of recognizable stars meant there was no handle by which less informed fans could sort through the disco section in record stores.

In the wake of disco's breakthrough, established artists (e.g., Rod Stewart, the Beach Boys, the Rolling Stones) — even new wave trendsetter Blondie — rushed to cash in, recording in this style. Radio stations didn't just add disco cuts to their playlists, they often went *all* disco. Record companies competed to hire disco insiders and artists.

After a brief run as the top pop music genre in 1978–1979, disco began to lose its patented dance groove. In addition, its success stimulated a cultural backlash from the more reactionary elements of the white establishment. "Disco sucks" dominated bumper stickers and graffiti of the day. There were disco record bonfires and anti-disco protests that occasionally degenerated into riots (e.g., a Yankee Stadium baseball game). The rock press widely criticized the genre.

By 1980, the best dance music was again coming from its original source, Black pop. Disco was absorbed back into the underground, to be resurrected

DISCOGRAPHY

in the 1980s as dance-oriented rock (DOR), alternative dance, house, go-go, electronic dance music, and, ultimately, techno. Donna Summer was the only notable disco artist to maintain past chart successes.

FRANK HOFFMANN

DISCOGRAPHY

The study of sound recordings, more particularly of disc recordings; it is equivalent to bibliography and like that science it has several subdivisions. Descriptive bibliography is the study of books as objects: how they are printed, bound, illustrated, and so on. In discography this approach is concerned with the physical aspects of a recording, including the sound signals it carries. A comprehensive description of a disc recording, for example, would include attention to its dimensions, weight, color, label, manufacturer, matrix number, manufacturer's number, other numbers and dates that are present, groove structure, spindle hole, defects, other aspects of condition, and materials from which the disc is produced. These characteristics are discernible by inspection of a disc, without the need to play it. When the disc is played, a whole range of new factors become operative, from rotation speed to elements of performance practice. Of course, the reason records exist is for their content, and this may be described at numerous levels of depth. The basic information (title, name of composer or author, and name of performer), is often printed on the label — although in some cases incorrectly, as with the pseudonyms used by early recording artists. Detailed information is usually sought elsewhere: a record jacket may present some data not on the label; and there is a vast array of primary and secondary literature to consult for facts about performers, recording dates, take numbers, reissues, and recording techniques. Part of the description may be subjective, involving a value judgment about performance and/or quality of audio fidelity. The end product of descriptive discography may turn on any one of the aspects mentioned, or on more than one. Perhaps the most comprehensive descriptions of individual recordings are found in catalogs of specialized archives. There are also fine monographs that provide rich detail about a group of recordings, for example, from one company during a limited period of production (such as Fagan 1983 and Koenigsberg 1987). Generally, the work done in descriptive discography is carried over into enumerative or historical discography, as a contribution to a listing of some kind or the account of a record company's activities.

While the term "enumerative discography" is not really in use, the kind of work it names — the enumer-

ating or listing of records—is the predominant mode of research and publication in the field. The earliest lists of records appear to have been the account books kept in the Edison Laboratory from May 1889 (reprinted in Koenigsberg 1987). Public lists were included in the trade magazine *Phonoscope*. *Phonoscope* (1896–1900), *Phonogram* (1891–1893), and a later *Phonogram* (1900–1902), carried advertisements and notices that mentioned new releases. Edison's first annual printed catalog dates from August 1897; an 1898 catalog listed about 750 titles. The *Edison Phonograph Monthly* (1903–1916) carried various lists, including "best sellers." As new cylinder and disc producers emerged, they compiled their own lists, at least for internal control purposes; one specialist says, of the U.K., that he "would now be prepared to gamble on the fact that all companies did issue lists" (Andrews 1971). The earliest printed catalog of the North American Phonograph Co. was issued in 1890; Columbia's first catalog came out later in the same year. In Britain the Gramophone Co. offered a comprehensive catalog in 1900, with more than 5,000 entries. That firm had produced, from 1898, catalogs of limited scope, including lists of records in languages other than English (see *Voices of the Past* in the Bibliography). Victor's initial catalog dates from 1900.

In the 1920s piano rolls were still significant rivals to the disc; and several manufacturers issued catalogs. It seems the first of these "rollographies" was published in 1924 by Welte-Mignon. In that inventory, and in similar ones by Aeolian, the reproducing piano rolls of great pianists were listed, in performer order.

Ethnomusicologists had turned quickly to the newly invented phonograph, and had begun as early as 1889 to make field recordings, which they listed in their subsequent publications; among these scholars were Walter Fewkes, Carl Stumpf, Béla Bartók, and Percy Grainger.

While a number of public, research, and academic libraries took an early interest in collecting records (from 1909), they did not participate systematically in the production of discographies, which would have been lists of their own holdings. It seems that those holdings were noted only in card catalogs. Among the great national libraries of the world, the presence of recordings has been largely ignored in published catalogs. The U.S. Library of Congress did not begin until 1953 to include a section on "phonorecords" in its periodic catalogs.

National bibliographies have been slow to consider sound recordings worthy of coverage, so the aggregate output of records from all countries is not available in any centralized list. It was Yugoslavia, in 1945, that first introduced a national bibliography with sound

recordings included (actually it was a regional list, for Slovenian materials); Hungary was next, in 1947. (The situation for other countries was described in Marco 1989, from which this summary is taken). Lists of recordings are included in the current national bibliographies of these countries, beginning with the dates given: Bulgaria, 1972; Canada, 1970; Cuba, 1970; Denmark, 1969; Federal Republic of Germany, 1974; Hungary 1946; Iceland, 1974; Jamaica, 1975; Japan, 1948; Kenya (selectively), 1980; Malta, 1983; New Zealand, 1966; Papua New Guinea, 1981; Romania, 1952; and Yugoslavia, 1945. The absence of Britain and the U.S. from that inventory is particularly unfortunate, since they are the countries with the longest history of record production. Great Britain announced the preparation of a national discography, but there is nothing comparable planned for the U.S., which has no official national bibliography either (*American Book Publishing Record* [1960–] approximates a national bibliography, but it is a commercial publication based on information supplied voluntarily by publishers). Probably the most comprehensive American listing, from 1978 only, appears as part of the *Catalog of Copyright Entries* of the U.S. Copyright Office. As a semi-annual, uncumulated list it offers the basic facts without organizational features that would make it a useful reference tool. Other principal nations of the record industry that are without national discographical listings include India, Italy, Japan, U.S.S.R., and all of Latin America.

Although various trade magazines had been listing new recordings, there was not until 1923 a journal for listeners outside the industry: this was *The Gramophone*. Between its covers have appeared lists of new issues and critical reviews of them. There were also some artist discographies, the earliest being of Emmy Destinn. Similar treatment was offered later by *Disques* (1930–), and *American Music Lover* (1935–) in the U.S., and by a French *Disques* (1934–).

All of these approaches to enumerative discography were of value for limited purposes. But they did not satisfy the need for “bibliographical control” of record production: a means of identifying any record that had been issued anywhere, and of obtaining fundamental descriptive information about it. The manufacturers’ catalogs were the most useful publications, but they invariably listed only records “in print” — currently available. No systematic lists of deleted, out of print items have been published.

It was from a jazz enthusiast in France that discography took a new direction. Charles Delaunay’s *Hot discographie* (1936) attempted to list the records by major jazz artists, wherever and by whomever they had been produced. In the same year R.D. Darrell issued *The Gramophone Shop Encyclopedia of*

Recorded Music in New York, a compilation of “all listings of serious music currently to be found in the catalogues of the world’s record manufacturers....” In other words it was an in-print list, but it had the benefit of showing the available discs from various firms clustered by composer, with some topical groupings, and with a performer index. Through its three editions, the last in 1948, this work dealt with 66 labels from Europe (including the U.S.S.R.) and America. It marked the belated establishment of discography as a systematic field of investigation, comparable to bibliography.

Basing their work on that of Darrell, two British writers, Francis F. Clough and G.J. Cuming, published the *World’s Encyclopaedia of Recorded Music* (WERM) in 1952, with supplements in 1952 and 1957. The main volume displayed some 40,000 items on more than 300 labels, all of them issues from the electrical recording period (1925–1951). Descriptive data for each item included artist, label and label number, speed, and some information about reissues. But release dates were not given, and there was no performer index. All recordings were of “permanent music”; in other words, jazz and pop recordings were excluded.

In 1937 there appeared the first retrospective discography of classical music arranged by performer: the *New Catalogue of Historical Records, 1898–1908/09*, by Robert Bauer. Covering all the lateral-cut disc labels that were active in that period, this landmark discography exhibited the work of 1,920 artists, nearly all of them singers. Unfortunately, the descriptive information about each record was minimal and the listings were incomplete. Bauer did a second edition in 1947; then Rodolfo Celletti, in 1964, produced an update of the recordings by about 250 leading singers.

The amazing growth of the record industry after the introduction of the long-playing (LP) record in 1948 is marked by the appearance of the first unified in-print list, covering more than one label, to be published on a periodic basis. It was the *Long Playing Record Catalog*, by William Schwann, predecessor to his *Schwann Catalog* series. Eleven American firms had their output noted in the initial issue, which identified 674 LPs. Similar trade catalogs came along presently in Britain (*Gramophone Classical Catalogue*, 1953–), and Germany (*Bielefelder Katalog*, 1953–). Pre-recorded tapes, significant rivals to the LP, have had their own listing, the *Harrison Tape Catalog* (1953–1976), but cassette tapes also came to be listed in Schwann.

Enumerative discographies began to proliferate in the 1950s, prompting the earliest attempt to keep track of them: C.L. Bruun and J. Gray’s “Bibliography of Discographies” in the first issue of *Recorded Sound*, in 1961. The compilers presented about 450 entries, each

DISCOPHONE

a discography (no cylinder lists) of classical records by a certain artist or of a certain type. This work was extended by David Cooper's *International Bibliography of Discographies* (1975), which listed 1,908 discographies of classical music, jazz, and blues, all published from 1962 to 1972. Clearly, the writing of discographies had entered a boom period.

As the number of such publications mushroomed, several scholars began to consider the nature of discography: its objects and proper methodology. (Such concerns were not entirely new: William Moran had written an eloquent plea for discographical standards in a letter to *The Record Collector* in 1958.) Gordon Stevenson, in a 1972 article, sought "solid theoretical underpinnings" for the emerging science. Similar efforts were undertaken by Louis Foreman in 1974, and by J.F. Weber a year later. A 1980 volume, *Brian Rust's Guide to Discography*, offered the most thorough treatment of discography as a science.

By 1976 the approach to discography had climbed to a level that called for "Standards for the Review of Discographical Works" (the title of an article in the *ARSC Journal* by Steven Smolian). Another proposal of 1976, by George Blacker, called for a "clearing-house of discographical data." A data sheet prepared by Blacker was suitable for international use in entering all relevant facts about a recording in a consistent manner. It is unfortunate that Blacker's data sheet has not had wide acceptance, and that most published discographies present incomplete and often misleading information about the records they cover.

In step with the growth of discography came the march of new specialist magazines, many of them the principal publishing outlets for discographical scholarship. Journals with strong discographies have included *ARSC Journal* (1967–), *Goldmine* (1974–), *Hillandale News* (1960–), *Paul's Record Magazine* (for rock discographies; 1975?–), *Record Collector* (1946–), *Record Research* (1955–), *Recorded Sound* (1961–1984), and *Talking Machine Review International* (1969–).

Monographic coverage of individual performers has reached an elegant stage, notably in the publications of Greenwood Press and Scarecrow Press. For example, the Benny Goodman discography from Scarecrow (Connor 1988) is a model of its kind. Discographic output in all formats and for all kinds of music is kept under control by the continuing bibliography of discography series written by Michael Gray and Gerald Gibson (see Gray 1985 in the *Bibliography*).

While all discographies contribute to knowledge of the recording industry, one type is designed especially to do so: historical discography. Like its parent, historical bibliography, this discipline is focused on

the activities of key individuals and firms. Those who examine the record industry usually begin with a single company, or label, and do archival research that leads to a narrative history. Recordings are the basic artifacts that are studied, less for themselves than as pieces of the historical mosaic. Thus part of that history, and as part of the material needed for it, is the list of recordings produced under a label name. Compiling of "label lists" has become a major interest among record specialists like Frank Andrews, Arthur Badrock, John R. Bennett, George Blacker, Tim Brooks, Sydney Carter, Ron Dethlefsen, Bjorn Englund, Ted Fagan, Pekka Gronow, Alan Kelly, Carl Kendziora, Karleric Liliedahl, William R. Moran, Anthony Rotante, Michel Ruppli, Brian Rust, and Raymond Wile. Historical discographers try to assemble complete lists, usually with the assistance of the collector community. This drive for completeness is fueled by the fact that record makers, unlike publishers, have invariably given serial numbers to their products; hence it is a reasonable starting point to find one record for each number in a series (although there are complications with the systems used by various manufacturers), and it is in that form — label list by series — that much of the research is published.

Discographical control over 78-rpm records has probably reached its zenith with the Rigler and Deutsch Index, a joint effort of five American archives to list and describe their holdings. Will there ever be complete listings of LP records, either of current world production or of retrospective output? It seems doubtful; too much documentation has been missing or lost in these 40 years. The largest compilation of LPs is in the OCLC database, an online union catalog of major libraries. Recently the compact disc (CD) has swept over the scene, with no sign of a better control system than the LP has had. [Andrews 1971/2; Blacker 1976/5; Brooks 1979/2; Directory 1989; Fagan 1983; Foreman 1974; Koenigsberg 1987; Rust 1980; Smolian 1976; Stevenson 1972; Weber 1975.]

See also Criticism; Sound Recording Periodicals; Sound Recordings and the Library; The Bibliography

DISCOPHONE

SEE PICTURIZED PHONOGRAPHS

DISCHORD RECORDS (LABEL)

Based in Washington, D.C., Dischord Records has been administered as a utopian postpunk institution since its establishment in January 1981. Espousing a

do-it-yourself (DIY) ethic, the label has attempted to provide a mouthpiece for area punk bands unable to achieve — and, more importantly, not interested in — affiliation with a major record company. According to Michael Azerrad, author of *Our Band Could Be Your Life* (Little, Brown, 2001), Dischord “has set ethical standards, indie style [and] made a mythos out of the D.C. scene, inspiring like-minded souls in cities across the nation to start their own scenes...”

Dischord was created when Ian MacKaye and Jeff Nelson spent \$900 to release *Minor Disturbance*, a seven-inch EP containing eight songs recorded by their former band, the Teen Idles. Reviews in fanzines and radio airplay in selected nationwide markets enabled the label to sell out its initial run of a thousand copies in short order. The profits were used to finance releases by S.O.A., headed by future rock star/actor Henry Rollins; MacKaye and Nelson’s then-current hardcore band, Minor Threat; Youth Brigade; and Government Issue in early 1981.

In October 1981, MacKaye, Nelson, and several associates moved into a nondescript four-bedroom house in Arlington, Virginia; christened Dischord House, it became label headquarters as well as a band practice facility and way station for touring hardcore artists. In a manner highly reminiscent of 1960s communes, label personnel would handle all aspects of the business except pressing the records, even scheduling folding parties to prepare the record covers for distribution.

The success of *Flex Your Head* (Dischord; 1982), a D.C. hardcore sampler distributed by Alternative Tentacles in England, and Minor Threat’s album, *Out of Step* (Dischord 10; 1983), led to inquiries from larger labels for foreign distribution rights. MacKaye and Nelson signed an agreement authorizing London-based Southern Studios to press and distribute Dischord releases (including the European market), an arrangement lasting from 1984 to the present day.

Although labor and cash-flow problems were no longer an issue, the label has steadfastly insisted on retaining many of the characteristics of its early days. In an effort to maintain a reasonable pricing policy, Dischord albums (including compact discs, or CDs) are authorized to retail for no more than \$10. Deemed to be not worth the trouble, promotion to press and radio is virtually nonexistent, and supplies such as stationery are often obtained free from other firm’s trash bins. Most importantly, the label has remained committed to community activism and the nurturing of D.C.-area punk rock bands.

Through it all, Dischord has also left an indelible mark on popular music history. Minor Threat provided a template for later hardcore bands in the early 1980s, and Fugazi, formed by MacKaye in 1987, helped

pioneer the rock-funk fusion that became a fixture in 1990s alternative rock.

FRANK HOFFMANN

DISCOTECA DISTATO

The Italian national sound archive, established in 1928 in Rome. A large collection of ethnic field recordings has been assembled. An extensive catalog of holdings appeared in 1967, with a revision in 1970 and a supplement with index in 1973.

DISCOTHEQUE

SEE DISCO MUSIC

DISCRETE DIRCUIT

SEE INTEGRATED CIRCUIT

DISKO CO.

A British firm, established in 1913 at 76–78–80 High Street, Shirley, Southampton. It produced a disc cleaner that promised to “make the worst worn record play as well as if it had just left the presses.”

DISPERSION

A characteristic of a loudspeaker, referring to its ability to distribute sound widely and evenly throughout the listening area.

DI STEFANO, GIUSEPPE (24 JULY 1921–)

Italian lyric tenor, born near Catania. His debut was in 1946 at Reggio Emilia; then he sang in Rome and at La Scala. He made his Metropolitan Opera debut as the Duke on 25 Feb 1948, and was with the company until 1952, returning in 1955/1956 and 1964/1965. However, vocal problems began to develop for the singer by the late 1950s, exacerbated by asthma, and the quality of his singing declined over the next 15 years. Widely regarded as the world’s leading tenor, he sang also in San Francisco and Chicago, and in Europe and South America. Di Stefano made an acclaimed concert tour with Maria Callas in 1973–1974. He has been mostly inactive since, and he made a final appearance at age 71 in 1992 in Rome in *Turnadot*.

His best recordings were 78s made for HMV from 1947 to 1953, for example, “E lucevan le stelle” (#DB 6580), and “Che gelida manina” (#DB 21518).

DISTORTION

He is heard in nine complete opera LP recordings, many with Callas. An LP of Di Stefano's earliest recordings, some of which appeared under the name of Nino Florio, was released in 1977 (O.A.S.I. 500). A CD compilation of his recordings made between 1952–1963 was issued by Huub in 1991 (*Historical Recordings*, Huub 303).

DISTORTION

Any alteration to the input signal as it passes through a sound system. Various types of distortion are listed below. It should be noted that distortions related to analog devices such as the LP record are no longer serious problems, due to the advent of digital-audio recording and playback systems.

1. Amplitude distortion. Also known as nonlinear distortion. The name given to any change in the ratio of output amplitude to input amplitude for any value of the latter. Both harmonic and intermodulation distortion are outcomes.

2. Amplitude/frequency distortion. Also named attenuation distortion. A change in amplification produced by shifts in signal frequency.

3. Clipping distortion. A result of overload, usually involving a low-powered amplifier trying to generate higher power levels.

4. Inner-groove distortion. In an analog-disc reproducing systems that utilize constant angular velocity, the speed of the disc surface under the stylus is faster at the edge than at the center. On a 12-inch 33 1/3-rpm LP, the speed at the outside edge is 20.9 inches per second; while at the center, with the radius reduced to about 2.5 inches, the speed is only 8.7 inches per second (see DISC, 5). In practice this means that the amplitude must be less at the center than at the edge, or amplitude distortion will result, particularly at higher frequencies. Some companies solved the problem by simply putting less music on a side, which made it necessary to flip the recording more often than some people might like. It was this problem that led Thomas Edison to prefer the cylinder, where surface speed is constant. The triumph of digital-discs systems has made this kind of distortion superfluous.

5. Flutter distortion. See FLUTTER.

6. Harmonic distortion. A result of amplitude distortion: it refers to overemphasis or underemphasis on certain overtones. The first overtone, or second harmonic (the octave above the fundamental), is not a major problem when it is distorted, but the higher harmonics — third, fifth, seventh, and ninth — can be disturbing if reproduced out of balance. A common reason for this effect is that the volume is turned up to a point where the amplifier is overloaded.

7. Intermodulation distortion. A result (like harmonic distortion) of amplitude distortion: it refers to

the production of alien frequencies corresponding to the sums and differences of the fundamentals and harmonics of two or more signal frequencies.

8. Linear distortion. A type of amplitude distortion in which the input and output signals are not proportionate, but without the introduction of alien frequencies. Modern audio electronics usually have minimal linear distortion, and it most commonly shows up in loudspeaker systems.

9. Nonlinear distortion. The type of distortion that is most troublesome in an audio system, because it stems from the transmission properties of the system. That is, from the dependency of the system upon the instantaneous magnitude of the transmitted signal. Nonlinear distortion produces flutter, intermodulation distortion, and wow.

10. Phase distortion. Also called phase-frequency distortion. The type of distortion that results when phase shift is not in direct proportion to the frequency across the entire transmission range. The significance of phase distortion in audio systems is debatable, and probably inconsequential unless the levels are fairly high.

11. Rumble. The sound produced by vibrations in the recording or playback turntable of an analog disc system. In digital systems, which do not have problems with mechanical rumble, a similar effect might be generated by noise artifacts in the recording studio or concert hall. Examples would be traffic noise outside of the building or heater and air-conditioner noises.

12. Scale distortion. The result of widely different dimensions between input and output locations. For example, it may occur when a signal originating in a concert hall is reproduced in a small room. To an extent, this can be obviated by well-designed surround-sound audio systems and multichannel recordings.

13. Tracing distortion. The result of a misfit between the record groove and the playback stylus in an analog record player, usually caused by the swing of the tone arm from the start to the end of the record. The misfit can be diminished by linear tone arm travel, constant groove-to-stylus angle devices, stylus size, and stylus shape.

REV. HOWARD FERSTLER

DITHER

In digital recording systems, it is the addition of random noise at a very low level, before the signal is quantized. Its purpose is to decorrelate the quantization error from the signal, and in doing so, it allows the encoding of signals well below the digital noise floor. The result will be improved resolution of the signals being recorded.

HOWARD FERSTLER



Columbia subsidiary Diva label, made for the W. T. Grant department store chain. Courtesy Kurt Nauck/Nauck's Vintage Records

DIVA (LABEL)

A subsidiary of Columbia, made for the W.T. Grant department store chain from 1925 to 1932. At first the material was drawn from Harmony, but later it was original, featuring blues. [Rust 1978.]

DIXI (LABEL)

A Swedish product introduced in 1932 by the department store chain Ahlen and Holm. The disc was about eight inches in diameter at first; then in 1934 it grew to 10 inches and took the name Silverton. Most of the records were of Swedish dance orchestras. The final year of issue was 1944. [Liliedahl 1973.]

DIXIE CHICKS

The Dixie Chicks are part of the youth brigade in 1990s country music, a movement that has placed as much emphasis on sexy good looks as on musical talent. The Chicks, however, are highly accomplished musicians — founding member Martie Seidel finished third in the 1989 National Fiddle Championships — capable of playing a wide range of styles, including folk, bluegrass, hard country, and adult contemporary pop.

Seidel and her sister, banjo player Emily Erwin, formed the group — named after the Little Feat recording, “Dixie Chicken” — in 1989 with bassist Laura Lynch and guitarist Robin Lynn Macy. Their

debut album, *Thank Heavens for Dale Evans* (Crystal Clear 9103; 1990), exuded a traditional country and western feel. The next two LPs — *Little Ol' Cowgirl* (Crystal Clear 9250; 1992), and *Shouldn't a Told You That* (Crystal Clear 9369; 1993) — were transitional in nature, as the group edged toward a more modern sound. Macy had departed before the third album, followed by Lynch (allegedly forced out due to her comparatively advanced age and lack of sex appeal) shortly after the group signed with Sony's resurrected Monument label in 1995.

With youthful lead vocalist/guitarist Natalie Maines as a replacement, the trio's breakthrough album, *Wide Open Spaces* (Monument 68195; 1998), had a look that was as contemporary as their hook-laden country-pop. *Wide Open Spaces* became the top-selling group LP in country music history, moving more than 4 million units within the first year of its release, due in part to three hit singles: “I Can Love You Better” (Monument; 1998), “There's Your Trouble” (Monument 78899; 1998; #1 C&W, #36 pop), and “Wide Open Spaces” (Monument; 1998; #1). It earned a Grammy for best country album, while the Chicks were named favorite new country artist at the American Music Awards in addition to capturing best vocal group honors and the Horizon award from the Country Music Association.

Fly (Monument 69678; 1999), fueled by several hit singles, most notably “You Were Mine” (Monument; 1999; #1 C&W, #34 pop), also dominated the country charts as well as winning two Grammys in 2000, best country album and best vocal performance by a country duo or group. Other hits included the comic novelty “Goodbye Earl” (which tells of an abused wife's murder of her loutish husband, causing some controversy among country fans), and “Cowboy Take Me Away.”

The great success of the Dixie Chicks's first two albums — and their unhappiness with the contract that they signed with Monument/Sony before they were famous — led to a protracted battle between the group and the label, delaying the release of their third album. Finally, a settlement was reached whereby the Chicks earned their own label, Open Wide. In spring 2002 they released their third album, *Home* (Open Wide/Sony 96840), and immediately scored hits with the leadoff single “Almost Gone,” and their cover of the Fleetwood Mac standard, “Landslide.” In September 2002 the Chicks achieved a landmark when five of the songs from the album were on the *Billboard Hot Country Singles and Tracks* chart simultaneously. The album also was number one on the country charts through that month.

FRANK HOFFMANN

DIXIE HUMMINGBIRDS

The Dixie Hummingbirds was celebrated for its show-stopping performances and polished stage presentations but the group constantly resisted invitations to become part of the secular music world. As a result, they became legends in gospel music but relatively unknown outside that sphere. They influenced such luminaries as Ray Charles, the Spaniels, the Temptations, and Little Anthony and the Imperials.

The original quartet was formed by baritone James B. Davis in Greenville, South Carolina, in 1928, with Ira Tucker (lead), who was considered one of gospel music's most charismatic 'growlers-and-shouters,' Beachery Thompson (tenor), and William Bobo (bass), who originated trademark "walking" vocal lines. Later, the Hummingbirds became either a quintet or a sextet. The group's primary goal was to sing for the Lord and guide its listeners to spiritual epiphany; second, they had to put on a show.

The Hummingbirds joined the gospel circuit in the 1930s, starting with "jubilee" singing, then advancing to more demanding a cappella arrangements in the 1940s; they constantly reinvented themselves within the Black religious culture. The group sang hymns, spirituals and jubilees with little accompaniment except for their precise and warm harmonies. These recordings, done between September 1939 and January 1949 in New York City, were collected on the *In the Storm Too Long* compilation (Gospel Jubilee, RF-1405; 1991).

The Dixie Hummingbirds first recorded for Decca in 1939, then signed with Duke/Peacock Records, a Black-owned independent record company, in 1952, where the group added instrumental backing to their patented vocal arrangements and put together what was considered its "quintessential lineup": James Davis, Ira Tucker, James Walker (who took over the group's leadership after Davis retired in 1984), Beachey Thompson, William Bobo, and Howard Carroll. Other replacements over the years included Jimmy Bryant, Barney Parks, George B. Shea, Roxie Moore, and Bernie Haneghen. The group's constant touring, TV appearances and album releases expanded their fan base beyond gospel without having to change their musical style.

In the 1950s, the Dixie Hummingbirds recorded a series of compelling albums for Peacock Records, the compassion and emotive timbre of which matched the power of gospel greats Mahalia Jackson and Rev. James Cleveland, with outstanding teamwork rather than individual flair their greatest asset. With the beginning of the 1960s, the group began to embrace secular music, fusing their traditional gospel with jazz, blues, and rock.

Their appearances included an historic one in 1942 when the Hummingbirds were the second gospel

group to play Cafe Society in New York, the landmark political-musical cabaret. In 1959, they starred at the Apollo and joined a salute to Mahalia Jackson at Madison Square Garden. There were also performances at the Newport Folk Festival (1966) and the Newport Jazz Festival (1972).

One of their most famous appearances outside of the church circuit came in 1973 when they backed Paul Simon at the Muscle Shoals Studio on his recording *Loves Me Like a Rock*. The title song won them a Grammy for best soul gospel performance in 1973 [*We Love You Like a Rock* (Peacock PLP-178)]. However, their natural market was always within the gospel community, where recordings such as "Somebody's Lying" [*Golden Flight* (ABC/Peacock PY-59237; 1978)], "You Don't Have Nothing If You Don't Have Jesus." and "The Dead Can't Harm a Praying Man" are considered classics, but their biggest hit was probably "Let's Go Out in the Program" [*The Dixie Hummingbirds Live* (ABC/Peacock, PL-59231; 1977)], which was recorded in New Brunswick, New Jersey, 14 Nov 1976. Another interesting combination was *Dixie Hummingbirds*, with the Angelic Gospel Singers (Gospel Heritage, HT 318; 1988), which was originally recorded by Gotham, July 1949-early 1951. Other compilations include *The Best of the Dixie Hummingbirds: the AIR Gospel Recordings* (Air Gospel/Atlanta International, 2000; *Dixie Hummingbirds: Complete Recorded Works in Chronological Order, 1939-1947* (Document Records, DOCD-5491; 1996), with selections recorded in New York City on 19 Sep 1939 and in July 1944, February 1946, and January 1947; *Legendary Groups of Gospel* (Universal Special Products, 088112079-2; 1999), with the Dixie Hummingbirds singing "Will the Lord Be With Me," and the two-part *Pewburner Records Presents The Great Gospel Ground-Crews of the Past: Dixie Hummingbirds, Vol.1: 1952-1958* (Pewburner Records, 552; 2001) and Vol. 2: 1959-1966 (Pewburner Records, 553; 2001).

The group retired in the late 1990s. It was the subject of a documentary, *The Dixie Hummingbirds: We Love You Like a Rock* (Berkeley, CA: Searchlight Films, 1994), which included archival stills, black and white film clips, and interviews with the Hummingbirds and fellow musicians who have been influenced by their work. VHS format.

MARTIN MANNING

DIXIELAND JAZZ

An early jazz style practiced in New Orleans, primarily associated with white musicians. The first recording of this sound was by the Original Dixieland Jazz Band in 1917. During the late 1940s and early 1950s, the

style enjoyed renewed popularity in reaction to new developments such as Bebop.

See also **Jazz Recordings**

DIXON, WILLIE

(1 JULY 1915–29 JAN 1992)

As a house producer for Chess Records beginning in 1954 — responsible for writing, arranging, producing, and playing bass on the recordings of Chuck Berry, Buddy Guy, Howlin' Wolf, Little Walter, Otis Rush, Muddy Waters, Sonny Boy Williamson, and others — Dixon was a key force in the development of the post-World War II Chicago blues scene. Many of his compositions have become blues standards, including "Back Door Man," "I Can't Quit You Baby," "I Just Want to Make Love to You," "I'm Ready," "I Ain't Superstitious," "The Red Rooster," "The Seventh Son," and "Wang Dang Doodle."

Born in Vicksburg, Mississippi, Dixon revealed an aptitude for writing poetry as well as a deep, rich voice developed in church prior to moving to Chicago in 1937. He first made his mark as a professional boxer before becoming a singer/bassist with a jazz-pop combo, the Five Breezes, in 1940. The group would record for Bluebird that year without commercial success; sessions with Mercury in the early 1940s, as a member of the Four Jumps of Jive, also failed to produce any hits. Together with pianist Leonard Caston and guitarist Bernardo Dennis, Dixon then founded the Big Three Trio, whose jazz-R&B-pop amalgam was waxed by Columbia in the late 1940s. Their most popular recording, "You Sure Look Good to Me" (Columbia 38093; 1948), reached number 10 on the *Billboard* R&B charts.

Dixon began working as a producer for Chess Records in 1951, proving his worth on a series of tracks with guitarist Robert Nighthawk. While producing Chess sessions well into the 1970s, Dixon found time to pursue many other activities, including production work for the Chicago-based Cobra label, recording as the featured artist, promoting new talent (e.g., Little Wolf, Margie Evans), managing a record company (Yambo), and live performing, first with Memphis Slim in the early 1960s and, beginning in 1967, as head of his own band, the Chicago Blues All-Stars. Dixon's only solo hit, "Walking the Blues" (Checker 822; 1955), reached number 6 on the R&B charts.

Following the 1987 settlement of a two-decade dispute with Led Zeppelin over their failure to credit his contribution to the composition of "Whole Lotta Love" (based largely on his "You Need Love"), Dixon established the Blues Heaven Foundation, an organization dedicated to preserving blues music and culture as well as helping secure copyrights and ensuing royalties for

other songwriters and recording artists. Despite a relative lack of success as a recording artist, much of his work has been reissued on compact disc, from the Big Three Trio to 1970s albums by the Chicago Blues All-Stars. Dixon's most enduring legacy, however, remains the classic Chess tracks he helped create in a supporting role. Many of them are available in a three-CD compilation, *The Willie Dixon Chess Box* (Chess 316500).

FRANK HOFFMANN

DODDS, JOHNNY

(12 APR 1892–8 AUG 1940)

American jazz clarinetist, born in New Orleans. He played locally as a teenager, then went to Chicago and played with King Oliver during 1920–1924. He freelanced, had his own band, and performed with Louis Armstrong. Dodds died in Chicago. Probably his biggest hit record was "Wild Man Blues" (Brunswick 3567; 1927), with his Black Bottom Stompers, a group that included Armstrong, Barney Bigard, and Earl Hines.

DODGE, PHILIP T.

(11 JULY 1851–9 AUG 1931)

American record industry executive, born in Fond du Lac, Wisconsin. In 1915, with the death of Edward Easton, Dodge became president of American Graphophone Co. In April 1917 he became chairman of the board. He died in New York

DO IT YOURSELF (DIY)

In practice, "Do It Yourself" refers to complete (or nearly complete) control of the record production and distribution process. However, it has come to indicate a frame of mind, or approach, to creating music as opposed to a particular style or genre. While the term has been specifically applied to 1980s postpunk artists committed to an amateurish, Everyman ethic, it has probably existed since homo sapiens first arrived at the concept of music by slapping various body parts and experimenting with castoff bones, gourds, and sea shells. Art music composers such as Erik Satie, intrigued with the Dada movement immediately following World War I, seem to have had an affinity for DIY conventions. Certainly, it has provided an alternative perspective for the development of virtually every indigenous American popular music genre. It all but defines folk music from a purist standpoint, and has fed the populist element of rock music — that most rebellious and antielitist of all musical forms. The spirit of DIY literally saturates 1950s rockabilly, 1960s

DOLBY, RAY[MOND M.]

garage rock, and 1970s punk/new wave. It represents the missing link between the passionate rants of the Sex Pistols, the Clash, and thousands of other bands on both sides of the Atlantic who were barely able to play their instruments prior to the 1980s, and the more stripped down, incendiary, low-fi proponents of 1990s alternative rock. Notable practitioners — and seminal recordings — of this transitional postpunk variant include the Adverts (*Crossing the Red Sea with the Adverts*; Bright 201; 1978), Swell Maps (*Collision Time*; Rough Trade; 1981), Mekons (*So Good It Hurts*; Sin 008; 1988), Television Personalities (*Mummy Your Not Watching Me*; Fire; 1982), and the Posies (*Dear 23*; DGC 24305; 1990).

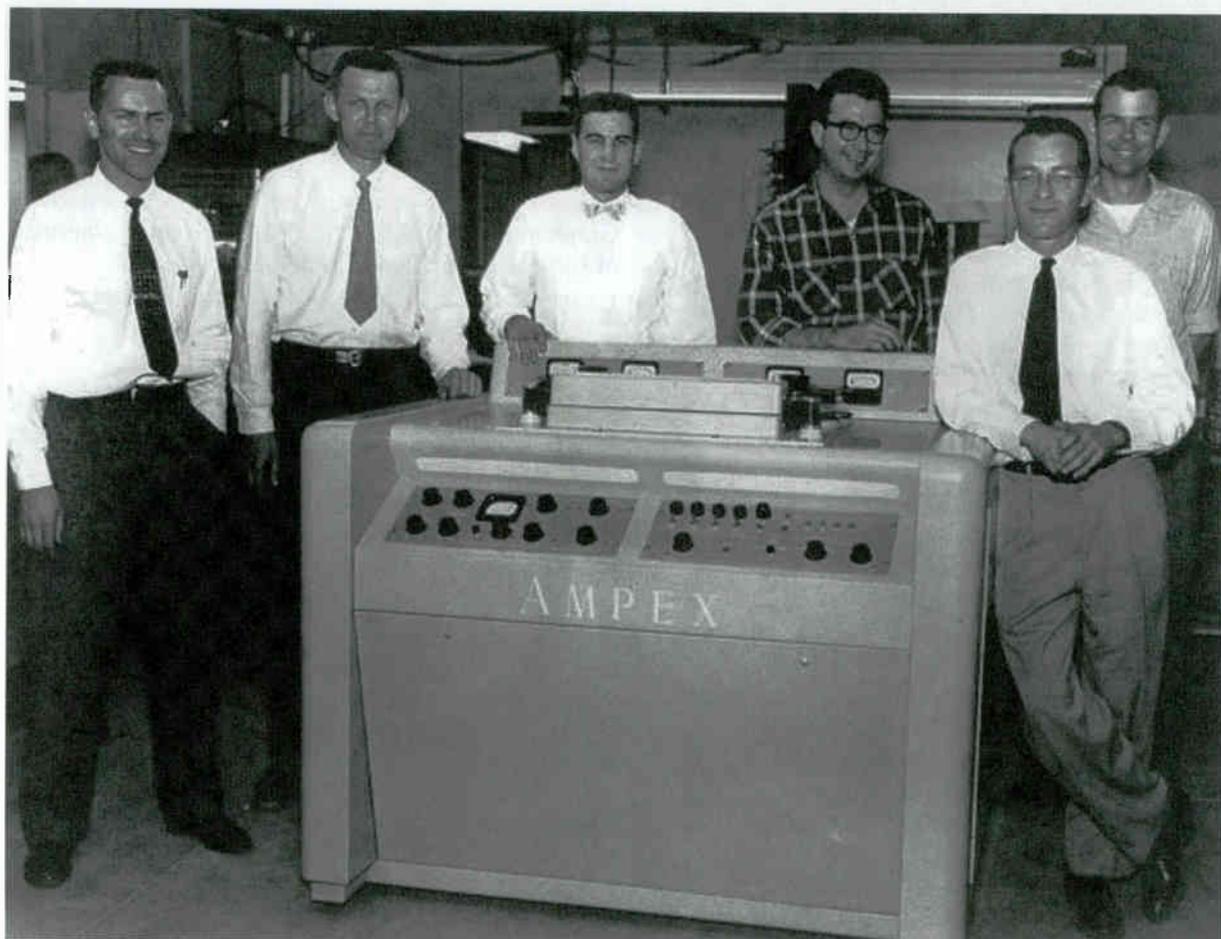
FRANK HOFFMANN

DOLBY, RAY[MOND M.] (18 JAN 1933–)

Dolby was born in Portland, Oregon, and is founder and chairman of Dolby Laboratories, Inc. From 1949 to 1952 he worked on various audio and instrumentation

projects at Ampex Corporation, where from 1952 to 1957 he was mainly responsible for the development of the electronic aspects of the Ampex videotape recording system. In 1957 he received a B.S. degree from Stanford University, and upon being awarded a Marshall Scholarship and a National Science Foundation graduate fellowship, left Ampex for further study at Cambridge University in England. He received a Ph.D. degree in physics from Cambridge in 1961, and was elected a fellow of Pembroke College (honorary fellow, 1983). During his last year at Cambridge, he was also a consultant to the United Kingdom Atomic Energy Authority.

In 1963, Dolby took a two-year appointment as a United Nations advisor in India, then returned to England in 1965 to establish Dolby Laboratories in London. Since 1976 he has lived in San Francisco, where his company has established further offices, laboratories, and manufacturing facilities. He holds more than 50 U.S. patents, and has written papers on videotape recording, long wavelength x-ray analysis, and noise reduction.



Ray Dolby (third from left) in 1956 with the team of Ampex engineers who developed the first practical videotape recorder. Courtesy Dolby Laboratories



Harman Kardon Cassette Deck first to use Dolby. Courtesy Harman Kardon International

Dolby is a fellow and past president of the Audio Engineering Society, and a recipient of its silver and gold medal awards. He is also a fellow of the British Kinematograph, Sound, and Television Society and an honorary member of the Society of Motion Picture and Television Engineers, which in the past has also awarded him its Samuel L. Warner memorial award, Alexander M. Poniatoff gold medal, and Progress medal. The Academy of Motion Picture Arts and Sciences voted him a scientific and engineering Award in 1979 and an Oscar in 1989, when he was also presented an Emmy by the National Academy of Television Arts and Sciences. In 1986, Dolby was made an honorary Officer of the Most Excellent Order of the British Empire (OBE).

In 1997, Dolby received the U.S. National Medal of Technology, the Institute of Electrical and Electronics Engineers' Masaru Ibuka consumer electronics award, and the American Electronic Association's medal of achievement. That year he also received an honorary doctor of science degree from Cambridge University, and in 1999 was awarded the honorary degree of doctor by the University of York.

DOLBY DIGITAL

A digital, surround-sound audio format that goes well beyond the standard, matrixed Dolby Surround technology pioneered in the 1970s. Making use of data compression and reduction to minimize the number of bits required for storage and transmission, Dolby Digital will typically involve a total of six channels: three up front, two for surround duty, plus a low-frequency effects (LFE) bass channel. However, it can also involve as few as one channel, depending upon the requirements of the source material.

Originally, Dolby Digital was called AC-3 (AC-1 and AC-2 are earlier variants, developed for other applications), and it was originally configured for regular movie theater use. (The first movie to utilize a Dolby Digital soundtrack was *Batman Returns*, in 1992.) However, it has evolved into an important home-theater audio technology, as well. It is normally called a 5.1-channel system, with the bass-only LFE channel given the point-one designation because of its limited bandwidth.

See also Data Reduction, and Data Compression; Dolby Surround; DTS

HOWARD FERSTLER

DOLBY NOISE REDUCTION SYSTEM

A device invented by Raymond M. Dolby in 1966 for increasing the signal-to-noise ratio of a tape recording; it removes most recording noise and hiss. Essentially, the Dolby method is to code the audio signal during recording and then decode it during playback, thus circumventing hiss production.

See also DBX Corporation; Dolby Digital; Dolby Pro Logic (DPL); Dolby Surround Sound; Noise Reduction

DOLBY PRO LOGIC (DPL)

Strictly speaking, basic Dolby Surround Sound does not offer adequate separation between the left/right channels and the center, or between the left/right channels and the surround channel. Pro Logic, which in many minds has for some time has been synonymous with Dolby Surround, applies automatic gain riding to the decoding, which increases separation markedly. The latest Pro Logic II version, developed by Jim Fosgate and licensed by Dolby, improves upon the steering and also allows the technology to deliver good simulated surround sound from ordinary two-channel music source material.

See also Dolby Surround Sound; Home Theater; Steering Systems; Surround Sound

HOWARD FERSTLER

DOLBY SURROUND SOUND

No longer a dominant format, but at one time used for motion picture soundtracks, some music recordings, and some network video programming, it is a 4:2:4 ambiance-extraction and derived-center surround-sound system that delivers three audio channels up front, plus a single surround channel. The latter is

DOLPHY, ERIC

usually reproduced through two or more speakers with home-theater playback and with a considerably larger number used for standard movie theater playback.

With Dolby Surround, the single-channel surround information is folded into two discrete channels, with the signal sent to one channel being at +90 degrees out of phase and an identical signal routed to the other channel at -90 degrees out of phase. During playback, any signals that are exactly 180 degrees out of phase with each other are extracted by a Dolby decoder and sent to the surround channel. All other signals remain up front.

Center-channel information is handled in just the opposite manner. Identical, in-phase signals in the two discrete channels are electrically routed to a center channel. The result is a stabilized center feed for both theater and home-audio playback. Because of the derived center, Dolby Surround produces a theater soundstage that works better than a stereo phantom center for listeners sitting away from the dead-center sweet spot.

In modern movie theater and home-audio playback systems, basic Dolby Surround, even with Pro Logic decoding, has been mostly superseded by the Dolby Digital and DTS theater and home-theater versions.

See also **Ambiance Extraction; Dolby Pro Logic (DPL); Surround Sound**

DOLPHY, ERIC

(20 JUNE 1928–29 JUNE 1964)

Dolphy, who played alto saxophone, bass clarinet, and flute, made a lasting mark on the jazz language during his short career. Born in Los Angeles, he started studying clarinet when he was six and began playing professionally as a young teen. His first major break came with Chico Hamilton's group in 1958 in Los Angeles. He then moved to New York and joined Charles Mingus's powerful and forward-looking group in 1959, with which he recorded *Charles Mingus Presents Charles Mingus* (Candid 9005; 1960), and *Mingus!* (Candid 9021; 1960). Dolphy's second album as a leader, *Out There* (Prestige 24008; 1960), demonstrates his penchant for exploring unusual melodic concepts. His 1964 release, *Out to Lunch* (Blue Note 84163), a recording that was considered radical at the time of its release, now sounds like part of the jazz mainstream.

Dolphy performed as a sideman on some of the most historically important records in jazz. His startling bass clarinet improvisations on Ornette Coleman's album, *Free Jazz* (Atlantic 1364; 1960), were an integral part of Coleman's masterpiece. One of his contributions to the third-stream music movement that fused jazz and classical music can be heard on Gunther Schuller's important recording, *Jazz Abstractions* (Atlantic 1365;

1960). His death in 1964 due to complications from diabetes was a great loss to the jazz world.

GARTH ALPER

DOMAINS

The small regions of uniform magnetization (typically magnetized iron oxide particles) that store the sound signals in tape recording. As the domains move past the receptor head, the varying magnetic field induces changing electrical signals that can be converted back to the original sound.

DOMESTIC TALKING MACHINE CORP

A Philadelphia firm, established in 1916, to make disc players. "Domestic" was the brand name. Horace Sheble was president until he retired in February 1918; George Anderson replaced him. George W. Lyle was sales agent. In March 1916 the firm offered two vertical-cut discs at \$.35. Ten-inch discs of blue material (like the Hawthorne and Sheble "Indian" Records of the American Record Co. in the early 1900s) appeared in September 1917 for \$.70. In October 1917 there were also 12-inch records, at \$1.25. The repertoire was popular songs and dance music. Domestic moved to Latrobe, Pennsylvania, in April 1919.

FRANK ANDREWS

DOMINGO, PLACIDO (21 JAN 1941–)

Spanish tenor, born in Madrid. His family moved to Mexico when he was nine years old, and he learned to play the piano there; he also sang in zarzuela performances with his parents, taking baritone roles at first. He sang opera in Israel for two years, then made his American debut at the New York City Opera on 17 Oct 1965 as Pinkerton. He joined the Metropolitan Opera in 1966, singing Turridu at a concert performance on 9 Aug 1966, and stayed 10 years with the company, singing 74 roles. He has been heard in the principal world theaters. During the 1990s, he also performed as one of the "Three Tenors," setting new records for opera recording sales.

Domingo has recorded extensively on Deutsche Grammophon compact discs (CDs). Complete operas include Nabucco, Luisa Miller, Manon Lescaut, Turandot, Fanciulla del West, Trovatore, Carmen, Rigoletto, Macbeth, Traviata, Ballo in maschera, Tannhäuser, Contes d'Hoffmann, and Meistersinger. He also sings popular love songs, and has had such chart albums as *Perhaps Love* (1981), and *My Life for a Song* (1983), both for Columbia. His 1984 "Siempre en mi corazón" won the Grammy in the Latin category.

DOMINION GRAMOPHONE RECORD CO., LTD.

A British firm established on 21 Mar 1928, selling records with a Dominion label at 1s 3d. The address was 55–57 Great Marlborough Street, London. Masters from American labels Cameo and Perfect were used, as well as original material. Dominion repertoire included dance music, some opera, and authors reading their own works. One release, "My Man o' War," sung by Elsie Carlisle, was reportedly denounced as pornographic; and it supposedly led to a fine that helped put the company into liquidation in July 1930. [Badrock 1976; Rust 1978.]

DOMINO, ANTOINE "FATS" (26 FEB 1928–)

Fats Domino was one of the most consistent rhythm and blues hit-makers of all time. He wrote and recorded rock standards years before "rock 'n' roll" became a household phrase. His engaging, inimitable style helped facilitate the transition of popular R&B artists to the pop charts at the outset of the rock era.

A lifetime New Orleans resident, Domino taught himself the popular piano techniques of his day, including the blues, boogie-woogie, and ragtime. These elements would remain an integral part of the easy rocking style that was a keynote of his entire career. In the mid-1940s, local bandleader Dave Bartholomew hired him as his regular pianist. This job led to his 1949 recording contract with the Los Angeles-based Imperial label, and the Domino-Bartholomew songwriting partnership.

His debut single, "The Fat Man" (Imperial 5058; 1950), was a Top 10 R&B hit. For a dozen years, Domino would release at least one Top 10 single every year; his number one R&B releases included "Goin' Home" (Imperial 5180; 1952; #30 pop), "Ain't That a Shame" (Imperial 5348; 1955; #10 pop), "All By Myself" (Imperial 5357; 1955), "Poor Me" (Imperial 5369; 1955), "I'm In Love Again" (Imperial 5386; 1956; #3 pop), "Blueberry Hill" (Imperial 5407; 1956; #2 pop), "Blue Monday" (Imperial 5417; 1956; #5 pop), "I'm Walkin'" (Imperial 5428; 1957; #4 pop), and "I Want to Walk You Home" (Imperial 5606; 1959; #8 pop). Despite the drop-off in chart singles by the early 1960s, he remained in demand as a theater and nightclub attraction. Furthermore, his albums continued to sell well. When he moved to ABC-Paramount in 1963, Imperial retained many of them in the catalog, most notably *Rock and Rollin' with Fats Domino* (Imperial 9004; 1956), *Fats Domino – Rock and Rollin'* (Imperial 9009; 1956), *This Is Fats Domino!* (Imperial 9028; 1957), and *Million Sellers by Fats*



Fats Domino in the mid-'50s. Courtesy David A. Jasen

(Imperial 9195; 1962). He recorded for a number of other labels as well in the 1960s, including Mercury, Sunset, and Liberty/United Artists.

By the 1970s, Domino had cut back sharply on his concert tours, limiting his out-of-town work largely to Las Vegas and Lake Tahoe. His recordings were more widely available in England and Europe than at home; American fans often found it necessary to seek out import anthologies. He has continued to record and perform intermittently in recent years. His first major-label LP release in 25 years, *Christmas Is a Special Day* (1993), received critical acclaim but had limited sales.

FRANK HOFFMANN

DOMINO (LABEL) (I)

A double-sided, vertical-cut, seven-inch disc first marketed in June 1916 by the Domino Phonograph Co. of New York. Despite their small size, the records had a playing time of 2 1/2 minutes. The sale price was \$.33, the repertoire was pop and standard. A 10-inch disc, glossy red in color, appeared in February 1917, at \$.35. W.R. Anderson, 220 Fifth Avenue, did the distribution, which seems to have ceased around 1917.

DOMINO (LABEL) (II)



Plaza subsidiary Domino label, made from the mid-'20s through the early '30s. Courtesy Kurt Nauck/Nauck's Vintage Records

DOMINO (LABEL) (II)

A subsidiary label of the Plaza Music Co., issued from 1924 to 1933 by the Domino Record Co. of New York. Certain jazz releases were important, several of them by the New Orleans Jazz Band. But most of the repertoire was dance music and popular song. [Rust 1978.]

DONOVAN (LEITCH) (10 MAY 1946–)

Donovan was a highly derivative artist. He always appeared to be jumping on the latest stylistic bandwagon, be it commercial folk, folk-rock, protest music, pop-psychodelia, the singer-songwriter vogue, or even heavy metal. Nevertheless, his popularity was not unwarranted; he was an extremely gifted composer and projected considerable sincerity and warmth both live and on record.

Born in Glasgow, Scotland, Donovan relocated to London with his family at age 10. Following a year of college, he attempted to break into the music business by recording demos of his material. These recordings would enable him to land a regular slot on the British rock TV variety show, *Ready Steady Go*, in early 1965. The program provided a springboard to the U.K. pop charts.

Donovan's British recordings, combined with an appearance at the 1965 Newport Folk Festival, laid the groundwork for commercial success in America. Following the acoustic-flavored hits, "Catch the Wind" (Hickory 1309; 1965; #23), "Colours" (Hickory 1324; 1965; #61), and "Universal Soldier" (Hickory 1338; 1965; #53), Donovan — under the sure hand of produc-

er Mickie Most — began recording more rock-oriented songs. His chart singles — most notably, "Sunshine Superman" (Epic 10045; 1966; #1), "Mellow Yellow" (Epic 10098; 1966; #2), "Hurdy Gurdy Man" (Epic 10345; 1967; #5), and "Atlantis" (Epic 10434; 1969; #7) — and albums — *Sunshine Superman* (Epic 26217; 1966; #11), *Mellow Yellow* (Epic 26239; 1967; #14), *A Gift from a Flower to a Garden* (Epic 171; 1968; #19), *Donovan in Concert* (Epic 26386; 1968; #18), *The Hurdy Gurdy Man* (Epic 26420; 1968; #20), *Donovan's Greatest Hits* (Epic 26439; 1969; #4), *Barabajagal* (Epic 26481; 1969; #23), *Open Road* (Epic 30125; 1970; #16), and *Cosmic Wheels* (Epic 32156; 1973; #25; a dubious attempt at heavy metal) — featured a diversified palette of instrumental colors and mystical lyrics. Much of his flower-power aura derived from his conversion in 1967 to Maharishi Mahesh Yogi's brand of meditation — as opposed to drug use — as a means of mind expansion.

When the hits stopped coming, Donovan shifted his attention to scoring films, including *If It's Tuesday This Must Be Belgium* (1969), *The Pied Piper* (German, 1972), *Tangled Details* (animation feature, 1973), and *Brother Sun, Sister Moon* (1973). He also composed a theatrical revue, *7-Tease* (1975; the soundtrack was issued in 1974) and published a volume of poetry, *Dry Songs and Scribbles*, while touring and recording sporadically. In the early 1990s, the Manchester band, Happy Mondays, helped revive interest in his work; however, real commercial success has continued to elude him. To many of today's youth, he is best known as the father of actress Ione Skye (*Say Anything, River's Edge*), and actor Donovan Leitch, Jr.

FRANK HOFFMANN

DOOBIE BROTHERS

The Doobie Brothers switched personnel and musical styles on a regular basis; the band remained popular, however, throughout these changes. Although not an innovative act, the Doobies were a case in point that high quality recorded music can be derivative, if adequate attention is placed on songcraft, tight ensemble playing, and competent production values.

The band formed in 1969 as a northern California trio — guitarist/songwriter Tom Johnston, drummer John Hartman, and bassist Greg Murphy (replaced later that year by Dave Shogren, who in turn gave way to Tiran Porter) — named Pud. With the addition of singer/rhythm guitarist/songwriter Patrick Simmons in 1970, the Doobies began to gel. A demonstration tape led to a contract with Warner Bros., but the debut album, *The Doobie Brothers* (Warner Bros. 1919; 1971), was only marginally successful.

Toulouse Street (Warner Bros. 2634; 1972; #21; on the charts for 119 weeks), which included the hit singles “Listen to the Music” (Warner Bros. 7619; 1972; #11), and “Jesus Is Just Alright” (Warner Bros. 7661; 1972; #35), catapulted the Doobie Brothers into the public eye. These recordings — along with the next two LPs, *The Captain and Me* (Warner Bros. 2694; 1973; #7), and *What Were Once Vices Now Are Habits* (Warner Bros. 2750; 1974; #4) — portrayed a populist, laid-back biker band. Best-selling singles such as “Long Train Runnin’” (Warner Bros. 7698; 1973; #8), “China Grove” (Warner Bros. 7728; 1973; #15), and “Black Water” (Warner Bros. 8062; 1974; #1), exuded an infectious blend of funky roots rock and smooth arrangements that made them a fixture on both AM and FM radio.

The band’s sound began to evolve noticeably in the mid-1970s as talented new members were recruited. Jeff “Skunk” Baxter, a session guitarist formerly with Ultimate Spinach and Steely Dan, placed his stamp on the jazz/R&B-oriented *Stampede* (Warner Bros. 2835; 1975; #4). Another Steely Dan associate, vocalist/pianist/songwriter Michael McDonald, came aboard for *Takin’ It to the Streets* (Warner Bros. 2899, 1976; #8), endowing it and future releases — *Livin’ on the Fault Line* (Warner Bros. 3045; 1977; #10), *Minute by Minute* (Warner Bros. 3193, 1978; #1), and *One Step Closer* (Warner Bros. 3452; 1980; #3) — with a more urbane polish and broader instrumental palette. Thoroughly dominated by McDonald, *Minute by Minute* would win four Grammys: best pop vocal performance by a duo, group, or chorus, as well as record of the year, song of the year, and best arrangement accompanying vocalists (by McDonald) for “What a Fool Believes” (Warner Bros. 8725; 1979; #1).

Changing musical trends and other attractive career options for band members led to a breakup in 1982. Key members from both early and later editions of the Doobies reunited for selected concerts in 1987. An album, *Cycles* (Capitol 90371; 1989; #17) — which most closely approximated the early 1970s recordings and featured the hit single, “The Doctor” (Capitol 44376; 1989; #9) — was released in 1989. The band has remained active since that time, producing *Brotherhood* (Capitol 94623; 1991), *Rockin’ Down the Highway: The Wildlife Concert* (Sony Legacy 484452; 1996), and *Sibling Rivalry* (Pyramid; 2000).

FRANK HOFFMANN

DOO-WOP

Doo-wop, the popular name for vocal group rhythm and blues of the 1950s and early 1960s. The style generally includes the following musical qualities: group

harmony; a wide range of vocal parts; nonsense syllables; a simple beat; light instrumentation; and simple music and lyrics. Above all, the focus is on ensemble singing. Single artists fit the genre only when backed by a group (the possibility that the group may not be mentioned on the record label is immaterial). Solo billing simply means that this individual is more prominently placed in the musical arrangement (e.g., Dion, Bobby Day, Thurston Harris), as opposed to typical group productions.

Doo-wop emerged in the urban ghettos from the blending of rhythm and blues, gospel, and popular Black vocal group music in the post-World War II era. The style represented the culmination of many hours spent by teens — usually Black males — practicing vocal harmonies in school gyms, church basements, subway entrances, and on street corners. These young groups sought a piece of the American Dream via crossover success in the music business. From their perspective, the most direct route to success meant adapting white pop standards to contemporary Black vocal styles. In other words, they attempted to replicate the formula employed a generation earlier by Black groups like the Mills Brothers and the Ink Spots. The pronounced gospel and R&B traits within their work reflected the influences from childhood (church, social activities, etc.) that formed the core of their music education. Doo-wop features began emerging in African-American pop music during the 1948–1951 period. They can be discerned in R&B hits like the Orioles’ “It’s Too Soon To Know” (1948), and the Dominoes’s “Sixty-Minute Man” (1951). The doo-wop era began around 1952 — a time when the key musical qualities of the genre were all clearly in evidence — and remained artistically and commercially viable until the early 1960s. This timeframe can be subdivided into several phases of stylistic development.

1. Paleo-doo-wop (1952–1954). This subgenre retains many visible features of its stylistic ancestors; e.g., R&B in the Drifters’ “Money Honey”; gospel in “The Bells of St. Mary’s,” by Lee Andrews and the Hearts; Black pop vocal groups in the Platters’s “Only You.” These traits had yet to be synthesized into a truly singular style. Other notable records from this period included the Cadillacs — “Gloria” (1954), The Chords — “Sh-Boom” (1954; the cover by the Crewcuts became one of the biggest hits of that year), the Crows — “Gee” (1954), the Drifters — “Honey Love” (1954), the Harptones — “A Sunday Kind of Love” (1954), the Jewels — “Hearts of Stone” (1954), the Orioles — “Crying in the Chapel” (1953), and the Penguins — “Earth Angel” (1954).

2. Classical doo-wop (1955–1959). This phase featured tight and sweet harmonies; however, the lead singers lost much of the smoothness typifying

paleo-doo-wop recordings. Bass singers were given a more prominent role; in the past they had tended to function merely as part of the background harmony. The performers were generally quite young, featuring lyrics primarily concerned with young, idealistic love. Nonsense syllables were employed in the majority of songs. Instrumentation remained in the background, albeit with a heavy backbeat. Key recordings included the Clefones — “Little Girl of Mine” (1956), the Del Vikings — “Come Go With Me” (1957), The El Dorados — “At My Front Door” (1955), the Five Satins — “In the Still of the Night” (1956), the Flamingos — “I Only Have Eyes For You” (1959), the Heartbeats — “A Thousand Miles Away” (1956), the Monotones — “Book of Love” (1958), the Rays — “Silhouettes” (1957), the Silhouettes — “Get a Job” (1958), and the Willows — “Church Bells May Ring” (1956).

The classical period saw the development of a wide array of spinoff styles, in part a response to newly devised marketing strategies. These included:

a. Schoolboy doo-wop. The focal point here was an ultra-high tenor, usually a male in his early teenage years. While Frankie Lymon was the definitive interpreter from the standpoint of both commercial success and singing prowess, he has many imitators, including brother Lewis Lymon (the Teenchords), the Kodaks, the Schoolboys, and the Students. Among the notable hits were Little Anthony and the Imperials — “Two People in the World” (1958), Frankie Lymon and the Teenagers — “Who Do Fools Fall in Love” (1956), and the Schoolboys — “Shirley” (1957).

b. Gang doo-wop. Lead singers studiously avoided being smooth; rather, they seemed to swagger as they sang. Likewise, harmonies, though intricate, were rough in approach. Major hits included the Channels — “That’s My Desire” (1957), the Charts — “Desiree” (1958), and the Collegians — “Zoom Zoom Zoom” (1957).

c. Italo-doo-wop. Like African Americans, Italian Americans accorded music a prime place in their upbringing (through church). Although isolated white groups had appeared in the early 1950s (e.g., the Bay Bops, the Neons, the Three Friends), the first major wave of white doo-wop acts surfaced in 1958. This variant was distinguished by even tighter group harmonies, roughly-hewn tenors pushing their upper registers to produce a “sweet” sound, and the prominence of bass singers (the latter a precursor of the neo-doo-wop phase). Notable recordings included the Capris — “There’s a Moon Out Tonight” (1958; 1961), the Classics — “Till Then” (1963), the Elegants — “Little Star” (1958), and the Mystics — “Hushabye” (1959).

3. Pop doo-wop. Heavily influenced by the commercial mainstream going as far back as turn-of-the-century

barbershop quartets, this style had little in common with classic doo-wop other than tight harmony. Practitioners developed a number of ploys geared to making inroads into the pop market, most notably cover records, softening the doo-wop sound in order that it might reach a broader range of age groups, and jazzing up adult-oriented standards so as to appeal to youth. Among the more popular records in this vein were the Duprees — “You Belong to Me” (1962), the Echoes — “Baby Blue” (1961), the Fleetwoods — “Come Softly to Me” (1959), the Temptations (white group) — “Barbara” (1960), and the Tymes — “So Much in Love” (1963).

4. Neo-doo-wop (1960–1963). The impetus for this phase was the oldies revival (largely focused on doo-wop) which began in 1959. Although neo-doo-wop maintained the simple melody lines and preoccupation with love lyrics typifying the classical phase, the distinctive features of doo-wop were greatly exaggerated; e.g., a greater preponderance of falsetto leads, heavier and more pronounced bass singing. Instruments also figured more prominently in song arrangements. Notable hits included Gene Chandler with the Dukays — “Duke of Earl” (1961), the Devotions — “Rip Van Winkle” (1961; 1964), Dion with the Del Satins — “Runaround Sue” (1961), Curtis Lee with the Halos — “Pretty Little Angel Eyes” (1961), the Paradons — “Diamonds and Pearls” (1960), the Reflections — “(Just Like) Romeo and Juliet” (1964), the Regents — “Barbara Ann” (1961), and the Stereos — “I Really Love You” (1961).

The absorption of new talent from a variety of backgrounds spurred the development of new stylistic subcategories, including:

a. Tin Pan Alley doo-wop. Exposed to doo-wop as well as schooled in music composition, young songwriters (e.g., Gerry Goffin/Carole King, Barry Mann/Cynthia Weil, Jeff Barry/Ellie Greenwich), and producers (Phil Spector) created their own formula. They melded doo-wop conventions (e.g., tight harmony, pronounced bass, nonsense syllables), with more complex melodies, augmented instrumentation, and thoroughgoing production values. Key recordings included the Chiffons — “He’s So Fine” (1963), the Crystals — “Da Doo Ron Ron” (1963), the Raindrops — “The Kind of Boy You Can’t Forget” (1963), Randy and the Rainbows — “Denise” (1963), and the Tokens — “Tonight I Fell in Love” (1961).

b. Girl group doo-wop. With few exceptions (e.g., the Chantels, the Bobbettes, the Shirelles, and fronting male groups such as the Platters), women didn’t play a prominent role in doo-wop until the Tin Pan Alley variant achieved popularity. Notable hits included Pati LaBelle and the Blue Belles — “You’ll Never Walk Alone” (1963), the Cookies — “Don’t Say Nothin’ Bad About My Baby” (1963), and Reperata and the Delrons — “Whenever a Teenager Cries” (1964).

c. Garage band doo-wop. Denotes material recorded on substandard equipment. Representative examples included the Laddins's "Did It," and the Contenders's "The Clock."

d. Novelty doo-wop. Almost without exception, this genre encompasses humorous, uptempo material. Themes covered include fantasy (e.g., the Eternals' "Rockin' in the Jungle," the Cadets' "Stranded in the Jungle"), rebellion (e.g., the Coasters' "Yakety Yak"), fads (e.g., the Royal Teens' "Short Shorts"), and media heroes (e.g., Dante and the Evergreens's "Alley Oop").

e. Pseudo-doo-wop. This category refers to the doo-wop style minus the vocal group format. Major strains have included solo efforts (e.g., Ron Holden and the Thunderbirds' "Love You So," Rosie and the Originals' "Angel Baby"), and duos (e.g., Skip and Flip's "Cherry Pie," Don and Juan's "What's Your Name," Robert and Johnny's "Over the Mountain").

5. Post doo-wop (1964-). For all practical purposes, the genre ceased to function in a creative sense as elements associated with it virtually disappear from recordings. With few exceptions, words replaced nonsense syllables as background responses, harmony receded into the background, falsetto appeared less frequently, the bass was used less as a separate voice, instrumentation took on much greater importance, and melodies exhibited a much greater degree of variation. A number of groups — most notably the Drifters, the Four Seasons, and Little Anthony and the Imperials — crossed over into the pop mainstream. The primary innovations in vocal group singing now took place within the a cappella genre. [Gribin and Schiff 1992; Miller 1980.]

FRANK HOFFMANN

DOORS, THE

The Doors represented the darker side of psychedelic flower-power vision first identified with San Francisco bands such as the Jefferson Airplane and Quicksilver Messenger Service. Showcasing lead vocalist Jim Morrison's blatantly sexual posturing and frequently surrealistic lyrics, the band — more than three decades after its demise — has remained a highly marketable, pop culture phenomenon.

The Doors grew out of the shared musical vision of Morrison and keyboardist Ray Manzarek, both of whom were film students at UCLA. By early 1966 they had recruited drummer John Densmore and guitarist Bobby Krieger, and signed with Columbia Records. Not satisfied with their treatment by that label, they maneuvered a switch to Elektra later in the year. Their eponymous debut, *The Doors* (Elektra 74007; 1967; #1), was an eclectic — and

commercial — tour de force; in addition to the hit single, "Light My Fire" (Elektra 45615; 1967; #1; shortened version), the tracks included the updated blues of "Back Door Man" and "Soul Kitchen," the German theatrical piece "Alabama Song," an 11-minute Oedipal tone poem "The End," and the stream-of-consciousness ballad, "Crystal Ship." The second LP, *Strange Days* (Elektra 74014; 1967; #3), exhibited greater thematic unity, focusing on a nightmarish world populated by maladjusted misfits and loners.

Despite the inclusion of a number one single, "Hello, I Love You" (Elektra 45635; 1968), *Waiting for the Sun* (Elektra 74024; 1968; #1), revealed a considerable drop-off in artistic creativity. With Morrison's contribution increasingly compromised by alcohol and drug abuse, the band's work — particularly *The Soft Parade* (Elektra 75005; 1969; #6), with its pretentious title cut, an overblown attempt to reprise the epic reach of "The End" — bordered on self-parody. *Morrison Hotel/Hard Rock Café* (Elektra 75007; 1970; #4), represented something of a temporary diversion, exploring musical territory akin to roots rock 'n' roll. Perhaps heedful of widespread criticism emanating from the rock press that their best days were behind them, the Doors produced one more masterpiece — *L.A. Woman* (Elektra 75011; 1971; #9), with extended pieces like "Riders on the Storm" (Elektra 45738; 1971; #14; edited version issued as a single), and the title song exploring the jazz-rock fusion then in vogue — before Morrison died of a heart attack while residing in Paris. The remaining members released a couple of unsuccessful albums before breaking up. Although each has remained active in the music business, their greatest success has come from overseeing various archival projects involving Doors material. In 1991, Hollywood director Oliver Stone produced a feature film, *The Doors* — the soundtrack was issued on Elektra 61047, reaching number eight on the *Billboard* album charts — in response to continuing public fascination with the band. In addition to the release of many commercial video titles and a series of live recordings on their Blue Midnight label, Manzarek, Krieger, and Densmore were reportedly working with Ian Astbury — the Morrison-influenced former lead singer of the Cult — in 2002.

FRANK HOFFMANN

DOPPLER EFFECT

In audio speaker systems, the frequency shift caused when a high-frequency signal is being reproduced by the same speaker driver that is also reproducing another signal at a lower frequency. The resulting anomaly may be audible with certain test signals, but is rarely heard with musical program sources.

DORATI, ANTAL, SIR
(9 APR 1906–13 NOV 1988)

Hungarian/American conductor, born in Budapest on 9 Apr 1906; "one of the most prolific conductors on record, his total output of records exceeding 500" (Holmes). His debut came at age 18 in Budapest, after which he was on the staff of the Budapest Opera (1924–1928). Then he conducted the Dresden and Münster operas. After world tours he moved to the U.S. and became a citizen in 1947. He has held many posts: Dallas Symphony Orchestra, 1945–1949; Minneapolis Symphony Orchestra, 1949–1960; BBC Symphony Orchestra, 1963–1966; Stockholm Philharmonic Orchestra, 1966–1970; National Symphony Orchestra (Washington, D.C.), 1970–1977; Detroit Symphony Orchestra, 1977–1981; and the Royal Philharmonic Orchestra, 1975–1979. He was awarded the OBE in 1984. He died near Bern, Switzerland.

On record Dorati's crowning achievement was to do the complete Haydn symphonies with the Philharmonia Hungarica for Decca, in 1971–1974, on 48 LP discs. He has also recorded the complete Beethoven symphonies, for DGG, with the Royal Philharmonic. In 1956 he made a spectacular recording of the *1812 Overture* with the Minneapolis Symphony, using a real cannon in the finale. [Holmes 1988.]

DORFMANN, ANIA
(9 JULY 1899–21 APR 1984)

Russian pianist, born in Odessa. She studied with Leschetitzky and Isidor Philipp, and became a specialist in the romantic school. She had world tours, and made an American debut in 1936. She was the only female pianist to appear as soloist with a symphony orchestra conducted by Arturo Toscanini. After 1939 she was less active on stage, concentrating on teaching. She was on the Juilliard School faculty from 1966 to 1983. Her death came a year later in New York.

Dorfmann recorded in 1930 and 1931 for Columbia, in Britain, doing some lighter pieces by Schubert and Johann Strauss (DX 91 and DX 328). Among her finest records are the Mendelssohn *Songs without Words* (Victor LM-6128), and the Mendelssohn Piano Concerto with the London Symphony Orchestra (Columbia X-124; 1938).

DORIAN (LABEL)

New York based, and founded in 1988 by Craig Dory and Brian Levine, Dorian has crafted a catalog of more than 350 recordings on its two labels, Dorian and Dorian Discovery. Throughout its history the organization and its artists have been recipients of numerous

international accolades, awards, and citations. Distributed in over 30 countries, the company also licenses its content to record clubs and film and television producers for motion picture soundtracks, as well as to other record companies and producers of multimedia content. Dorian currently releases three to four new recordings per month, and is known for making use of the legendary acoustics of the Troy Savings Bank Music Hall, a 125-year-old National Historic Landmark. [Website: www.dorian.com.]

HOWARD FERSTLER

DORSEY, JIMMY
(29 FEB 1904–12 JUNE 1957)

American saxophone and clarinet player, and Big band leader, born in Shenandoah, Pennsylvania. He was a brother of Tommy Dorsey, with whom he shared the successful Dorsey Brothers Orchestra from 1934 to 1935, based on a less formal joint band that had started in 1928. They recorded for Decca, one of the numbers being "I'm Getting Sentimental Over You," later to be Tommy Dorsey's theme song. Following a dispute in 1935, the brothers went separate ways. Jimmy Dorsey's band was enormously popular, in large part because of the outstanding vocalists he engaged: Kay Weber, Bob Eberly, and Helen O'Connell. Among the band's finest records were its theme song, "Contrasts" (Decca 3198), "Green Eyes"/"Maria Elena" (Decca 3698), "Yours" (Decca 3657), "Amapola" (Decca 3629), and "Tangerine" (Decca 4123). The Latin-American style was prominent in those and other favorites of the group. The Dorsey brothers reunited in 1947 to make a biographical film about themselves, *The Fabulous Dorseys*, and were together in the Tommy Dorsey band in 1953. Jimmy Dorsey died in New York. Dorsey's jazz band sides for Decca are sampled on the CD *Contrasts* (Decca/GRP 626). A similar all-instrumental selection of radio transcripts was issued in 1998 by Rhino made between 1940–1950 (Rhino 75248). There are many reissues on various labels of his pop recordings featuring various vocalists.

DORSEY, TOMMY
(19 NOV 1905–26 NOV 1956)

American trombonist and Big band leader, born in Mahoney Plains, Pennsylvania. He was younger brother to Jimmy Dorsey, with whom he shared the successful Dorsey Brothers Orchestra and other activities. His most remarkable achievement was the development of "a virtuoso technique using a unique method of convex breathing that enabled him to maintain miraculously

long passages legato" (Slonimsky 1984). The result was a tone of astonishing sweetness that appeared to ignore the limitations of the instrument. But Tommy Dorsey's band had other strengths, including such instrumentalists as trumpeters Bunny Berigan, Ziggy Elman, and Pee Wee Erwin; clarinetist Buddy De Franco; and drummers Buddy Rich and Dave Tough. Connie Haines, Dick Haymes, Frank Sinatra, Jo Stafford, and the Pied Pipers provided outstanding vocals. Arrangers included by Oliver, Paul Weston, and Axel Stordahl. One clever type of arrangement had the band members sing a chorus as background to a solo vocal; it produced such hit records as "Marie" (Victor 25523; 1937), and "Who" (Victor 25693; 1937). Some of the best records with Sinatra were "I'll Be Seeing You" (Victor 26539; 1940), "I'll Never Smile Again" (Victor 26628; 1940), and "This Love of Mine" (Victor 27508; 1941). "Boogie-Woogie" was an all-time instrumental hit (Victor 26054; 1937). "Song of India" — a powerful instrumental arrangement by Dorsey and Red Bone, featuring Dorsey's trombone and Bunny Berigan's trumpet — is perhaps the finest recording of the orchestra (Victor 25523; 1937). Dorsey died in Greenwich, Connecticut.

Dorsey's recordings are available on several reissue CDs. Victor began a "complete" reissue series in the 1970s on its Bluebird reissue label, eventually issuing eight two-LPs sets covering recordings made from 1935 to 1939, but then the series was dropped. However, Victor did follow up with a second series of three two-LP sets, featuring all of Frank Sinatra's recordings with Dorsey, made between 1940–1942. Dorsey's major hits for Victor are anthologized on the CD *Seventeen Number Ones*, recorded 1935–42 (RCA 9973). Victor has reissued other Dorsey material from time to time, and there are many other smaller label reissues of this material, along with radio transcriptions and live performances.

DORY, CRAIG D. (1957–)

Cofounder, president/CEO, and director of engineering at Dorian Records. While in high school, Dory was a budding jazz musician. Even so, when he went off to Iowa State University he entered the honors program to study his other interest, mathematics, although he continued to pursue his musical interests. Upon graduating from ISU in 1980, he accepted a job offer from AT&T Bell Laboratories. While working there, he received an M.S. in industrial and operations engineering from the University of Michigan in 1981, and during this time he also began to cultivate his interest in recording music. In 1985, while still a full-time employee at Bell Labs, Dory was named director of engineering for the Musical Heritage Society and Musicmasters labels.

He left Bell in 1986 to pursue his new-found career as an independent recording engineer and producer. Before cofounding Dorian, he produced and/or engineered recordings for several different labels including Deutsche Grammophon, Virgin, Musical Heritage Society, Musicmasters, and Orion. He also produced live-concert recordings for New York's 92nd Street Y, WOR-TV in New York, National Public Radio (NPR), Public Broadcasting Service (PBS), and numerous other concert and performing organizations. During this period, he worked with numerous artists, including Dawn Upshaw, whose debut recording he produced and engineered.

As Dorian's chief engineer, Dory has crafted more than 200 CDs for the label. He is an active member of the Audio Engineering Society (AES) and the National Academy of Recording Arts and Sciences (NARAS). He is also a member of Early Music America (EMA), and sits on the classical/jazz advisory committee of NARM (National Association of Record Merchandisers).

HOWARD FERSTLER

DOT RECORDS (LABEL)

Country-pop label formed in 1951 by mail-order record dealer Randy Wood out of his Gallatin, Tennessee, home. The company enjoyed great success in the mid to late 1950s, primarily thanks to crooner Pat Boone's covers of rock hits for the white, teen market. Wood moved the operation to Los Angeles by the decade's end, and then sold the label to Paramount/Gulf and Western. They, in turn, sold the label to ABC, which revived the Dot name from time to time during the 1970s and 1980s. The Dot catalog is now part of Universal Music Group, which acquired the assets of ABC.

DOUBLE TRACKING

A technique in which the same musical material is recorded twice, with one signal superimposed on the other. The effect is to give the listener an impression of multiple performers. Guitarist Les Paul was among the first to use double tracking on a commercial recording, overdubbing several guitar and vocal parts on the hit pop recordings he made in the early 1950s with his wife, singer Mary Ford.

DOUGLASS, LEON F. (1869–7 SEPT 1940)

American inventor and recording industry executive. He worked for the Nebraska Phonograph Co., Omaha, then moved to Chicago, establishing the Chicago Talking Machine Co. (sold to Columbia in 1897). A

DRAMA RECORDINGS

promoter for Eldridge Johnson's Consolidated Talking Machine Co. in 1900, he produced national magazine advertising in the U.S. touting the company's new wax disc and offering free samples to gramophone owners. It was once thought that the name of his wife, Victoria, was the inspiration for the name of the Victor Talking Machine Company that succeeded Consolidated.

Douglass was a successful inventor in several fields: he developed the magnetic torpedo used in World War I, demonstrated color motion pictures in 1918, constructed a periscope camera for underwater photography, and at his death was researching the problem of communication between planets. He held 13 U.S. patents in the sound recording area, filed between 1890 and 1909, among them a coin-op (#431,883; filed 14 Feb 1890), a cylinder record duplicating method (#475,490; filed 17 Mar 1892, granted 24 May 1892), and the Polyphone record player (#613,670; filed 14 Feb 1898, granted 8 Nov 1898). The Polyphone featured two sapphire stylus reproducers, each tracking the same cylinder groove, but 3/8 to 1/2 inch apart, each stylus leading to its own horn. Douglass died in San Francisco.

DRAMA RECORDINGS

SEE LITERARY RECORDINGS

DOWD, TOM (1925–27 OCT 2002)

Dowd was a famed recording engineer long associated with Atlantic Records. He was born in Manhattan; his father worked in the theater as a producer and his mother was trained in opera. Dowd played piano as a youth, but pursued a degree in physics at Columbia; during World War II, he worked there as part of the project to develop the atomic bomb. A job as an engineer with the Voice of America following the war launched his career in recording, and he soon joined the fledgling Atlantic label. Dowd remained there for 25 years as the label's chief engineer, overseeing the label's trademark crisp sound. He also was responsible for the label's early investment in new recording technologies, including stereo recording equipment. Dowd built the label's eight-track console, the first major commercial studio to employ this technology, in the 1960s. Acts that Dowd recorded ranged from contemporary jazz groups like the Modern Jazz Quartet and John Coltrane's groups to pop stars Aretha Franklin, Dusty Springfield, and the rock group Cream. In the late 1960s, Dowd went freelance, relocating to Miami and working out of Criterion Sound Studios. In 2002, he was awarded a Grammy lifetime achievement award. He died in Aventura, Florida, outside of Miami.

CARL BENSON

DOWNLOAD

A generic name given to anything that is received via computer network. Most often the network in question is the Internet, where downloads might take the form of audio files, video files, and so on. With the rise of the Internet as a major factor in music piracy, downloads became the subject of much debate in the late 1990s as MP3 became the simplest and easiest way to transfer music across email, the web, or any other facet of the Internet in high sound quality. Other downloads might be executable files which, in the music industry, have been used as promotional tools for longer than MP3s. Executable files are simply computer programs such as screensavers or browser add-ons.

IAN PEEL

DR. DRE (18 FEB 1965–)

Andre Young, better known as Dr. Dre, played a major role in steering rap away its preoccupation with partying, politics, and the exploration of new sonic effects to a celebratory form of gangsta rap. As a record producer, he modified the influential George Clinton school of funk into a stretched-out, lazier variation that he termed "G-funk." He was also a high-profile label executive; first with Death Row Records — cofounded in 1992 with Suge Knight; it provided the template for hip-hop aesthetics in the mid-1990s — and, in the late 1990s, Aftermath Records.

Dr. Dre first attracted attention in the early 1980s working south central Los Angeles house parties and clubs as part of the World Class Wreckin' Cru. By 1986, he had teamed with Ice Cube to supply compositions to Ruthless Records. The label's owner, rapper Eazy-E, together with the twosome, formed N.W.A. (aka Niggaz With Attitude). The group released two albums, *N.W.A. and the Posse* (Marcola/Rams Horn 5134; 1987), and *Straight Outta Compton* (Ruthless/Priority 57102; 1989; #37; double platinum), the latter of which attracted widespread publicity due to its incendiary lyrics, most notably on the heavily censored track, "Fuck tha Police." With the departure of Ice Cube, N.W.A. released two more records — the EP *100 Miles and Runnin'* (Ruthless/Priority 7224; 1990; #27; platinum), and *Efil4zaggin* (Ruthless/Priority 57126; 1991; #1; platinum) — featuring Eazy-E's comic book lyrics set against Dre's thickly textured funk arrangements.

Intent on pursuing a solo career, Dre released his debut solo album, *The Chronic* (Death Row 57128; 1992; #3), which profoundly modified the hip-hop landscape with its G-funk sound. He then shifted his focus to production work, providing the music to several film soundtracks — most notably *Above the Rim*

(1994), and *Murder Was the Case* (1994) — and assisting protégé Snoop Doggy Dog with *Doggystyle* (Death Row/Interscope 92279; 1993; #1), Warren G, and Blackstreet, among others.

Alienated by the gangster behavior of Death Row partner Knight, Dre severed all ties with the label in summer 1996 and formed Aftermath in association with Interscope Records. While the new label was not an immediate success, Dre slowly returned to public favor with a more mainstream pop approach on the LPs *Dr. Dre Presents...The Aftermath* (Aftermath/Interscope 90044; 1996; featuring his production work with various artists), and *2001* (Aftermath/Interscope 490486; 1999; #2; also issued in “clean” and “instrumental” versions). In 1997, Dre discovered a young, white rapper from Detroit known as Slim Shady aka Eminem; he signed him to Aftermath and produced his first album, and Eminem became one of the most successful rap stars of the turn of the 21st century.

FRANK HOFFMANN

DRG (LABEL)

Founded in 1976, Digital Recording Group initially released an anthology of legendary recordings from the vaults of MGM Records. Notable recordings include soundtracks to *Cinema*, *Diva*, and the Merchant Ivory hit, *A Room with a View*. In addition to film soundtracks, DRG is regarded as the major record label of several legendary cabaret performers including Tony and Grammy winner Barbara Cook, Tony award winner Faith Prince, MAC award winners Karen Akers, KT Sullivan, and Julie Wilson, as well as jazz greats Carol Sloane and the Ralph Sharon Quartet. The orientation of the label continues to be musical theater recordings, and DRG has recorded nearly 30 Broadway, Off-Broadway and touring shows. [Website: www.drg.com.]

HOWARD FERSTLER

DREAMWORKS RECORDS (LABEL)

SEE GEFFEN, DAVID

DRIFTERS, THE

With the possible exception of the Dells, the Drifters were more successful in adapting to stylistic changes within the pop music scene than any other doo-wop group. Beginning as a rhythm and blues act in the early 1950s, they shifted to a more pop-oriented sound to remain leading hitmakers throughout the classic rock ‘n’ roll era, and were still regularly denting the



The Drifters in the mid-'50s. Courtesy David A. Jasen

charts at the peak of the British Invasion, folk rock, and Motown Soul.

Clyde McPhatter, formerly lead singer with Billy Ward’s Dominoes, formed the Drifters in 1953 with second tenor Gerhard Thrasher, baritone Andrew Thrasher, and bass Bill Pinkney. Before McPhatter entered the Army in the mid-1950s, the group enjoyed a string of R&B hits featuring his smooth, sexy tenor voice, most notably “Money Honey” (Atlantic 1006; 1953; #1 R&B 11 weeks), “Such A Night”/“Lucille” (Atlantic 1019; 1954; #2/#7 R&B), “Honey Love” (Atlantic 1029; 1954; #1 R&B 8 weeks, #21 pop), “Bip Bam” (Atlantic 1043; 1954; #7 R&B), “White Christmas” (Atlantic 1048; 1954/1955/1956; #2/#5/#12 R&B), “What ‘Cha Gonna Do” (Atlantic 1055; #2), “Adorable”/“Steamboat” (Atlantic 1078; 1955; #1/#5 R&B), and “Ruby Baby” (Atlantic 1089; 1956; #10).

Following a period of diminished record sales — and various personnel changes — the group disbanded in 1958. Because the Drifters had signed a multi-year contract with New York’s Apollo Theater, their manager recruited another group, the Five Crowns, to fill the void. Assisted by the songwriting/production team of Leiber and Stoller, the new Drifters quickly outstripped their predecessors with releases like “There Goes My Baby” (Atlantic 2025; 1959; #2), reputedly the first R&B recording to utilize a sophisticated string arrangement, “Dance with Me” (Atlantic 2040; 1959; #15), “This Magic Moment” (Atlantic 2050; 1960; #16), “Save the Last Dance for Me” (Atlantic 2071; 1960; #1), and “I Count the Tears” (Atlantic 2087; 1960; #17).

DROP-IN

When lead singer Ben E. King — who would record the solo hits “Spanish Harlem” (Atlantic 6185; 1960–1961; #10), and “Stand By Me” (Atlantic 6194; 1961; #4) — departed, the Drifters remained successful with recordings such as “Up On the Roof” (Atlantic 2162; 1962; #5) and “On Broadway” (Atlantic 2182; 1963; #9), which featured Rudy Lewis singing lead. Following his death in 1963, Johnny Moore became the frontman for bestsellers such as “Under the Boardwalk” (Atlantic 2237; 1964; #4), and “Saturday Night at the Movies” (Atlantic 2260; 1964; #18).

By 1967 the hits had stopped coming, although the group continued to perform well into the 1970s. The act was revived in the mid-1970s to capitalize on the oldies circuit. Releases of both new material and updated versions of the group’s old hits, however, failed to compete with regular reissues of the classic Drifters recordings.

FRANK HOFFMANN

DROP-IN

The insertion of a new signal on a recorded track of magnetic tape by playing the tape to a desired point and switching to the record mode.

DROPOUT

A very brief reduction in reproduced signal level on a magnetic tape, resulting from dust or some fault in the tape coating. Its magnitude is expressed in terms of decibel loss and length of time. “Dropout count” refers to the number of dropouts on a given length of tape.

DRUGOLA

SEE *PAYOLA SCANDAL OF THE 1950S*

DRUM AND BASS

Drum and Bass evolved out of the desire on the part of Black British club goers to have a music with an identity apart from the then-prevalent African-American house and techno styles. First appearing in London dance venues in the early 1990s, Drum and Bass — also known as Jungle — was a fast-paced, kinetic music featuring a predominance of drum loops. Emerging from the Ecstasy culture, it incorporated elements of hardcore techno, hip-hop, soul, jazz, and reggae afterbeats. Whereas house and techno were built around standard time signatures, particularly 4/4, Drum and Bass — like jazz — was founded on syncopation, that is, an emphasis on the offbeat.

Furthermore, the focal center of the genre, its rhythmic groove, preempted the role of melody, with instrumental lines serving merely as ornamentation.

Drum and bass is generally believed to have originated from the late 1980s to early 1990s work of Club Rage deejays Fabio and Grooverider. Their approach consisted of melding the speeded-up acid house (resulting from increased usage of cocaine and other chemical stimulants by club patrons) with the nuances of contemporary Black music forms. These experiments were made possible by new developments in sampling and sequencing.

As Drum and Bass became more entrenched in British clubs, stylistic offshoots developed by the mid-1990s. The complex studio creations of LTJ Bukem — whose releases include the dance singles collection *Logical Progression* (Good Looking 124106; 1996), and *Journey Inwards* (Kinetic 54653; 2000) — were referred to as “Intelligent Drum and Bass.” The sub-genre was also mined by DJ Rap — the Singapore native Charissa Saveiro who blended ethereal backdrops with pounding rhythms in *Learning Curve* (Columbia 69553; 1998) — and the London duo, 4 Hero, who achieved a fusion of jazz-rock, German synth-rock, and processed breakbeats in albums such as *Parallel Universe* (Reinforced 4; 1994), and *Two Pages* (Mercury 558465; 1998; #38 UK).

Goldie helped pioneer a related form, Ambient Jungle, utilizing symphonic flourishes that manipulated the listener’s perception of time through a series of stretched and compressed musical samples. His breakthrough LP, *Timeless* (London 828646; 1995; #7 UK), almost singlehandedly stimulated heavy print and broadcast media coverage of the Drum and Bass phenomenon, as well as countless imitators.

FRANK HOFFMANN

DRUM MACHINE

The drum machine or beat box started as a simple studio tool but became an integral part of hip-hop culture in the early 1980s. As Malcolm McLaren noted on the sleeve to his early hip-hop hit “Buffalo Gals,” all a kid needed to create this new style of music was a pair of decks to scratch records and a drum machine to pump out a beat. By the mid-1980s musicians unions were up in arms at the thought of drum machines making traditional, “real” drummers redundant. But at the same time musicians such as Peter Gabriel proved instead that this technology could play its own part in music. His anti-apartheid anthem “Biko” started with a stark, solitary drum machine and finished bolstered by “live” African percussion. The very sounds that certain drum machines produce have inspired whole cultures and genres of music. Acid house would have

been nothing without the bass drum sound of a Roland TR-808 drum machine, as evidence by the success of experimental dance outfit 808 State, who named themselves after the device.

IAN PEEL

DSP (DIGITAL SIGNAL PROCESSING)

Any recording or playback system that makes use of digital technology to handle program sources in any number of ways. In addition to digital equipment designed for recording and mixing purposes, contemporary technologies that involve DSP include DAT, the compact disc (CD), the DVD, Dolby Digital, DTS, DVD-A, and SACD. DSP is also well known for its use in consumer-oriented, home-playback signal processors, and involves the synthesizing of concert hall, nightclub, auditorium, and similar environments from two-channel audio sources, or even the enhancement of 5.1-channel source material.

HOWARD FERSTLER

DTS (DIGITAL THEATER SYSTEMS)

A movie theater and home-theater audio format that is similar in concept to, but technically different from, Dolby Digital (DD). Like DD, it involves up to 5.1 channels of data-reduced audio coding, but does so at a higher data rate than the Dolby version. Whether this results in superior sound is the subject of debate in the audio community. The first movie to make use of a DTS soundtrack was *Jurassic Park*, in 1993.

See also **Surround Sound**

HOWARD FERSTLER

DUAL GEBRÜDER STEIDINGER

A firm established in 1900 in St. Georgen, Germany, by Christian Steidinger. Originally devoted to clock making, the company turned to gramophone motors in 1906. Its successful spring motors were modified in 1927, resulting in a combination electrical-mechanical drive system. By 1976 the firm was employing 3,500 persons in 12 factories, making turntables, amplifiers, tuners, cassette decks, and complete audio systems. About half of its production is exported. [Borwick 1976.]

DUAL TRACK

SEE **TRACK**

DUB

An early ancestor of Drum and Bass, dub — or “dub reggae” as it was sometimes called — also provided the impetus for mixing, sampling, and rapping. The term represents a derivation of “dub acetate,” a recorded song mix intended for disc jockey preview at sound-system dances.

The practice of distributing prerelease “dubs” arose in the mid-1950s in Jamaica; by the early 1960s, deejays vied for the opportunity to play them at public venues. Later in the decade, the “instrumental” — a mix of a hit song without the singing — had become a fixture at street dances. By the 1970s, these mixes had been superseded by the “version,” the rhythmic portion of an original track used for deejay “toasting” (an early form of rapping), and/or instrumental ornamentation. Singles were now released with a “version” of the main track on the “B” side featuring sonic embellishments by an assortment of producers, engineers, and deejays.

The first fully realized dub recordings, which utilized a wide range of studio effects, were created in the early 1970s by electronics engineer Osbourne “King Tubby” Ruddock. The success of *Blackboard Jungle Dub* (Clocktower 115; 1973), a collaboration with Lee “Scratch” Perry, served notice that his studio was the preferred option for producers requiring dub mixes of their tracks. His approach consisted of ample equalization and reverb accented by the layering of instruments and/or vocals that were dropped in and out of the mix in dramatic fashion. *Super Ape* (Island 9417; 1976) includes perhaps his most imaginative collection of studio effects.

Tubby’s innovations gave rise of an entire school of studio mixers, including Mikey Dread, Tapa Zukie, Bunny Lee, Prince Jammy, and Scientist Brown. Perry, the most influential of Tubby’s associates, is heard to best advantage on *Lee Scratch Perry: Arkology* (Island 524379; 1997), a three-CD collection of hits, mixes, dubs, and unreleased material from his Black Ark studio between 1976–1979.

In addition to Bob Marley and the Wailers — whose work owed much to Perry’s producing skills — dub sets by reggae bands such as Steel Pulse, Aswad, and Misty In Roots were a major influence in the development of many 1980s British dance genres, including House, Techno, and Drum and Bass. The vital missing link in this evolutionary process was the work of British dub producers, most notably Adrian Sherwood and the Mad Professor, who incorporated a host of new stylistic elements such as Indian music and Trip-Hop. In New York, Kingston native Clive “Kool Herc” Campbell pioneered the role of deejays and instrumental breaks in the early 1970s, providing the impetus for the rise of hip-hop culture.

FRANK HOFFMANN

DUBBING (I)

DUBBING (I)

Copying or rerecording; as a noun, the recording thus obtained.

DUBBING (II)

Revoicing the dialogue of a film track into another language, or by a different artist in the original language.

DUBBING (III)

Recording additional parts on previously taped material (known also as overdubbing).

DUBBING (IV)

Making a test pressing, known as a dub.

DUBOIS, TIM (4 MAY 1948–)

Tim DuBois is partners with Tony Brown in Universal South, a Nashville-based record label. He is a certified public accountant, holds a master's degree from Oklahoma State University, and has written 20 country singles, including five number ones. He was the first head of Arista Nashville, which sold 80 million records in its first 11 years, with artists like Alan Jackson, Diamond Rio, and Brooks and Dunn. *Entertainment Weekly* magazine named him one of the entertainment industry's 101 most powerful people. He sits on the boards of the Country Music Association, the Academy of Country Music, and the National Academy of Recording Arts and Sciences.

PAUL FISCHER

DUCHIN, EDDY

(10 APR 1910–9 FEB 1951)

American big band leader and pianist, born in Cambridge, Massachusetts. At age 21 he was directing his own band and playing solo parts, employing a simple melodic delivery, often with one finger on the tune. He had a significant engagement at the Congress Hotel, Chicago, in 1934, and went on to radio (including the *Kraft Music Hall*), and motion pictures. Duchin became one of the most popular performers of the period 1934–1940. He recorded for RCA Victor from 1933 to 1936, and then moved to Brunswick (a subsidiary label of Columbia), where he continued to record through 1942. "My Twilight Dream" (Columbia 35314; 1939), was among his many acclaimed records. He died in New York. The *Eddy Duchin Story* was a film made of his career, featuring

Carmen Cavallaro's piano on the soundtrack (1956). His son is the pianist Peter Duchin. His Victor recordings have been reissued on several compilations, notably Diamond Cut 309. His Columbia/Brunswick recordings have been reissued on *Dancin' with Duchin* (Collectables 7449), among other places.

DUCKING

In recording, the technique of adding one signal to another without increasing total dynamic level, as when a voiceover is dubbed onto music.

See also Dubbing (III)

DUCRETET ET CIE

A French firm of instrument makers, which produced a "plate phonograph" (i.e., a tinfoil disc player) in 1879. The company also marketed a tinfoil phonograph for cylinders. The disc player was ingeniously designed to account for the change in groove speed from edge to center of the record. Little is known of these products or their commercial success. The machines were sold for 100 francs (a hand-driven model) or 550 francs (a spring-driven model). [Chew 1982.]

DUCRETET-THOMSON (LABEL)

A French record, issued by Decca in Britain from October 1954. The repertoire focused on world music, including UNESCO recordings. In 1958 the label made its final appearance in the English catalog. [Bryant 1962.]

DUDLEY S.H. (CA. 1865–1947)

American operatic and popular singer, born Samuel Holland Rouse in Greencastle, Indiana. He sang in 72 operas for 34 different companies, accumulating 3,742 performances as a utility buffo. Dudley was heard on Berliner's seven-inch record #01021, "In Old Ben Franklin's Day" (26 Feb 1900), and on Eldridge Johnson's first 10-inch Monarch record, #3001 of 1901: "When Reuben Comes to Town." He made other Berliners in 1902, then recorded for Edison, doing solo and quartet work, making as many as 85 cylinders in one day. The first Edison was "Dreaming, Dreaming" (#1150). In London, in 1902, he recorded with his Hayden Quartet for the Gramophone Co. Back in America he was engaged by Calvin Child as assistant director of recording for Victor. One of his tasks was to edit the annual Victor catalog and the

Victor Book of the Opera (first edition 1912). He retired in 1919.

Most of Dudley's solo recordings were comic numbers, many with whistling. A notable example was the "Whistling Coon," a duet with Billy Murray. He sang ballad duets with Harry Macdonough, such as "Red Wing," a song in the style of an American Indian melody, that became one of the best-selling discs of its time. That number was coupled with the Hayden Quartet rendering of "Rainbow," an authentic Indian melody. Dudley used the pseudonym Frank Kernell on some Victor discs. Dudley is not to be confused with the Black vaudevillian/performer Sherman H. Dudley.

DULCEPHONE

See *APOLLO (I)*

DUMMY HEAD STEREO

Also known by the German name "Kunstkopf." A process of recording in which microphones are placed in the ears of a model head. The earliest reference to the technique was in a 1927 U.S. patent application by Bartlett Jones of Chicago.

See also *Binaural Recording*

DUMPING

The sales practice of remaindering records at a discount.

See also *Rack Jobber*

DUNCAN, TODD

(12 FEB 1903–28 FEB 1998)

American baritone, born Robert Todd Duncan in Danville, Kentucky. He graduated from Butler University, Indianapolis, Indiana, and taught music in public schools. In 1930 he received a master's degree from Columbia University, and became a professor of music at Howard University in Washington, D.C. He sang in New York with the Aeolian Negro Opera Co., and attracted the attention of Olin Downes, who recommended him to George Gershwin. As a result, Duncan was selected to sing the lead in *Porgy and Bess* (1936). Duncan did other Broadway work, and appeared with the New York City Opera; he retired from the stage in 1965 after singing at President Lyndon Johnson's inaugural ceremony. He died in Washington, D.C. His principal recording is the com-

plete *Porgy and Bess* (Decca #A145, four 78s). He also recorded for British Columbia in the 1930s, and for Philips in the 1940s.

DUNCAN SISTERS

American singing actresses and vaudeville duo, consisting of Rosetta and Vivian Duncan, both born in Los Angeles around 1900. Their sister Evelyn performed with them at first. Rosetta and Vivian appeared at the Fifth Avenue Theater in New York in 1917, and in New York plays through 1922; they were also in London in 1921. Their greatest success was in the play *Topsy and Eva*, for which they wrote the music and lyrics; it opened in San Francisco on 9 July 1923, and then broke the box office record at Chicago's Selwyn Theater. In New York the play ran for 159 performances, starting on 23 Dec 1924. A (silent) movie based on it premiered in June 1927 at Hollywood's Egyptian Theater.

The sisters made records for HMV in 1922, Victor in 1926–1927 and 1930, Columbia in 1928 and 1931, Parlophone in 1937, and for their own Duncan Disc Co. in 1947. There were also some 1928–1929 Vitaphone talkies, no longer extant. Their outstanding hits were from *Topsy and Eva*: "Rememb'ring"/"I Never Had a Mammy" (Victor 19206; 1923), and "The Music Lesson" (Victor 19050; 1922).

DUNHILL (LABEL)

SEE *ADLER, LOU*

DUNLAVY, JOHN (20 JAN 1929–)

Born in Wichita, Kansas, Dunlavy is highly regarded loudspeaker system designer. He majored in physics at St. Mary's University, and further majored in electrical engineering at the University of Texas, San Antonio. Before professionally entering the field of audio in 1972, he invented several new types of antennas, including the basic log-periodic design, a cavity-backed spiral, the passive-network array, the active-network array, the "time-domain" array, etc., and holds several U.S. patents in the field. He also holds patents in the audio field, the two best known being one that involves the use of acoustical absorb-ing material to mitigate the effects of cabinet edge-diffraction and one covering the design of high performance audio cables. He has also published several papers on audio and other topics. While living in Australia from 1981 to 1990, he founded Duntech, a high-end-oriented speaker company. He then returned to the U.S., to Colorado, and founded Dunlavy Audio Labs in 1992, a high-end

DUO-ART

loudspeaker company which he currently heads as its CEO and director of R&D.

HOWARD FERSTLER

DUO-ART

A reproducing piano made by AEOLIAN CO.

DUOPHONE

A line of gramophones produced in Britain by C.L. Newland, beginning in March 1922, then by the Duophone Syndicate from July 1922. The firm was at 63 Queen Victoria Street, London. "Duo" refers to the special feature of the machines, which was their double soundbox. Success of the gramophones, and of Duophone unbreakable discs — mostly of dance music — sold at 1st 6d, was temporary. In 1928 Duophone and Brunswick, both failing, shared offices — two separate companies operating as one. In June 1929 the company went into receivership, heading toward eventual liquidation in June 1930.

FRANK ANDREWS

DUO-TRAC

A soundtrack recorded on reels of tape (not a motion picture film), made by British Ozaphane, Ltd., based on certain French patents, demonstrated 15 Feb 1937 in London. It was made of cellophane, 4 millimeters wide, and played 30 minutes on a seven-inch reel, or 60 minutes on a nine-inch reel. For home use, there were audio-only versions of prerecorded classical and dance music; those "reel records" were playable on the Cellophone. [Andrews 1984/4.]

DUPLEX (I)

A table model Pathéphone with two turntables, marketed in 1912.

See also Pathé Frères Compagnie

DUPLEX (II)

A soundbox sold by Favorite in summer 1912; it played with a needle for lateral-cut discs or sapphire for vertical-cut discs.

DUPLEX PHONOGRAPH CO.

A Kalamazoo, Michigan, firm active from 1906 to ca. 1911. It made a double-horned, double-reproducer disc machine and disc records. The machine, incorporating

devices patented by Charles E. Hill, was named Duplexophone. (Hill's patent application was filed 20 Mar 1903; patent #773,740 was granted 1 Nov 1904.) Duplexophones were first made in 1905 in Lincoln, Nebraska, then by the Kalamazoo Novelty Co., and finally by the Duplex Phonograph Co. Col. F.D. Eager was general manager.

Although promotion of the Duplexophone tended to distort reality — claiming, for example, that its double-diaphragm prevented half the sound waves from being wasted as they were on single diaphragm phonographs — the claim of "double volume of sound" was perhaps closer to the mark. Certainly the twin horns, each 30 inches long with a 17-inch brass bell, had a high volume capacity. The horns were attached directly to the reproducer, without a tone arm, a potential weakness that was cleverly exploited in advertising as a favorable feature: "no swing arm to cause harsh, discordant, mechanical sounds." But the best selling point may have been the \$29.95 sales price, less than the Edison Home (cylinder) phonograph or the Victor disc models of the day. (Victor's table model Victrola did not appear until 1911.) Customers were also attracted by the moneyback guarantee of satisfaction.

An extensive catalog of recordings was issued by Duplex. One issue of ca. July 1906, described in Petty, listed about 2,000 discs. Most of them were Columbia and Victor records, selling at their regular prices. Others were pressed by Columbia, International Record Co., or American Record Co., and issued with a Kalamazoo Record label. The material was primarily popular vocal and popular band repertoire, but Victor Red Seals and Columbia Grand Opera discs were also available.

After moderate success, Duplex encountered a court challenge from the Victor Talking Machine Co. (5 Feb 1907) over violations of the basic Berliner gramophone patent, U.S. #534,543. On 2 Apr 1907 the Duplex plant was closed, following an injunction issued in favor of the Victor Co. A second suit by Victor, filed in January 1908, alleged violation of patent #624,301 (which covered a double-horned graphophone made by Charles G. Conn). It appears that Duplex remained in business after the shutdown of 1907, at the River Street address, but it was finally forced to close down permanently by 1911. C.Q. De France was the last owner of the firm. [Paul 1984; Petty 1984.]

DUPLEXTONE NEEDLE

A needle marketed in 1912, with the capability of playing either loudly or softly; loud play resulted when the needle was positioned flat, soft play from a perpendicular position relative to the disc surface.

DUPRÉ, MARCEL (3 MAY 1886–30 MAY 1971)

French organist, born in Rouen. He studied with his father, then with Felix-Alexandre Guilmant, Louis Vierne, and Charles Widor. In 1920 he played 10 recitals from memory, covering all the works of J.S. Bach. After a New York debut in November 1921 he made American and world tours. Dupré was professor of organ at the Paris Conservatory in 1926, and organist at Saint Sulpice, Paris, from 1934 to 1971. From 1954 to 1956 he was director of the Paris Conservatory. He was also a prolific composer.

Dupré recorded 78s for Victor, mostly of J.S. Bach; there were eight titles in the 1940 catalog. On LP he made discs for Mercury (Bach, Franck, and Saint-Saens), and Westminster (Widor). He died in Meudon, near Paris.

DUPREZ, FRED (6 SEP 1864–27 OCT 1938)

American comedian, born Frederick August Duprez (pronounced by him as Du-pree) in Detroit. He did theater work in Brooklyn, after some youthful years as a cabin boy, coal passer, and sailor; and was finally successful on stage as a substitute for a canceled act. By 1907 he was an established touring comic. He appeared in London in 1908; in France (performing in French), and in Germany (performing in German).

His first disc was issued in 1908 for the Indestructible label; it was followed by Columbia A633 (1909): "A Vaudeville Rehearsal." Other labels he worked for were Indestructible and U-S Everlasting. "Happy Tho' Married" (Edison Blue Amberol 2373; 1914), was a great success, selling in the millions. It appeared on Edison Diamond Disc 50254 and also on Columbia A1516. Duprez moved to Britain and continued his career, recording there for Columbia and World Record, Ltd. He died during a transatlantic crossing in 1938. [Walsh 1950/6–7.]

DURANOID CO.

A Newark, New Jersey, firm that made the new shellac composition disc for Emile Berliner in 1897. Duranoid as a trade name was still applied to 78-rpm records into the 1950s. Its composition was shellac, lamp-black, pyrites, and a binder of cotton flock.

DURA-TONE RECORD (LABEL)

In December 1922 the Dura-Tone Record Co. was formed by the president of Standard Music Roll Co. of Orange, New Jersey. Dura-Tone's offices were in Newark. Discs were announced to be laminations of

flexible fibrous material coated with shellac; but there is no further information about the product or the firm.

FRANK ANDREWS

DURIUM (LABEL)

An inexpensive line of celluloid or cardboard discs marketed by Durium Products (G.B.), Ltd., Slough, from 1932 to 1936. Similar in concept to the American Hit of the Week label, Durium produced one new issue each week, sold on newsstands (until 1933). Repertoire was primarily dance music, but there were also language records and children's records; price was as low as "3 records for 6d." The dance material was primarily by Lew Stone's orchestra, with vocals by Al Bowlly. Durium and its successor firm, Dubrico, Ltd., also made some advertising records, both for their own products and for others. Those included a spoken commercial (with a musical segment) for the North Eastern Electric Supply Co. in Newcastle-upon-Tyne, and one for Ford automobiles. [Rust 1978.]

DURIUM PRODUCTS CORPORATION

A New York firm. On 23 Sep 1930 Durium's request for two trademark registrations was granted by the U.S. Patent Office: "Durium" (for phonograph records), and "Hit-of-the-week" (for phonograph needles). In practice the record issued by the firm had the name Hit of the Week, and the steel needles sold were



Durium made a special-composition disc designed to be sold on newsstands and for custom pressings. Courtesy Kurt Nauck/Nauck's Vintage Records

DVD

called Durium. But the name "durium" (not trademarked) was also the name given to the material of which the Hit of the Week discs were made: a fiber paper with a synthetic resin lamination. The composition of the disc — which offered tensile strength in an unbreakable, flexible product—resulted from an invention by Hal T. Beans, a Columbia University chemistry professor.

Durium marketed 10-inch Hit of the Week records from February 1930 (after a false start with a seven-inch label titled Broadway) to June 1932. Early prosperity gave way to receivership in 1931, as the Irving Trust Co. and Arthur S. Jones were appointed by the New York Supreme Court to "continue the manufacture of records and attempt to liquidate the claims of creditors." At that time Durium claimed to own patents in 57 countries and to have book assets of \$500,000 with liabilities of between \$350,000 and \$400,000. Weekly distribution of the discs continued, with some of the publishers responding favorably to a request from Irving Trust to reduce the royalty charged to Durium.

Then in May 1931 it was announced that the Irwin-Wasey Advertising Agency had bought the record company, apparently "for a group of preferred stockholders in Chicago." Hit of the Week continued to appear on the newsstands, from August 1931 in a new longer-playing (five-minute) format. Phil Spitalny was placed in charge of recordings for Durium in November 1931, and a strenuous effort was made to recruit top name artists for the discs. But sales of Hit of the Week, at first about 500,000 per week, fell steadily, and reached a low of about 60,000 per week in 1932. Concerns about the impact to be made on Durium sales by the new RCA Victor low cost label (Elektradisc) helped in the decision to discontinue Hit of the Week.

The firm also engaged in the manufacture of custom recordings as promotional and advertising material. A four-inch disc was produced to advertise *College Humor* magazine, and similar items were made for *Redbook* and Chevrolet. [Waters 1960.]

DVD

Initially, this set of letters was supposed to stand for either Digital Video or Digital Versatile Disc. Ultimately, they ended up not meaning anything but DVD. With home video and audio, it is an advanced technology that involves a digitally coded, data-compressed picture in combination with digitally coded, data-reduced and compressed audio - usually Dolby Digital. Because of this and also because of the small size of the disc (it is the same size as the compact disc, or CD, but because of data reduction and compression it can hold up to 14 times as much data), the technology is ideally suited for home-theater presentations.

As noted, the audio tracks on a pre-recorded DVD movie disc usually involve Dolby Digital technology, but some releases also offer DTS audio. Most discs also feature scads of "bonus" materials, including performer biographies, trailers, multiple language tracks, director commentaries, and featurettes that involve production information. In most cases, the audio is five-channel surround (although fewer channels, at lower data rates, can also be utilized), with a low-frequency effects channel for handling the often very powerful "effects" bass. As noted, DVD programs mostly involve movies, but a large number of music programs are also available. DVD technology, in DVD-ROM form, has also been utilized to include computer storage. Current incarnations of DVD technology also allow for video recording.

The DVD has been a runaway sales phenomenon, eclipsing the early success of both the CD and the VCR, and in one form or another it promises to replace both the compact disc and video tape.

HOWARD FERSTLER

DVD-A (DVD-AUDIO)

A variant of the standard DVD technology, but primarily oriented toward very high-quality sound reproduction in a home-listening environment, the missing or minimal video material on a DVD-A disc allows for a much higher audio data rate and less digital compression than what is possible with Dolby Digital and DTS audio versions. The result is a potentially superior sound reproduction, although the main advantage of the format, compared to the two-channel compact disc, or CD, is the addition of the center and surround audio channels. To listen to the DVD-A program material on a disc, a DVD player with a DVD-A, six-channel output must be used. However, most DVD-A discs also have alternate tracks in Dolby Digital and/or DTS, which allows them to also be played on conventional DVD players.

See also SACD (Super Audio Compact Disc)

HOWARD FERSTLER

DYER, FRANK LEWIS (2 AUG 1870—4 JUNE 1941)

American record company executive, born in Washington, D.C. He studied law and was admitted to the bar in 1892, practicing in Washington until 1897, then in New York. Thomas Edison invited him to take charge of legal aspects of his enterprises in 1903. When William E. Gilmore retired in 1908 as manager of the Edison companies, Dyer succeeded him. He then

became president of the National Phonograph Co. in 1909; and president of Thomas A. Edison, Inc. in September 1912, but resigned in December to head the General Film Co., a major distributor of motion pictures throughout the U.S. In 1914 he left that firm to freelance in New York as a mechanical and electrical expert, and remained in that situation until he retired in 1929. Dyer had more than 100 inventions, including the talking book for the blind, a record running about 2 1/2 hours, with 30,000 words per disc. He wrote, with coauthor T. Comerford Martin, a two-volume life of Edison (1910; revised 1929). He died in Ventnor, New Jersey.

DYER-BENNET, RICHARD
(6 OCT 1913–14 DEC 1991)

English/American folksinger, born in Leicester, England. He became an American citizen in 1935, after study at the University of California at Berkeley. He was popular on U.S. college campuses in the 1930s, accompanying himself on the lute, and later on the Spanish guitar, presenting authentic minstrelsy. He made records for Harvard University, then for commercial labels (including his own, in the mid-1950s). He gave annual concerts at Town Hall in New York, from 1944. The Dyer-Bennet record label included collections of his best work (many of which had been previously recorded for independent labels such as Stinson), including *Requests* (DYB 5000; 1958), *Songs with Young People In Mind* (DYB 6000; 1959), *Beethoven, Scottish, and Irish Songs* (DYB 7000; 1960), and *Of Ships and Seafaring Men* (DYB 12; 1965). The label is now part of the Smithsonian/Folkways archive in Washington, DC.

REV. FRANK HOFFMANN

DYLAN, BOB (24 MAY 1941–)

American folk and popular singer, born Robert Zimmerman in Duluth, Minnesota. He played the guitar as a child. He went to the University of Minnesota and sang in nearby coffee houses, influenced by Woody Guthrie. In New York he found hardship until he was discovered by John Hammond of Columbia Records, who arranged for Dylan's first recording sessions. A successful album was released in 1961, *Bob Dylan*. A half dozen chart albums followed within five years, notably *The Freewheelin' Bob Dylan* (Columbia CL 1896; 1963), and *The Times They Are A-Changin'* (Columbia CL 2105; 1964). By 1974 Dylan had posted 17 chart albums. His early style had been a folk idiom, but he moved gradually toward folk-rock and country rock, using intricate lyrics that addressed social problems.



Bob Dylan's first album. Courtesy Frank Hoffmann

Dylan performed in concert and on television, and gave acclaimed performances at the Newport Jazz Festivals (1962–1965), and the Monterey Jazz Festival. Dylan's first hit single was "Subterranean Homesick Blues" (Columbia 43242; 1965), followed by his most famous disc, "Like a Rolling Stone" (Columbia 43346; 1965). Other notable hits included "Rainy Day Women #12 & 35" (Columbia 43592; 1966), and "Lay Lady Lay" (Columbia 44926; 1969). His composition "Blowin' in the Wind" became a hit record for Peter, Paul, and Mary, and for Stevie Wonder.

With the expiration of his Columbia contract in 1973, Dylan moved to the Asylum label. Asylum recorded live programs from his very successful 1974 national tour, in *Before the Flood* (#AB 201; 1974), a chart album for 18 weeks. He returned to the Columbia label to make further noteworthy albums, in a more pronounced rock style, such as *Desire* (Columbia PC 33893; 1976). Dylan wrote most of the music he performed and many of the lyrics.

In the 1980s, Dylan appeared with other leading stars in the album *We are the World*, to raise funds for African famine relief. He released a remarkable five-record album, *Biograph* (Columbia C5X-38830; 1985). He won a Grammy in 1979 for the best gospel recording by a male singer, and in 1990 was presented with the Grammy lifetime achievement award. His 1997 album *Time Out of Mind* won a Grammy for best rock album. CD reissues by Columbia have covered most of his repertoire. [Hoggard 1978.]

DYNACO CORPORATION

DYNACO CORPORATION

Incorporated by David Hafler and Edward Laurent in 1955, with the intention of producing output transformers for amplifiers made by other companies, as well as their own tube-type amplifiers. The company soon became well known for its low-priced and innovative designs, which were available assembled or in kit form (Dynakits) for hobby enthusiasts. Preamplifiers and FM tuners were also produced. In the mid-1960s, Hafler's company released its first solid-state equipment, and the company also imported speakers from SEAS in Norway (the model A-25 was the most notable version), which were sold under its own name, and also produced some early surround-sound adapters. Dynaco became a subsidiary of Tyco in 1969. The new owners could not make a go of it, given the foreign competition, and they sold the company to ESS in 1979. However, ESS could do no better, and the company sold the inventory to Stereo Cost Cutters/Sound Values Inc. In the early 1990s, the Dynaco brand was picked up by Panor Corporation, which started selling original-design equipment under the Dynaco brand. Panor still owns the Dynaco name, but none of the original principals are involved.

See also Loudspeaker

HOWARD FERSTLER

DYNAUDIO ACOUSTICS

A Danish loudspeaker manufacturer, founded in 1977. The company started out making full systems and using speaker elements (drivers) made by other companies. Later on, they branched out into making their own drivers, and have since become a major OEM parts supplier, producing drivers for speaker manufacturers worldwide. They also continue to make complete speaker systems of very high quality, for both consumer and professional use. Their monitors are used by studios as diverse as NRG in Los Angeles, and

The Hit Factory in New York City. In 1999, the company merged with T.C. Electronic.

See also Loudspeaker

HOWARD FERSTLER

DYNAGROOVE

The RCA trademark for its microgroove record, issued in 1950 as a response to the Columbia long-playing record. [Olson, H. 1964.]

DYNAMIC (I)

Having a moving part; in sound recording the reference is to a moving element related to an electromagnetic field, as in a moving coil or ribbon cartridge; or to a loudspeaker that uses magnetic fields and electric currents to produce sound vibrations. The same principle is found in the dynamic microphone.

DYNAMIC (II)

The force or intensity of sound (also in plural, dynamics), or volume.

DYNAMIC RANGE

In an audio system, the difference (expressed in decibels) between the overload level and the minimum acceptable signal level; that is, the difference between the loudest and softest passages reproduced without distortion.

DYNE

The force that produces an acceleration of one centimeter per second per second on the free mass of one gram. In acoustics the unit of sound pressure is the dyne per square centimeter.

See also Intensity



E

E.M.G. HANDMADE GRAMOPHONES LTD.

A London firm that offered, in the 1920s, to "obtain or make anything any gramophone may require." Complete table and console models were sold at prices ranging from £14 to more than £30, and components were available separately, "made to measure." Its president was E.M. Ginn. In the 1950s the firm was still in operation, specializing in "modern reconstructions." [TMR #46 (1977) reprints some advertisements.]

EADON, SIMON (14 MAY 1952-)

A well-regarded British recording engineer, Eadon did important creative work for the Decca Record Company from 1970 until 1997. He was educated at Sandroyd Preparatory School (1960-1965), and Harrow School (1965-1969). In addition to working for Decca, he began Abbas Records in 1995 (in anticipation of Decca's closure), and continues in that enterprise. The list of artists he has recorded, among many others, includes Joan Sutherland, Vladimir Ashkenazy, Adrian Boult, Georg Solti, Riccardo Chailly, Andrew Litton, Luciano Pavarotti, Cecilia Bartoli, Ian Bostridge, Bryn Terfel, Thomas Trotter, Kiri Te Kanawa, David Zinman, and Gillian Weir. He has also recorded some genuinely notable ensembles, including the Chicago Symphony Orchestra, London Symphony Orchestra, the Choir of King's College Cambridge, the Winchester Cathedral Choir, Waynflete Singers, Bournemouth Symphony Orchestra, and the Holst Singers. He was a 1982 and

1988 Grammy finalist for best engineered recordings (classical), and won the 1991 *Gramophone Magazine* award for best engineered CD. In 1996, one of his recordings won the Grammy for best choral recording, and in 1999 another won the Grammy award for best instrumental soloist performance. He is a member of the National Academy of Recording Arts and Sciences and has written articles on recording techniques for *Gramophone Magazine* and *Studio Sound*.

HOWARD FERSTLER

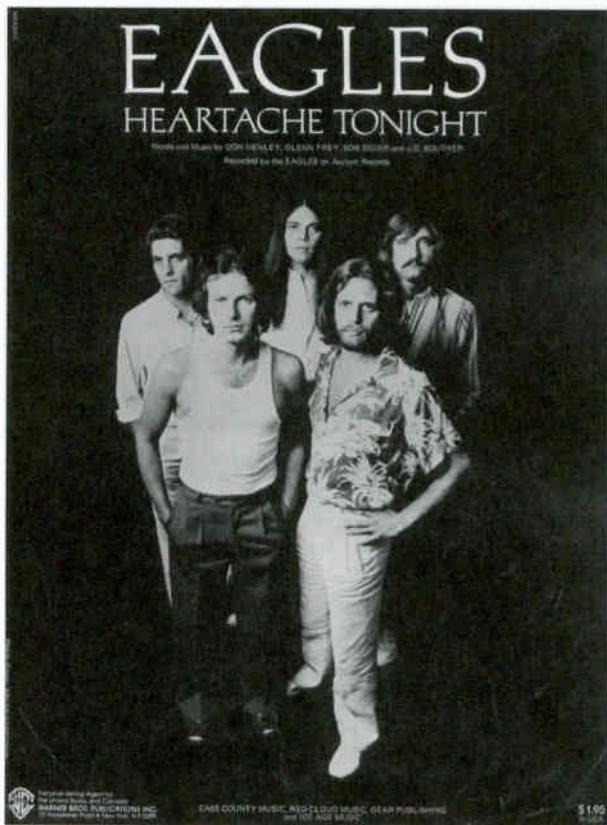
EAGLE

A very popular cylinder player with a double-spring motor, introduced in 1897 by the Columbia Phonograph Co. The name came from the \$10 selling price, equivalent to one U.S. gold eagle coin. About 149,000 were produced. In Britain this model was known as the Domestic. [Hoover 1971 has an illustration, p. 45, but the date is given as 1899.]

EAGLES, THE

The most successful band to emerge from the country rock genre, the Eagles gradually shifted to mainstream rock as a result of personnel moves and changes in public taste. Of greater significance, they created a body of work during the 1970s unequaled in terms of quality by any American music act.

The Eagles originated with the shared vision of guitarist Glenn Frey and drummer Don Henley when both were part of Linda Ronstadt's backup band. Two other



Sheet music cover for “Heartache Tonight” by the Eagles.
Courtesy David A. Jasen

musicians hired by Ronstadt — ex-Poco bassist Randy Meisner and lead guitarist Bernie Leadon, formerly with the Dillards and the Flying Burrito Brothers — agreed to join the enterprise and, with David Geffen serving as manager, the Eagles obtained a recording contract from Asylum.

Recorded in England with the assistance of veteran producer Glyn Johns, the debut LP, *The Eagles* (Asylum 5054; 1972; #22), exhibited a strong country rock bent built around lush vocal harmonies and Leadon’s facility on a variety of string instruments. Whereas *The Eagles* succeeded largely due to three strong singles — “Take It Easy” (Asylum 11005; 1972; #12), “Witchy Woman” (Asylum 11008; 1972; #9), and “Peaceful Easy Feeling” (Asylum 11013; 1972; #22) — the follow-up LP, *Desperado* (Asylum 5068; 1973; #41), a concept album concerned with the Old West’s Doolin-Dalton gang that lacked Top 40 material, was only moderately successful.

The decision to hire producer Bill Szymczyk during the recording of *On the Border* (Asylum 1004; 1974; #17; included #1 hit, “Best Of My Love,” Asylum 45218) — along with the addition of guitarist Don Felder — added greater polish as well as dynamic range and texture to the outstanding melodies and

intelligent lyrics typifying the band’s material. *One of These Nights* (Asylum 1039; 1975; #1) — which included the hit singles “One Of These Nights” (Asylum 45257; 1975; #1), “Lyn’ Eyes” (Asylum 45279; 1975; #2), and “Take It to the Limit” (Asylum 45293; 1975; #4) — propelled the Eagles into the upper pantheon of rock stardom. The recruitment of former James Gang guitarist Joe Walsh to replace the departing Leadon resulted in a tougher rock sound on *Hotel California* (Asylum 1084; 1976; #1); the lyricism of “New Kid in Town” (Asylum 45373; 1977; #1) evoked the early Eagles sans roots references, while the extended guitar jam on the title track (Asylum 45386; 1977; #1) literally defines 1970s American rock.

Although merely consolidating earlier experiments, the final releases from the band’s first phase, *The Long Run* (Asylum 52181; 1979; #1) — which included three Top 10 hits: “Heartache Tonight” (Asylum 46545; 1979; #1), “The Long Run” (Asylum 46569; 1979; #8), and “I Can’t Tell You Why” (Asylum 46608; 1980; #8) — and *Eagles Live* (Asylum 705; 1980; #6), also achieved platinum success. Core members Henley and Frey opted to dissolve the Eagles at this point in order to pursue solo careers. Despite comments over the years that a reunion would never take place, Henry, Frey, Walsh, Felder, and Timothy B. Schmitt (who’d replaced Meisner in 1977) got together for a 1994 tour. The album, *Hell Freezes Over* (Geffen 24725; 1994; #1), features songs from an MTV performance plus four new studio tracks. In 2003, the group issued a new song, “Hole in the World,” as part of a new greatest hits compilation CD/DVD.

FRANK HOFFMANN

EAMES, EMMA (HAYDEN)
(13 AUG 1865– 13 JUNE 1952)

American lyric soprano, born in Shanghai of American parents. Her opera debut was in Paris as Juliette on 13 Mar 1889. On 14 Dec 1891 she appeared in the same role at the Metropolitan Opera, and remained with the company until 1909. Eames was recorded on Mapleson cylinders while singing Tosca on 3 Jan 1903. She sang commercially for Victor from February 1905, beginning with “Still wie die Nacht” by Karl Bohm (Victor 85052), and nine other works, one record being the “Star Spangled Banner” and “Dixie.” In 1906–1907 she made 15 more Victors, and by 1911 another 16. She sang duets with Emilio Di Gogorza, Louise Homer, and Marcella Sembrich. The Victor 1917 catalog carried seven of her solos and four of the duets. Eames retired from performing in 1916,



Emma Eames from the 1917 Victor catalog. Courtesy Jerald Kalstein

and wrote her autobiography, *Some Memories and Reflections*, in 1927. She was a vocal coach and teacher in New York City following her retirement.

Francesco Tosti's song "Dopo" is one of the finest Eames records (Victor 88344; 1911). "Gretchen am Spinnrade" is another masterful performance (Victor 88361; 1911). Her favored role, Juliette, is represented by the "Valse" on Victor 88011 (1906), reissued on IRCC 43 — she sang the part "as Gounod taught it to me" (Migliorini). A selection of Eames's pre-1910 Victor recordings is available on the Nimbus CD, *Prima Voce: Emma Eames and Pol Plançon* (Nimbus 7860). She died in New York [Lawrence 1962; Moran 1977; Migliorini 1953.]

EARGLE, JOHN (6 JAN 1931–)

Graduating with a bachelor in music degree from the Eastman School of Music in 1953, Eargle then earned a masters in music from the University of Michigan in 1954. Not being satisfied with just learning about the artistic side of the business, he went on to get an engineering degree from the University of Texas in 1962, and a masters in engineering from Cooper Union for the Advancement of Science and Art in 1970.

From 1958 to 1960, he worked for Klipsch and Associates, and after earning his engineering degree he worked for Jensen Manufacturing (1962–1963), RCA Victor (1963–1969), Mercury Records (1969–1971), Altec (1971–1973), JME Associates (his own company, 1973–1976), JBL (1976–1981), and JME Consulting Corporation (his own company, again, 1981-present), with major clients as diverse as Delos Records, AKG Acoustics, and JBL Professional.

He has engineered more than 250 compact discs (CDs), has been nominated for Grammy awards in the classical music category four times, and won once, for classical engineering. He has also published several university-level books on recording and loudspeaker design, including *The Microphone Handbook* (1981), *Stereophonic Techniques* (editor, 1986), *Handbook of Sound System Design* (1989), *Handbook of Recording Engineering* (1986, 1992, 1996), *Music, Sound, and Technology* (1990, 1995), *Electroacoustical Reference Data* (1994), *The Loudspeaker Handbook* (1997), and *The Microphone Book* (2001).

Eargle is a member of the Acoustical Society of America and the Society of Motion Picture and Television Engineers, a senior member of the Institute of Electrical and Electronics Engineers, and a fellow and honorary member of the Audio Engineering Society (AES). He won the latter organization's bronze medal in 1984. He is also a member of the National Academy of Recording Arts and Sciences and the Academy of Motion Picture Arts and Sciences, and is also a past president of the AES and a reviewer for the *AES Journal*.

HOWARD FERSTLER

EARLY REFLECTIONS

In a concert hall or studio environment, the reflections from nearby wall and ceiling boundaries that may or may not enhance the sound picked up by the recording microphones. With regard to home-listening-room acoustics, they are the reflections that arrive within a few milliseconds of the direct sound coming from the speakers. Depending on the direction from which they are coming, they can either add spaciousness to the sound or muddy the detail. Large-room early reflections can also be simulated by DSP ambiance-synthesis devices.

See also Late Reflections

HOWARD FERSTLER

EASTERN PENNSYLVANIA PHONOGRAPH CO.

A Philadelphia firm, in operation from 1890 to 1893. It was one of the 33 regional companies that made up

EASTERN TALKING MACHINE CO.

the North American Phonograph Co. Officers included E.P. Wallace, president and member of the board of directors, 1892–1893; and James O. Clephane, secretary in 1890–1893 and member of the board in 1890–1891.

EASTERN TALKING MACHINE CO.

A Boston firm, selling cylinder and disc products beginning in March 1894, and continuing until at least 1923. Officers included E.F. Taft (July 1914), and H. Shoemaker (general manager, January 1923).

EASTERN TALKING MACHINE JOBBER ASSOCIATION

An organization established 10 Apr 1906 in New York to provide a forum for people in the trade. The first president was W.D. Andrews; he was reelected at the July conference in 1907. Other officers of 1907 were Louis Buehn, treasurer; J. Newcomb Blackman, vice president, and A.H. Jacot, secretary. The association merged in September 1907 with the Central States Talking Machine Jobbers Association to form the Talking Machine Jobbers National Association.

EASTON, EDWARD DENISON (10 APR 1856–30 APR 1915)

American record industry executive, born in Gloucester, Massachusetts. He went to Washington, D.C., to study law, and received a degree from Georgetown University in 1889. He worked as a court reporter in Washington, becoming interested in the phonograph as a dictating device. Easton was the first general manager of American Graphophone Co. (1887), which sold its cylinder machine for court and business use. In 1888 he was one of the founders of the Columbia Phonograph Co., which became the recording and sales agency for American Graphophone. Easton opened a phonograph parlor in Washington, and operated coin-ops in the Washington-Baltimore area. In 1894 he arranged a merger of the Columbia interests into the Columbia Phonograph Co., General. In 1913 the firm became the Columbia Graphophone Co., which Easton headed until his death in Arcola, New Jersey.

Easton was instrumental in arranging the first national convention of the phonograph industry in May 1890. He pioneered in the area of entertainment recording, and engaged many famous artists. Columbia was the only affiliate of the North American Phonograph Co. to emerge unscathed when North American collapsed in 1894. Columbia disc records appeared in 1902, and double-sided records were

offered in 1904. Easton's firm was a world leader in production of cylinder and disc players. He has been criticized for allowing rival Victor Co. to achieve a near monopoly in operatic recording and in much of the classical repertoire, but Columbia did issue important recordings by such luminaries as Percy Grainger and Pablo Casals.

EASTON, FLORENCE (25 OCT 1882–13 AUG 1955)

English dramatic soprano, born in South Bank, Yorkshire. She made her debut at Covent Garden in 1903, then sang with the Berlin Opera in 1907–1913, and the Hamburg Opera from 1912 to 1915. Easton was heard in Chicago during 1915–1917, and at the Metropolitan Opera from 1917 to 1929. She then toured in Europe, returning to the Metropolitan as Brünnhilde in *Walküre* on 29 Feb 1936. Although she was remarkably versatile, Wagnerian roles were her best, and she made several outstanding recordings of them. Her "Liebestod" (in English, IRCC 3004), and her *Siegfried* Act Three with Lauritz Melchior (Victor 7762–65; 1932), are favorites with collectors. Her earliest records were made for Odeon around 1912, after which she recorded for Aeolian-Vocalion. Then she was with Brunswick from 1921 to 1928, and joined Edison in 1928. Altogether she recorded about 100 sides. She made her last appearance in 1943, and then taught at the Juilliard School in New York until the end of World War II, when she retired to Montreal in ill health; she died there in 1955. Her commercial recordings made from 1918 to 1933, along with excerpts from a recital given at Juilliard in 1939, are available on a two-CD set from Marston, *Absolute Soprano* (52033). [Stratton 1974.]

EASTON, SHEENA (27 APR 1959–)

Scottish-born pop singer, born Sheena Shirley Orr, who had several major hits in Britain and the U.S. during the early 1980s. While working toward a degree at Glasgow's Royal Scottish Academy of Drama and Art in the late 1970s, Easton performed frequently in local nightclubs and pubs. An audition with EMI Records led to a contract in May 1979. Her debut single, "Modern Girl" (EMI America 8080), reached the Top 10 in England in early 1980.

"Morning Train" (EMI America 8071; originally titled "9 to 5" in England), enabled Easton to capture an American audience, reaching number one in spring 1981. More stateside hits followed: the James Bond theme song "For Your Eyes Only" (Liberty 1418; 1981), "You Could Have Been with Me" (EMI

America 8101; 1981–1982), “Telefone (Long Distance Love Affair)” (EMI America 8172; 1983), “Strut” (EMI America 8227; 1984), “Sugar Walls” (EMI America 8253; 1985), and “U Got the Look” (duet with Prince; Paisley Park 28289; 1987). The latter three releases signaled a switch from her formerly wholesome image to more sexually suggestive material. Prince wrote “Sugar Walls” specifically for Easton, which helped toughen up her image. Her last major hit was “The Lover in Me” (MCA 53416; 1988–1989).

Her pop-rock style translated well worldwide; she released a Spanish-language album, *Todo Me Recuerda a Ti*, in 1983, and earned gold records in Canada and Japan. In 1984, she received a Grammy for best Mexican/American performance for “Me Gustas Tal Como Eres,” a duet with Luis Miguel.

Although Easton’s recording career had lost momentum by the late 1980s, she continued touring on a regular basis. In the 1990s, she also appeared in films (e.g., *Indecent Proposal*), on Broadway (*The Man of La Mancha*), and on television (e.g., *Jack’s Place*, *Body Bags*, *The Highlander*). [Romanowski and George-Warren. 1995.]

FRANK HOFFMANN

EAZY-E (7 SEP 1963–26 MAR 1995)

Eazy-E (born Eric Wright, son of soul-funk star Charles Wright, in Los Angeles) was one of the most successful entrepreneurial artists in rock history, bar none. In addition to forming the trailblazing gangsta rap group, N.W.A., and later achieving acclaim as a solo act, in 1985 he founded his own label, Ruthless Records (allegedly with illegal profits), which became a major force in the then-emerging West Coast hip-hop scene.

Eazy-E’s first album project, *N.W.A. and the Posse* (Macola/Rams Horn 5134; 1987), featured core members of N.W.A. — Dr. Dre, DJ Yella, Ice Cube — along with a supporting cast including, among others, the Doc and Arabian Prince. With the addition of MC Ren, N.W.A. released the landmark LP, *Straight Outta Compton* (Ruthless 57102; 1999; #37), which almost single-handedly launched the gangsta movement on the strength of incendiary tracks such as “Fuck Tha Police” (Ruthless; issued as a CD-single and 12-inch disc in April 1991), and “Gangsta Gangsta” (Ruthless 191; 1990; #70 UK). The album’s notoriety helped propel the follow-up, *Efil4zaggin’* (Ruthless 57126; 1991; #1), to the top of the charts.

Shortly thereafter, internal differences caused N.W.A. to implode, with individual members all going on to solo careers. Eazy-E had a head start in this regard, having issued an album, *Eazy-Duz-It* (Ruthless 57100; 1988; #41), which almost predated N.W.A. His

first post-N.W.A. release, the mini-CD *5150 Home for Tha Sick* (Ruthless 53815; 1993; #70), was a pedestrian affair, apparently due to the distractions of administrative duties. The next release, the mini-CD *It’s On (Dr. Dre) 187 Um Killa* (Ruthless 5503; 1993; #5), revealed a greater concern for his artistic legacy; “Real Muthaphuckin G’s,” later released as a single (Ruthless 5508; 1994; #42), questioned Dr. Dre’s role in pioneering the G-funk sound.

Shortly after collaborating with Bone Thugs-N-Harmony on “Foe Tha Love Of” (Ruthless; 1995), Eazy-E was diagnosed as having HIV; a month later he died of AIDS. He continues to be represented by posthumous releases, most notably the compilation of previously released material, *Eternal E* (Ruthless 50544; 1995; #84), and the collection of unreleased tracks, *Str8 Off Tha Streetz Of Muthaphukkin – E.W. Compton* (Ruthless 5504; 1995; #3).

FRANK HOFFMANN

EBERLE, RAY (19 JAN 1919–25 AUG 1979)

American popular singer, born in Hoosick Falls, New York. His family name was spelled Eberle, although his brother Bob changed the spelling of his own name to Eberly. Eberle was a featured vocalist with the Glenn Miller band from 1938 until World War II; then went into military service. Later he was less active. Eberle, regarded as one of the premier vocalists of the big band era, was heard on outstanding Miller discs such as “At Last” (Victor 27934; 1942), “Moonlight Cocktail” (Bluebird 11401; 1941), and especially “Serenade in Blue” (Victor 27935; 1942). He died in Douglasville, Georgia.

EBERLY, BOB**(24 JULY 1916–17 NOV 1981)**

American popular singer, born in Mechanicsville, New York. He changed the spelling of his family name from Eberle. Eberly sang with Jimmy Dorsey’s band, and was recognized as one of the outstanding popular singers of the period 1938–1942. His great solo records include three made in 1941: “Blue Champagne” (Decca 3775), “The Things I Love” (Decca 3737), and “Maria Elena” (Decca 3698). In the same year he also recorded three remarkable duets with Helen O’Connell: “Green Eyes” (Decca 3698), “Amapola” (Decca 3629), and “Tangerine” (Decca 4123). He had the principal singing role in the motion picture *The Fabulous Dorseys* (1947). Twenty-five of his “best” recordings made with Jimmy Dorsey have been reissued on CD on Collectors’ Choice Music (181). He died of cancer in Glen Burnie, Maryland.

EBONOID (LABEL) (I)

EBONOID (LABEL) (I)

A short-lived, 200 turns-per-inch, five-minute wax cylinder made by the Premier Manufacturing Co., Ltd., of London, in April 1909, and later by Clarion Record Co., Ltd.

EBONOID (LABEL) (II)

A vertical-cut, double-sided, 10-inch disc first issued in December 1909 by the Premier Manufacturing Co., Ltd., London. It was claimed to have a playing time of five minutes.

ECHO

A reflected sound signal, having sufficient magnitude to be audible and reaching the listener long enough after the original signal to be distinguishable from it.

See also Echo Chamber; Flutter Echo; Reverberation

ECHO CHAMBER

In sound recording, a room used to add an echo effect to a signal. The engineer can control the degree of echo, or reverberation, by combining the program source with the signal as it passes through the microphone and loudspeaker of the echo chamber.

ECHOPHONE

A cylinder phonograph invented in 1896 by Edward H. Amet, marketed around 1897; it appeared first under the name "Metaphone." Apparently it was the earliest phonograph with a distinct tone arm — which was a thin shaft of glass with a rounded and tipped end that served as a stylus, with a bellows at the other end. Air vibration in this bellows reproduced the sound; operation was by spring motor. A wooden mandrel was the other unique feature of the Echophone, which had no special sound quality. W. Hill and Co., 96 S. State Street, Chicago, sold the machine for \$5. [Fabrizio 1976; Koenigsberg 1990.]

ECLIPSE (LABEL)

A British issue of 1931–1935, produced by Crystalate Gramophone Record Manufacturing Co., Ltd., and sold through Woolworth's for sixpence. A nursery series was included.

ECM (LABEL)

An independent record company, founded by Manfred Eicher in 1969, in Munich, the three letters stand for

Editions Contemporary Music. A former classical and jazz bass player and jazz fan, Eicher wanted this new company to express his musical tastes and desires, particularly regarding contemporary composers such as Arvo Pärt, John Adams, Kurtág, Meredith Monk, and Keith Jarrett. The company was early into digital sound, producing the first digitally mastered LP recording in 1981. ECM embraced the compact disc (CD) early on, and ceased producing LP recordings altogether in 1990. The current catalog contains more than 700 titles and has released material in styles ranging from medieval (Pérotin, Frye, Tallis, Gesualdo), to contemporary (Dave Holland, Stephen Micus, Charles Lloyd, Evan Parker, Jack DeJohnette, and Joe Maneri), via its New Series releases.

HOWARD FERSTLER

EDDY, DUANE (26 APR 1938–)

Duane Eddy was one of the most successful instrumental recording artists during the rock 'n' roll era (mid-1950s to mid-1960s). His signature "twangy" guitar sound, built around staccato riffing on the lower (bass) strings, influenced surf music and countless British Invasion acts.

Born in Corning, New York, Eddy began playing guitar at age five. Relocated in Phoenix by his early teens, he began performing with local dance groups. Shortly after hooking up with Phoenix deejay, producer, and entrepreneur Lee Hazlewood, Eddy began releasing records on Dick Clark's Jamie label. During the 1958–1964 period, Eddy had 27 charting singles, including the Top 10 singles "Rebel-'Rouser" (Jamie 1104; 1958), "Forty Miles of Bad Road" (Jamie 1126; 1959), and "Because They're Young" (Jamie 1156; 1960). His LPs also sold very well for a teen artist, most notably the Top 5 release, *Have 'Twangy' Guitar-Will Travel* (Jamie 3000; 1959), which remained on the *Billboard* pop album charts for 82 weeks.

Eddy's influence was strongly felt in the U.S. and Britain. Guitar groups like the Ventures, the Surfariis, and the Fendermen all achieved success emulating his sound. British guitarist Hank Marvin, and his backup band, the Shadows, modified Eddy's style for a British audience, influencing dozens of wannabe guitarists, including Jeff Beck and Eric Clapton. Surf instrumentalist Dick Dale had a similar sound, and his work directly influenced dozens of beach bands. The heavily echoed recording style that Eddy employed has become a signature sound for rockabilly artists, including recent neo-country stars like Dwight Yoakam.

Although the influx of British Invasion artists and changing public tastes ended the hits, various back-to-the-roots movements, beginning in the late 1960s, have

helped keep Eddy in the public eye. He did production work in the 1970s, and has continued to perform regularly over the years (including oldies revival shows). He has attempted comebacks as a recording artist, including a 1977 single, "You Are My Sunshine" (Asylum), produced by Hazlewood and featuring vocals by Willie Nelson and Waylon Jennings. He played on Art of Noise's industrial-dance treatment of his 1960 hit "Peter Gunn," which reached the Top 50 in 1986. *Duane Eddy*, his first major-label album in 15 years, was released in 1987, featuring assists from the likes of Ry Cooder, George Harrison, Jeff Lynne, and Paul McCartney. In 1995, he was inducted into the Rock and Roll hall of Fame. Rhino's two-CD set, *Twang Twang* (71223), issued in 1993, gives a good career overview.

FRANK HOFFMANN

EDDY, NELSON

(29 JUNE 1901–6 MAR 1967)

American baritone, born in Providence, Rhode Island. He studied in New York, Dresden, and Paris; made his debut in 1922; and sang four years with the Philadelphia Opera Co. He also appeared on radio, and in Gilbert and Sullivan productions. His film debut was in 1933, after which he and Jeanette Macdonald began their greatly successful series of musical movies: *Naughty Marietta* (1935), *Rose Marie* (1936), *Blossom Time* (1936), *Maytime* (1937), *Sweethearts* (1938), *Girl of the Golden West* (1938), and *New Moon* (1940). His costar in *Rosalie* (1938) was Eleanor Powell. Among Eddy's hit records were "I'm Falling in Love with Someone"/"Tramp, Tramp, Tramp Along the Highway" (Victor 4280; 1935); "Rose Marie" (Victor 4305; 1936); and "Will You Remember?" (Victor 4329; 1936)—all from the films. A later film produced the highly popular "At the Balalaika" (Columbia 17173; 1939). But his all-time best seller was a novelty song, "Short'nin' Bread" (Columbia 17329; 1942). Eddy died in Miami Beach, Florida. His recordings have been reissued on various CDs, mostly on "nostalgia" labels like Crown, Legacy, and ASV.

EDIBEL SOUND FILM APPARATUS LTD.

A British firm associated with Edison Bell, established 5 July 1929. It ceased operations in July 1931.

EDIPHONE STANDARD PRACTICE RECORDS

SEE *EDISON SCHOOL RECORDS*

EDISON, CHARLES A.

(3 AUG 1890–31 JULY 1969)

American industrialist and statesman, son of Thomas A. Edison, born in Orange, New Jersey. He served as chairman of the board of McGraw-Edison, and as president of Thomas A. Edison, Inc., succeeding his father in August 1926. From 1939 to 1940 he was U.S. secretary of the navy, and from 1941 to 1944 he was governor of New Jersey. He died in New York.

EDISON, THOMAS ALVA

(11 FEB 1847– 18 OCT 1931)

Eminent American inventor, born in Milan, Ohio. Edison is usually credited with the invention of the cylinder phonograph. His earliest patent application for the device was dated 24 Dec 1877. In July of that year Edison had, through serendipity, discovered that paper tape he was using for telegraph relay experiments could retain and play back sound signals. He applied the concept in a sketch for a tinfoil phonograph on 29 Nov 1877, and conveyed the idea to his assistants Charles Batchelor and John Kruesi. Those



Thomas Edison with early phonograph. From the Collections of the Library of Congress

men produced a prototype machine and gave it to Edison on 6 Dec 1877; that phonograph was covered by U.S. patent #200,251, granted on 10 Feb 1878. (The wooden model submitted to the Patent Office went to the Science Museum, London, thence to the Henry Ford Museum, in Dearborn, Michigan.)

Although he remained interested in the phonograph, Edison did little work on it for 10 years — during that decade he concentrated on the electric light and the electric power industry. In 1887 he resumed experimentation with recorded sound, and developed the New Phonograph, in which solid wax cylinders replaced the tinfoil of the original invention. He followed this with the Improved Phonograph, and then on 16 June 1888 with the Perfected Phonograph (exhibited at the Crystal Palace, London, in August 1888). A long series of ever-improved models emerged from the Edison workshops over the next three decades.

With central electric power systems at an unreliable stage, and storage batteries still too bulky to be widely accepted, Edison gave his attention to the spring motor — which he had, in fact, described in his British patent application (#1644) of 1878; and it was the spring motor that operated most of the cylinder machines to come.

The phonograph had been invented in Edison's first laboratory, located in Menlo Park, New Jersey. However, all subsequent phonographic work was carried out in the new Edison Phonograph Works, in West Orange, New Jersey. The parent organization in control of the works and other Edison interests was the Edison Phonograph Co. (1887); but that firm sold its stock to Jesse H. Lippincott in 1888, who formed the North American Phonograph Co. to hold the patents. North American licensed 33 semi-independent subsidiaries, one of which was destined to emerge as a rival to Edison and Victor: the Columbia Phonograph Co. Edison reacquired control of his patents in 1894, but then liquidated North American. He set up another firm, the National Phonograph Co., in January 1896, to manufacture and distribute the spring-motor machines, and within three years had established branches in Europe. There were 12,000 affiliated dealers by 1907.

A final name change occurred in 1910, as the earlier companies were reorganized into Thomas A. Edison, Inc. Edison was president from December 1912 until August 1926, when he became chairman of the board, and his son Charles succeeded him as president. It was this firm that produced the finest Edison sound media, the Blue Amberol cylinder and the Edison Diamond Disc. With much reluctance, Edison conceded that discs were winning the market from cylinders, and he did create an outstanding version in the Diamond Disc. A series of tone tests demonstrated

the remarkable fidelity achieved by it, despite the limitations of acoustic recording.

Although the Edison records and the machines made to play them were widely perceived to be of the highest quality, the firm was unable to hold a strong place in the burgeoning sound recording market. Many of the difficulties have been traced to Edison's own strongly held views: for example, his conviction that cylinders were inherently superior to discs because they did not encounter end-of-side distortion. His narrow musical taste tended to hold back the repertoire that his company offered, so that he never seriously competed with Victor and Columbia for the classical and operatic market. His preferred audience was rural, and of simple musical requirements. Edison's long-playing record of 1926 failed, for one reason because he did not exploit the repertoire possibilities it presented for uninterrupted renditions of longer compositions. Curiously, the inventor so prominent in the world of electricity was late to enter the field of electrical recording (1927); and he was also behind the competition in combining record players and radios (1928). Cylinder production continued until 1929, though market demand had nearly vanished. Edison ceased making discs, cylinders, and machines on 1 Nov 1929, except for Ediphone dictation records.

While this article has dealt with the Edison contributions to sound recording, it would be incomplete without mention of his other achievements. His first patented invention was a vote recorder in 1869, forerunner of the modern voting machine. In 1870 he developed a successful stock market printer ("ticker"). His automatic repeating telegraph of 1872–1877 allowed the storage and playback of telegraph messages — and led the inventor to the idea of storing and playing back voice signals. The quadraplex telegraph of 1874 expanded the capacity of the national wire system. While he did not originate the electric light bulb, he labored to produce one that would burn long enough to be useful: the incandescent lamp with a carbonized filament (1879). From that beginning he went on to develop the dynamos, conduits, mains, relay circuits, and so forth that went into a total electric power distribution system; and he did this despite opposition from the reigning gaslight interests. Edison improved Alexander Graham Bell's telephone transmitter in 1877, and advanced the march of electronics in 1883 by discovering the so-called Edison Effect in lamps — a basis for the vacuum tube, radio, and television. He did important pioneer work in motion pictures, beginning in 1889; Menlo Park had the first motion picture studio, and produced the earliest action films (most early movie production took place in and around New York City). The classic *Great Train Robbery* of 1903 was an Edison work, filmed in part at Menlo Park. On 6 Oct 1889

Edison and William A. Kennedy had synchronized cylinder records with motion picture film to bring sound films into the world. In 1913 he offered a combination of a celluloid cylinder (similar to the Blue Amberol) with film in the Kinetophone. He made 19 talking pictures before 1915, when he abandoned the format.

Thomas Edison's life story is a recitation of the American dream. He was born in a "humble cottage" in a small town in Ohio, lived after age seven with his family in another small town, Port Huron, Michigan. He had little formal schooling, but acquired a wide general and technical education through self study. He would later suffer from deafness, due to a childhood mishap. At age 12 he began to work on the railroad that ran from Port Huron to Detroit, selling newspapers and candy; he soon built this modest post into a fruit and vegetable business. He learned telegraphy from a station agent whose son he had saved from death, and by the age of 17 he had become a railway telegrapher. Boston was his home for a period, then New York City — where he arrived impecuniously in 1869. Good fortune came at last when his first commercially successful invention — the stock printer — brought in \$40,000.

Edison set up a factory and laboratory in Newark in 1870, then the Menlo Park laboratory in 1876. He began to receive patents for electrical developments, and a stream of inventions followed.

During World War I the genius of Edison (which he described as 2 percent inspiration and 98 percent perspiration) was applied to practical problems. He headed the U.S. Navy research effort that developed submarine detection devices, underwater searchlights, improved torpedoes, and range finders. He was awarded the Congressional Medal of Honor in 1928. At the age of 80 he was still active in experiments, and developed a form of synthetic rubber just before his death in West Orange in 1931.

An early marriage, to 16 year old Mary Stillwell, ended in 1884 with the lady's untimely death. Edison then met and courted Mina Miller, of Akron, Ohio, and eventually proposed to her — via a Morse code message tapped on her palm, as the story goes — in September 1885. The couple, with Edison's three children, settled in Glenmont, a mansion in West Orange. Another three children were born, including Charles (1890), who was to assist in administering his father's enterprises.

His widow outlived Edison by 16 years, and devoted much energy to preserving her husband's workplaces. This interest culminated in the establishment of the Edison National Historic Site in West Orange, New Jersey.

Edison lived a simple life, considering his fame and wealth. Despite his consuming interest in science, he

was not a cultural blank. His reputed ignorance about music, for instance, must be ascribed to his preferences rather than to lack of familiarity with the masters. (A conversation with John Philip Sousa, printed in the October 1923 issue of *Etude* magazine, revealed an acute musical ear — despite his poor hearing — and his considered views on Mozart, Chopin, and Wagner.) He did not credit himself with genius, yet "his genius was the spark of history — making advances in the world's social, economic and political life. Imagination, dynamically related to a persistent soul, never discouraged by defeat, comprised the sinew of his fame" (Sarnoff 1948).

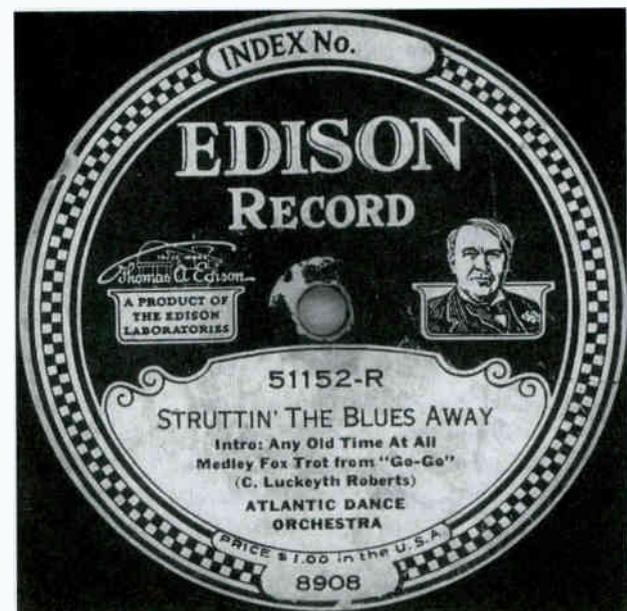
An LP presenting all the surviving recordings of Edison speaking was issued in 1986: *Voice Recordings of Thomas Alva Edison* (Mark 56 Records). The disc includes Edison's Morse code message to the Old Time Telegraphers and Historical Association in 1919. [NAG #30 (1979) reprints the *Etude* interview; Sarnoff 1948; Wachhorst 1981.]

See also Cylinder; Disc; Edison Diamond Disc; Edison Record Players

EDISON (LABEL)

The name given to the cylinder records sold by Edison's North American Phonograph Co. (1890–1894), the National Phonograph Co. (1896–1910), and Thomas A. Edison, Inc. (1910–1929).

See also Cylinder; Edison Diamond Disc



Edison Record label. Courtesy David A. Jasen

EDISON (THOMAS A.) INC.

A firm incorporated in 1910 in a reorganization of the earlier Edison companies; it was under this name that Thomas Edison carried on his business activities until his death. He himself was president from December 1912, when Frank L. Dyer resigned the post, until August 1926, when Edison turned the job over to his son Charles and became chairman of the board. In 1912 C.H. Wilson, general manager, became vice president as well. The firm included various units for particular products: phonograph division, Ediphone division, and divisions to handle nonaudio items like storage batteries. Blue Amberol cylinders were among the first products offered by the company, along with the Amberola player for them, followed by the Edison Diamond Disc. West Orange, New Jersey, was the center of research activity. In fact, the first of the famous tone tests took place there, in 1915, when soprano Anna Case and contralto Christine Miller demonstrated that their recorded voices on Diamond Discs were indistinguishable from their live ones.

After a remarkable first decade of invention and advanced products, the company fell behind its competitors. Electrical recording of Diamond Discs was put off until 1927. A long-playing record, marketed in 1926, was unsuccessful. Acquisition of Splitdorf Radio Corp. in 1928 marked a belated move into the radio market. Edison was never able to gather the recording stars of Victor and Columbia, nor to handle the sophisticated repertoires of his rivals.

Both discs and cylinders were manufactured by the firm until 1 Nov 1929, when Edison ordered an end of production except for dictation records. That product was made by the Voicewriter Division, which merged with McGraw Electric Co. in 1956. [Wile 1985/2.]

EDISON BELL (LABEL)

Discs marketed by Edison Bell Consolidated Phonograph Co., Ltd., of London, from May 1908 (as Bell Discs) to April 1933. The first records entitled "Edison Bell" were actually Edison cylinders, marketed in Britain from ca. 1901 until 1914. Although the firm referred to the discs as "Discaphone Records," that name did not appear on the labels. Bells were 10 1/2 inches in diameter, double-sided; they sold for 2s 6d. A few months later a new line of 8 3/4 inch, double-sided vertical-cut discs named "Phonadisc" appeared, selling at 1s 6d. There was also to be an 11-inch or 12-inch Marvel to be sold at 4s, but it seems not to have appeared. A total of 62 Phonadiscs were issued. They had paper labels, and carried spoken announcements.



Edison cylinders. Courtesy Frank Hoffmann

With the formal demise of the Edison Bell Company in 1909, the label name passed to the new firm of J.E. Hough, Ltd. Hough had been general manager of Edison Bell. He relaunched the Bell discs in 1910, and the new nine-inch, vertical-cut Little Champion label.

Edison Bell Winner was a new label name, the discs being produced by a syndicate named The Winner Record Co., with J.E. Hough, Ltd., providing matrices. Later The Winner Record Co. was incorporated as The Winner Co., Ltd. Winners were sold until January 1935 — after November 1932 they came from Decca Record Co., Ltd., which had bought Edison Bell.

Repertoire included worthwhile classical works, and popular items taken from American masters, such as jazz numbers from Gennett (1920–1925), and material from Emerson, Federal, and Paramount. Edison Bell Radio was an eight-inch label sold from April 1928 to April 1932. [Adrian 1989; Rust 1978.]

EDISON BELL CONSOLIDATED PHONOGRAPH CO., LTD.

A London firm, it held the Thomas Edison and Bell-Tainter British patents, and was the primary owner and purchaser of any phonographic goods from any country. There were two companies of the name, one successor to the other, both preceded by the Edison Bell Phonograph Corp., Ltd., of 1892. All three firms licensed others as long as their patents were alive. Edisonia, Ltd., founded in 1897 by J.E. Hough as a reformation of his London Phonograph Co., coexisted with it for a year as a supplier of records and machines; it was found guilty of patent infringement and stopped by the courts. Then in 1898 the Edison Bell interests were brought together into the Edison Bell Consolidated Phonograph Co., Ltd., under Hough's direction. (Edisonia remained as its manufacturing unit.) By 1904 the firm was one of the three major

producers of cylinders in Britain, the others being the National Phonograph Co., Ltd. and Pathé. In 1908, following a few years of price wars and patent litigation, Edison Bell acquired Sterling and Hunting, Ltd., makers of the competitive Sterling record. Success of Edison Bell was further indicated by the extension of patent rights to Australia, China, Japan, and South America.

Cylinders had the label names London, Grand Concert, Indestructible, Indestructible Ebony, Popular, and Standard. In 1903 a factory in Peckham was built to make phonographs and gold-molded records. Disc records were offered simultaneously with cylinders, from June 1908.

Competition from formidable disc firms, for example, the Gramophone Co., Jumbo, and Rena, took its toll on Edison Bell, and it went into receivership in 1909, dissolving in May 1910. This was evidently a technical bankruptcy only, for business continued and Hough remained in control. Under the name J.E. Hough, Ltd., the Edison Bell Velvet Face disc was released in September 1910, the Little Champion in December 1910, the Velvet Face Edison Bell Celebrity Record in June 1911, and then the successful Winner label in February 1912. Winners, priced at 2s 6d, were sold by a new subsidiary firm, Winner Record Co., Ltd., which was registered on 10 Apr 1912. The Westport label was sold from 1922 to 1924. Beltona was acquired in 1927. Decca Record Co., Ltd., acquired the Edison Bell interests in 1932.

See also **Edison Bell International Ltd.; Edison Bell (Label)**

FRANK ANDREWS

EDISON BELL ELECTRON (LABEL)

An English issue, released from July 1927 to November 1930. About 370 records were marketed.

EDISON BELL INTERNATIONAL LTD.

A company established in October 1928 in London to manage the foreign business of Edison Bell. The new firm took over all overseas rights except for North America. Recordings were made in Budapest and Zagreb. An ensemble from the Dutch East Indies was recorded on a visit to London.

EDISON BELL PHONOGRAPH CORP., LTD.

The predecessor firm to the two companies named Edison Bell Consolidated Phonograph Co., Ltd., owner of the Edison and Bell-Tainter patent rights.

EDISON BELL RADIO (LABEL)

SEE EDISON BELL (LABEL)

EDISON BELL WINNER (LABEL)

SEE EDISON BELL (LABEL)

EDISON DIAMOND DISC

As early as 1910 there had been experiments in the Edison laboratory directed at the production of a flat disc record. It was put on the market in 1913, as the Diamond Disc, to be played with a diamond stylus in the new Diamond Disc Phonograph. The disc with the earliest recording date was "Dir che ci sono al mondo" from *Zaza*, performed by Carmen Melis. It came from a session of January or February 1910, but was not issued until 1913 (#83001). The machine had a heavier reproducer than the one used on cylinders, so a hard surface disc was needed; this was achieved with a plastic named Condensite. The records weighed one pound each, and measured a quarter-inch thick. There were 150 turns (grooves) per inch. At 80 rpm, the 12-inch Diamond Disc played 7 1/2 minutes, and the 10-inch record played five minutes. There was no warping, and no perceptible wearing of the surface, even after hundreds of plays. Outstanding audio fidelity for its time brought the Diamond Disc great acclaim; it was the medium of the remarkable tone tests that Edison used to demonstrate the quality of his product. Considering the longer playing time of the Diamond Discs, their price was competitive with standard discs: \$1 for 10-inch records, while standard records were selling for \$0.60.

What prevented the Diamond Disc from gaining a greater market share was its excessive surface noise (gradually improved, but a reasonably quiet surface did not emerge until 1924), and the tendency of the earlier discs to separate their layers and to curl or crack. Another difficulty was the need to have an Edison disc player, since the Diamond Discs were not compatible with Victors, Columbias, and other machines. Finally, there was the artist and repertoire problem that always dogged Edison; he did not contract the finest artists and have them perform the quality music that was found on competing labels.

Edison did not begin recording electrically until June 1927, two years after the process had been adopted by other firms. He did pioneer in the manufacture of long-playing records, from 1926, but those were not well received. Just before Edison dropped out of the record business, he offered a lateral-cut electrically recorded disc (summer 1929), but it was without outstanding

EDISON DICTATION RECORDS

qualities. The final Diamond Disc was cut on 18 Sep 1929. [Wile 1978; Wile 1985/2; Wile 1990/4.]

See also Edison Record Players

EDISON DICTATION RECORDS

SEE EDISON SCHOOL RECORDS

EDISON HORNS

The earliest phonographs and gramophones made use of listening tubes to increase audibility during playback. On the first tinfoil phonographs, the cone-shaped mouthpieces also functioned as volume enhancers. A graphophone of 1886 had a small horn, and so did the Edison New Phonograph of 1887. In a photograph taken at the Paris 1889 Exposition, an Edison Perfected model was shown next to "what could be the first horn of any size for a phonograph, probably spun from brass or copper... but there is no indication of how it fixed to the machine" (Frow, p. 153). Around 1895 14-inch brass horns were first marketed with Edison domestic machines and coin-ops.

Horns got larger and larger; by the turn of the century some manufacturers were selling models up to 56 inches in length, collapsible into sections, and held up by cranes or stands. Edison was more restrained, preferring to develop efficient design in place of greater dimension. His products were of curved metal, or later of wood, not more than 19 inches long; they gave superior acoustic results compared to the massive conical shapes of other makers. Music Master was the name given to the wood horns — oak, mahogany, spruce — and also to some British versions in hard cardboard or whale skin. [Frow 1978.]

See also Horn

EDISON NATIONAL HISTORIC SITE

An entity located at Main Street and Lakeside Avenue, West Orange, New Jersey. Thomas Edison opened a new laboratory and manufacturing complex in West Orange on 24 Nov 1887, 10 years almost to the day after he had invented the phonograph in Menlo Park. His early work in West Orange resulted in the Improved Phonograph, the Perfected Phonograph, and the kinetophone, as well as a successful storage battery; all his later enhancements in recording were developed there. After the inventor's death, activity at the lab began to phase out, and it closed completely by 1935. Manufacturing of phonographs for business use and of electric storage batteries did continue until 1972. The laboratories were preserved by Edison's widow, Mina.

After she died in 1947, the firm opened some of the research areas to the public on guided tours. In 1955 the laboratories were turned over to the National Park Service, which administers the facility as an educational museum. President John F. Kennedy signed legislation giving the site — which combines the labs and the Edison home, Glenmont — its present name.

EDISON PHONOGRAPH CO.

A firm established in 1887 for research and development; Edison's current and future patents (extending to October 1892) were assigned to it. The plant was located in West Orange, New Jersey; its general agent was Ezra T. Gilliland. Actual manufacturing was carried out at the Edison Phonograph Works. On 28 June 1888 the stock was sold to Jesse H. Lippincott for \$500,000, and his North Americana Phonograph Co. became sole U.S. proprietor of the Edison patents, though certain manufacturing rights were retained by the Edison Phonograph Works.

EDISON PHONOGRAPH CO. (OHIO)

The successor to the Ohio Phonograph Co., commencing business in May 1897. There were offices in Cincinnati, Chicago, Cleveland, and Indianapolis. James L. Andem was general manager.

EDISON PHONOGRAPHTOY MANUFACTURING CO.

The firm established in October 1887 for the promotion of Edison's talking dolls. Legal and manufacturing problems held up production, which finally began in 1890. The doll was featured in *Scientific American* (26 Apr 1890), and distributed to stores. According to claims by the firm, up to 500 dolls a day were manufactured. There were still mechanical faults in the doll, however, leading to returns by many buyers. The doll was withdrawn and further research was undertaken in the fall of 1890. Response from the stock market was negative: the price of doll stock fell from a high of \$10 to \$3.50 in mid-1890. Thomas Edison, confronted simultaneously with the financial difficulties of his North American Phonograph Co., decided to terminate the contract with the Edison Phonograph Toy Manufacturing Co. as of 23 Mar 1891. The company officially ceased operating on 6 Aug 1901. [Wile 1987.]

EDISON PHONOGRAPH WORKS

The manufacturer of Edison products, established at West Orange, New Jersey, on 30 Apr 1888. Its

manager, Alfred O. Tate, entered into a secret agreement on 7 Dec 1896 with the American Graphophone Co. to cross license each other's key patents. In 1910 the facility was part of the reorganization that resulted in Thomas A. Edison, Inc.

EDISON RECORD PLAYERS

Listed here in alphabetical order are the named models of Edison cylinder phonographs. Disc players are identified following the names of the cylinder machines.

1. *Alva*. An electric (mains) version of the Triumph, available in 1907 in both America and Britain, supplied with a cygnet horn. It sold at \$85, or up to \$100 with the Model C reproducer. In 1908 a Model H reproducer was added, for playing the Amberol. A Model O reproducer was available in 1910. The machine was discontinued in 1912 (U.S.) and 1911 or 1912 (Britain). Illustrations in Frow 1978, pp. 23–24.

2. *Amberola*. Edison's premier phonograph, produced from 1909 to 1929 to play both the two-minute and four-minute Amberol and the four-minute Blue Amberol cylinders. The machine appeared in various modifications with different model designators:

Amberola I. Marketed in the U.S. and Britain, 1909–1912, for the two- and four-minute Amberol records. It came in A and B styles, both of them floor models with internal horns; A was belt driven, B had the same motor as the Opera player. Selling at \$200 (mahogany, oak), or \$250 (Circassian walnut), it was aimed at the high end of the market, in competition with the Victrola and Grafonola gramophones. Reproducers used included Models A, L, and M. Illustrations in Chew 1981, p. 94; and Frow 1978, pp. 89–92.

Amberola III. (Note: there was no Amberola II.) On sale from 1912 to 1915 in U.S. and Britain, to accommodate the four-minute Blue Amberols. It came in an open stand instead of a closed console cabinet, using the same motors and reproducers as the I. Price was \$125. Illustration in Frow 1978, p. 93.

Amberola IV. On sale from 1913 to 1915 in America and Britain, for the four-minute records. It used the Model B reproducer, with Model N as an optional extra. The motor was a modification of the Home motor, belt driven. The stand had a modern look, with an open shelf in place of the closed cabinet. The appearance was evidently a hindrance to sales, as fewer than 71 were ever sold at the \$100 price. Illustration in Frow 1978, p. 94.

Amberola V. Despite its number, this model went on sale before Amberola IV; it was on the market in 1912, the first table model Amberola. Price was \$80; sales were brisk. It had a single-spring motor, using a Diamond B reproducer. Illustration in Frow 1978, p. 95.

Amberola VI. Three VI models of this table phonograph have been identified by Frow, offered in 1913–1914 in the U.S. and Britain. The nomenclature was confusing: Amberola VI (later called the A-VI), B-VI, and C-VI. Principal differences were in the motor, which gave trouble from the first. A modified Fireside type motor was finally used. All versions sold for \$60, but those remaining after the Edison fire of December 1914 were released at \$50; they had been fitted with Amberola 50 mechanisms. Reproducer was Diamond B. Illustrations in Frow 1978, p. 97–98.

Amberola VIII. (Note: there was no Amberola VII.) A simple, inexpensive (\$45) table model, introduced October 1913 and marketed until 1915. It had the Fireside or Standard motor, with Diamond B reproducer (Model N optional extra). Two cabinet styles were available. Illustrations in Frow 1978, pp. 99–100.

Amberola X. (Note: there was no Amberola IX.) Sold from 1913 to 1914, in the U.S. and Britain, in four table models having some mechanical differences. It used the Gem type motors at first, then the Fireside type. At \$30, it was the cheapest of all Amberolas; and also the smallest. The reproducers were Diamond B, or sapphire Model N as an optional extra. Illustrations in Frow 1978, pp. 100–101.

Amberola 30. In 1915 Edison decided to consolidate the numerous Amberolas into three lines, to be known by the number of dollars required to buy them: 30, 50, and 75. Table model 30 was the sales leader (selling 18,000 in one six-month period of 1916). It was available in the U.S. and Britain. A single-spring motor was supplied, with a Diamond C reproducer. Production ceased in October 1929. Illustrations in Frow 1978, pp. 105, 130.

Amberola 50. Introduced in 1915, in the U.S. and Britain. A table model, with double-spring motor, and Diamond C reproducer. It was modified and sold around December 1928 in Britain as the Amberola 60. Production ceased in October 1929. Illustrations in Frow 1978, pp. 106, 108, 109.

Amberola 60. The British version of Amberola 50.

Amberola 75. Sold in U.S. and Britain from 1915, it was a floor model version of the 50. It seems to have been sold in Britain and Australia, with modifications, as the Amberola 80, from around December 1928. Production ceased in October 1929. Illustrations in Frow 1978, pp. 107–108.

Amberola 80. The British/Australian version of Amberola 75.

3. *Balmoral*. The name given in 1906 to the Class M.

4. *Business*. A table model machine intended for taking dictation; supplied with a speaking horn and playback horn. It was available with 110–120 volt electric motor, or double-spring motor. The spectacle reproducer was used. Illustration in *TMR* 49b (1977), p. 1184.

5. *Class E*. An early modification of the Perfected Phonograph, sold ca. 1893–1909 (U.S.), and 1893–1910 (Britain); named the Conqueror in 1901. It operated on DC mains current, 110–120 volts. The first price was \$170, but this fell to \$90 in 1898 and \$75 in 1900; then rose to \$80 in 1906. Until October 1908 only the two-minute version was made, while later models played either two- or four-minute records. Reproducers began with the Model A Speaker, followed by the Standard Speaker and the Automatic Speaker. The Model C reproducer was used in 1902, and the Model H in 1908. Listening tubes and 14-inch horns were the first accessories; a 20-inch horn was among those offered later. A modification of the Class E, to play the larger Concert cylinders, was available in 1899–1906; it was known as the Class E Concert, and in 1901 as the Oratorio. Price was \$100. Illustration in Frow 1978, p. 20.

6. *Class M*. A version of the Class E which operated on a DC battery, sold from 1893. Its later names were the Victor (1901) and Balmoral (1906). Prices were \$150 including battery in 1893; \$75 without battery in 1898; \$60 without battery in 1900; \$65 without battery in 1910. A Class M Concert model, for the larger cylinders, was sold in 1899–1906; this was renamed the Opera model in 1901. Price was \$85. Illustrations in Frow 1978, pp. 16–19; Jewell 1977, p. 51.

7. *Coin-Slots*. Also known as coin-ops. By 1898 some Edison players were being adapted for coin use with spring motors; they could play only one record. Various mechanisms and cabinets were found, with model names including Edison H, Bijou, Climax, and Excelsior. All went out of production by 1908. Other coin-slots were run by electric (battery or mains) motors. Names included Class E, Class H, Class M, Ajax, Alva, Climax, Eclipse, Imperial, Majestic, Regal, and Windsor. The Blue Amberol was not used in coin-ops. Production ceased by 1909. Illustrations in Frow 1978, pp. 114, 115, 117, 119, 120, 122, 124–126.

8. *Commercial*. A model sold in 1893 by Edison Bell Phonograph Corp., Ltd., London. It was intended for dictation, and had a speaking tube as well as a listening tube. Illustrations in Frow 1978, p. 173; *TMR* 43 (1976), p. 841.

9. *Concert*. This name had various applications. It usually referred to the machines that played cylinders of five-inch diameter, the so-called Concert records. The commercial prototype seems to have been the Graphophone Grand. A model with the name Edison Concert Phonograph was marketed in 1899–1906 in the U.S., and from 1899 or 1900 in Britain. Some early versions of the Concert were called Edison Grand Concert Phonograph; the Opera was renamed Concert, and the Amberola I was also the Concert Amberola. The Concert machine had a spring motor that played six to eight cylinders on a single winding; and a 24-

inch horn. It sold for \$125, reduced quickly to \$100. Although concert records gave good volume, they were fragile, bulky, and expensive. Edison reduced production in a few years. Illustrations in Chew 1981, pp. 42–43; Frow 1978, pp. 63–66, 167; Jewell 1977, pp. 51–52; Marty 1979, p. 60.

10. *Domestic*. An Edison Bell phonograph, also known as the Drawing Room model, marketed in Britain in December 1893. It was a battery-driven machine with eight hearing tubes to permit group listening. Except for the smaller number of hearing tubes, it was the same as the Exhibition model. Domestic were leased for £10 per year, instead of sold. Illustration (advertisement) in *TMR* 43 (1976), p. 840.

11. *Drawing Room*. See Domestic, above.

12. *Duplex*. A model that played standard cylinders and concert cylinders by means of a slip-on concert mandrel.

13. *Exhibition*. An Edison Bell model “let out to showmen and others who desire to exhibit the machine throughout the country for a money payment,” as it was advertised in December 1893. It was battery operated, with 14 hearing tubes to allow group demonstrations.

14. *Fireside*. One of the most successful cylinder phonographs, introduced in July 1909 (U.S. and Britain). Operated by a single-spring motor, it played both standard records and Amberols. At first (*Model A*) it came with a straight horn, 19 inches long, in two sections; a cygnet horn was available in 1910. Price varied from \$32 to \$44, depending on the cabinet and horn chosen. The reproducer was Model K, with a Diamond B for the Blue Amberol records. A *Model B* phonograph was released in 1912 (U.S.) and 1913 (Britain). Some 250 machines a week were sold, and although production ended in 1913 sales continued for another two years. Illustration and story in *Glastris* 1990; illustrations in Frow 1978, pp. 83, 84, 86; Jewell 1977, p. 56; Marty 1979, p. 62.

15. *Gem*. The smallest and one of the most popular machines produced by Edison. It measured 7 3/4 by 5 7/8 inches in the base, and weighed only 7 1/2 pounds. *Model A* was introduced in U.S. and Britain in February 1899, selling at \$7.50. With a key-wound spring motor it could play two of the two-minute cylinders at one winding. The horn was a 10-inch conical, the reproducer was the Automatic. A crank replaced the key on the 1905 *Model B*, and the reproducer was Model C; the machine weight grew to 13 pounds. When *Gem Model C* came out, basically unchanged from *Model B* (1908 in U.S., 1909 in Britain), the price had climbed to \$12.50. *Model D* (1909) accommodated both standard two-minute records and the new four-minute Amberols; various reproducers were available for it, and a number of cabinets and horns. Price was up to \$15. The last version, *Model E* of 1912, played only the four-minute

cylinders. It was otherwise essentially the same as the previous model, and sold at the same price. Gem manufacture was discontinued in 1914. Edison Bell revived the name Gem for its radio receiver of 1925. Illustrations in Chew 1981, p. 56; Frow 1978, pp. 68–76; Hoover 1971, p. 44 (the date is given incorrectly there), Jewell 1977, pp. 51, 57; Marty 1979, p. 59.

16. *Home*. The history of this very successful machine began in 1895, with the introduction of the “clockwork” model; it had an intricate spring motor made by the United States Phonograph Co. of Newark, New Jersey. After a few months this device was replaced by a regular Edison motor, and the name *Model A* was assigned to the phonograph (1896–1905). It sold for \$40, later \$30, and included a choice of brass horns as long as 36 inches. In 1901 the Automatic Reproducer was offered, and in 1902 the *Model C* reproducer. Several cabinet styles appeared. *Model B* became available in the U.S. and Britain in late 1905, with some motor refinements and a choice of horns; price was \$30. Except for a change in mandrel support, the 1908 *Model C* (1909 in Britain) was the same as the previous version, although more expensive at \$35. Both two-minute and four-minute records were playable on the *Model D* (1908 U.S., 1909 Britain); alternatively an attachment could be purchased to play the Amberols on the earlier models. Cost was \$40 for the new model, or up to \$58 with cygnet horn and mahogany case. *Model E* (1911) had the new *Model O* reproducer, and a new price tag of \$45. The *Model R* reproducer was introduced later as an option. In the *Model F* (1912 U.S., 1913 Britain) there was yet another reproducer, the Diamond B. This machine played Blue Amberols; cost was \$50. Production of the Home ceased in October 1913. Illustrations in Frow 1978, pp. 40–45, 47–50; Hoover 1971, pp. 54–55, Jewell 1977, pp. 67–68; Marty 1979, p. 58, 61.

17. *Household*. The model exhibited by Edison at the World's Columbian Exposition of 1893.

18. *Idelia*. From 1907 to 1911 this was Edison's luxury model, selling at \$125 and featuring oxidized bronze finish on the metal parts. The original spelling, Ideal, was dropped after three months. A spring motor of the Triumph type was used, with a 33-inch horn and a *Model C* reproducer. *Model D1* (1908 U.S., 1909 U.K.) played both two- and four-minute cylinders. *Model D2* (1909 U.S., 1910 Britain) introduced the new cygnet horn. *Model E*, sold in U.S. in 1910, had a *Model O* reproducer. Production of the *Idelia* ended in 1911 in U.S. and 1912 in Britain. Illustrations in Frow 1978, pp. 77–81; Jewell 1977, p. 70.

19. *Improved*. This name was given to one result of Edison's renewed attention to the phonograph in 1887. It succeeded the New Phonograph, and preceded the Perfected Phonograph. Heavy-duty batteries provided

the power and a steady recording speed. Illustration in Chew 1981, p. 10.

20. *Military*. A small machine on display at the Paris Exhibition of 1889. It was an electric portable, with half-size cylinders. Illustration in Frow 1978, p. 12.

21. *New*. The first machine made by Edison when he resumed work on the phonograph in 1887, using wax cylinders in place of tinfoil. Its poor quality of reproduction required the inventor to make the improvements that led to the Improved model. Illustrations in Chew 1981, p. 10; Frow 1978, pp. 181–182.

22. *New Duplex*. A model offered in Britain in 1902–1903, with two mandrels (for standard and five-inch cylinders) and the Home motor. The horn was a self-supported Herald type. It was sold by Edison Bell for £15. In 1905 Edison Bell offered the Concert Duplex modification, which was basically the Concert phonograph, for £17 5s. Illustration in Frow 1978, p. 172.

23. *Opera*. Acclaimed as the greatest of Edison's phonographs, the Opera was introduced in U.S. in 1911 and Britain in 1912. It played only the four-minute Amberols, using a double-spring motor with a *Model L* reproducer. A Music Master horn was included, and the cabinet was mahogany. Price was \$90. The diamond *Model A* reproducer was offered for the Blue Amberols in 1912 (Britain 1913) and the model's name was changed to Concert. Production ceased in 1913. Illustrations in Chew 1981, p. 43; Frow 1978, p. 21, 111; Jewell 1977, p. 84; Marty 1979, p. 63.

24. *Perfected*. Possibly the most famous photograph of Edison shows him with the Perfected Phonograph, which he had created in June 1888 after a 72-hour marathon effort in the laboratory. The power came from 2.5 volt batteries. Pianist Josef Hofmann made a cylinder in the laboratory, the earliest record by a recognized concert artist. It was to be Edison's first commercial instrument, intended for business use; but in 1889 some music and novelty records were already being made. Edison's British agent, Colonel George Gouraud, demonstrated the Perfected model in Bath on 6 Sep 1888, in competition with the graphophone, and made records of William Gladstone, Alfred Tennyson, Robert Browning, and Florence Nightingale. Gouraud exhibited the machine at the Crystal Palace, London. Brahms performed a piano solo for the machine in 1889, in Vienna. The oldest recording in the BBC library, by naturalist Ludwig Koch, was made on a Perfected Phonograph. Illustration in Frow 1978, p. 4.

25. *School*. This model was intended for use with the 54 Blue Amberol School Records. It was introduced in 1912 (U.S.) and 1913 (Britain), selling at \$75. Mechanically it was identical to the Opera model; it had a diamond *Model A* reproducer and a cygnet horn. Instead of occupying a wooden cabinet, the School Phonograph stood on plain steel case with four

EDISON RECORD PLAYERS

shelves to hold cylinder boxes. Production ceased in 1914. Illustration in Frow 1978, p. 113.

26. *Motor*. Also identified as the Class SM, and later (1901) as the Triumph; in Britain it was named the Class M Spring Motor Phonograph. This machine was marketed from 1896 to 1900. Using a heavy three-spring motor, it could play up to 14 records on a single winding. The Edison Standard Speaker was on the early models, while later versions had the Edison Automatic Reproducer and Edison recorder. Listening tubes or a 14-inch brass horn were available. It was originally priced at \$100, then reduced to \$50. Illustrations in Frow 1978, pp. 25–28, 164; Jewell 1977, p. 97.

27. *Standard, Class S*. "By far the most commonly found of the Edison phonographs in Great Britain" (Frow), and highly successful in the U.S. as well, the Standard was sold from 1898 to 1913. *Model A*, with a single-spring motor, played two or three two-minute cylinders at one winding, using the Edison Standard Speaker and Edison Recorder and a 14-inch brass horn; in 1899 the Automatic Reproducer replaced the Standard Speaker. Price was \$20. *Model B*, 1905, had a slightly stronger spring motor and could play four records without rewinding; it had the *Model C* reproducer. Price was \$25 with a 30-inch horn. *Model C*, 1908, had only minor changes from the previous model. Both two- and four-minute records were playable on the *Model D*, introduced in 1908 (U.S.) and 1909 (Britain). *Model E* (1911, U.S. only) was for the Amberols only; it had a *Model N* reproducer and a flower horn; price \$30. *Model F* (1911 U.S., 1912 Britain) took either two- or four-minute records. It had a cygnet horn, with a *Model S*, *Model C*, or *Model H* reproducer; it sold for \$35. The arrival of the Blue Amberol cylinder required a diamond reproducer on *Model G* (1912), which was otherwise the same as the previous versions. Production ended in October 1913. Illustrations in Frow 1978, pp. 51–55, 57–62, 128–129; Jewell 1977, p. 97; Marty 1979, pp. 59–60.

28. *Triumph*. A phonograph that was developed in 1901 from the Spring Motor model; it remained in production until 1913, passing through several versions. *Model A* was a recasing of the Spring Motor model. It handled two-minute cylinders, using the *Model C* reproducer after 1902 in America and 1903 in Britain. A 14-inch horn, brass and later black japanned, was supplied. Price was \$50. In 1906 *Model B* appeared, featuring some mechanical improvements and, from 1907, a 33-inch black horn. *Model C* (1908 U.S., 1909 Britain) had a few mechanical changes, one being a central bearing support for the mandrel. With the arrival of the four-minute record in 1908, *Model D* was introduced to play it (1909 in Britain). It also handled the older two-minute cylinder. A *Model C* reproducer was used for the two-minute record, and *Model*

H for the new Amberols. After 1909 a 33-inch cygnet horn was supplied. Cost was \$65–\$85, depending on horn finish and cabinetry. *Model O* and *Model R* reproducers were provided for the *Model E*, sold in 1910; various horns were offered. In 1912 U.S., 1913 Britain, *Model F* was introduced; it was for two-minute or four-minute records, with a *Model O* reproducer and an oak Music Master horn. Price was \$75. The series ended with *Model G* in 1912 in the U.S., in 1913 in Britain; it had the Diamond B reproducer, and played only the four-minute Blue Amberol. Equipped with an oak Music Master horn, it was priced at \$75. Illustrations in Frow 1978, pp. 29, 32–34, 36–39; Jewell 1977, p. 101.

The Edison phonographs cited above are listed below by the year in which they were first marketed:

1887	New
1887	Improved
1888	Perfected
1889	Military
1893	Class E
1893	Class M
1893	Commercial
1893	Domestic
1893	Drawing Room
1893	Exhibition
1893	Household
1896	Home
1896	Spring Motor
1898	Coin-Slots
1898	Standard
1899	Concert
1899	Gem
1901	Triumph
1901	Victor
1902	New Duplex
1906	Balmoral
1907	Alva
1907	Idelia
1909	Amberola I
1909	Fireside
1911	Opera
1912	Amberola III
1912	Amberola V
1912	School
1913	Amberola IV
1913	Amberola VI
1913	Amberola VIII
1913	Amberola X
1915	Amberola 30
1915	Amberola 50
1915	Amberola 75
1928	Amberola 60
1928	Amberola 80

[Copeland 1991; Edison 1893/1; Frow 1978 (source of nearly all the above information); Waltrip 1991.]

Edison's first disc phonograph acknowledged the public's preference for flat records. However, his disc machine was more than a late entry into the market, it was superior to all that had preceded it. The Diamond Disc phonograph, marketed in 1912, was designed to play the new Diamond Disc records, and the effect was remarkable. *TMW* reported in July 1912 that there was "no perceptible scratch" made on the discs by the new diamond stylus of the reproducer, and indeed it was claimed that no record wear resulted after a thousand plays. The target audience for the new machine was a more affluent one than had been served by the cylinder phonograph. While cylinder machines were still sold for as little as \$15, the lowest price for a disc player was \$60, and luxury models were on sale for \$1,000. A 1920 Gothic model sold for \$6,000, the most expensive acoustic player ever marketed. Tone tests demonstrated the astonishing fidelity that the Diamond Disc and Diamond Disc Phonograph could achieve. An auto-stop was installed; attachments were available to play standard (lateral-cut) discs from other manufacturers. More than 800,000 machines were sold by 1929.

Only one substantial model change occurred in the disc player line, when the Edisonic was introduced in 1927 as a challenge to the Victor Orthophonic. This was an acoustic phonograph made by Edison in the electrical recording era, with an improved reproducer and a larger horn. It advertised "close-up" music, so that "in that chuckling jazz the hot sax seems at your shoulder" and "each instrument, each tone, stands out with cameo-like precision." A small console model, the Schubert, sold for \$135, and a larger Beethoven model sold for \$225. Some models were equipped to play Edison's long-playing records of 1926. Illustrations of various models can be found in Chew 1981, p. 57; Jewell 1977, p. 52; Marty 1979, p. 62. [Odell 1974.]

See also Edison Diamond Disc

EDISON RECORDERS

The recorder of the acoustic phonograph was the device that carried the audio signal to the record surface. It was basically a diaphragm with a stylus embedded in it, the whole fitted with a speaking tube or recording horn. In the pioneer days, the recorder was set into a spectacle carrier, which also held the reproducer. Such was the form seen in the New Phonograph produced by Edison in 1887. Nomenclature was less than lucid: the recorder was identified in some advertising as a "speaker for recording," while the reproducer was also called a speaker.

As the emphasis within the sound industry shifted from home or business recording to home listening, attention was concentrated on the reproducer. Edison made many versions of the reproducer, but he produced only minor variations on his basic recorder, which had a mica diaphragm and a sapphire cutting stylus. Nevertheless, he continued to offer the opportunity for phonograph owners to make their own records, even with the Amberola line of four-minute machines, and at reasonable prices (less than \$10 would buy a recorder, a recorder fitting, and a special recording horn). [Frow 1978.]

EDISON REPEATING ATTACHMENTS

Beginning in 1888 Edison produced devices for his phonographs that allowed repeated playing of the cylinder. This repeating attachment was intended for commercial rather than domestic use. It was a forerunner of the coin-op. Several mechanical principles were tried (cord and windlass, chain drive and pulley, etc.), but they were not successful, and none were offered after 1912. However, the mechanism was important in language instruction. [Frow 1978.]

EDISON REPRODUCERS

The diaphragm-and-stylus device used to play back cylinders was first known as a speaker, or sometimes as a repeater. By use of a spectacle, those reproducers were mounted in tandem with recorders; the one employed to play what the other had inscribed on the cylinder. By 1889 Edison had found a way to meld those functions into a single device (British patent #19153), which he named the Standard Speaker; it had tracking problems and was replaced in 1893 by the Automatic Speaker, also designated as Model A. It must be remembered that the model numbers of the reproducers had no relation to the model numbers of the phonographs. In 1901 there was a special Gem reproducer for the phonograph of that name; this was replaced in a year by the Model B. This complex scenario was simplified in 1902 with the arrival of the Model C reproducer, which was used on most Edison machines until 1913. Glass diaphragms of earlier reproducers were replaced by mica and then copper alloy. Model C was intended for the new hard molded records. The Model D was similar, but adapted for the large concert cylinder. For the four-minute cylinder of 1908, a Model H was introduced. A reproducer to permit playing of Amberol records on five-inch concert machines — the Model J — came out in 1909.

The first reproducer for both two-minute and four-minute records appeared in the 1909 Model K. The required stylus was brought into playing position by

EDISON SHIVERS

turning a swivel. Model L and Model M (1909) were similar devices, intended for Amberola and Opera phonographs. Model N (1911 U.S., 1912 U.K.) played four-minute Amberol records with a sapphire. Model O (1910) was used on players with large carrier arms. Models R and S (1911) were the final sapphire stylus devices from Edison, offering a large diaphragm usable on a small carrier arm. As for the missing model letters in this summary, Frow states that the Model P "has not been accounted for, but is thought to have been a modification of an earlier model"; "Model I was doubtless omitted as liable to cause confusion"; and "further research is needed to trace what happened to Models E, F, and G."

The advent of the Blue Amberol record called for a new series, the diamond reproducers. They were issued from 1912, and bore no model-letter marks; however, researchers refer to them as Diamond A, B, C, and D. They remained on the market until 1929. Lacquered paper and cork were the diaphragm materials. Illustrations in Frow 1978, pp. 134–152. [Frow 1978.]

EDISON SHIVERS

One of the advantages held by wax cylinders over other recording media was their capability of reuse. From 1887 Edison's home and commercial phonographs had devices for shaving the surface of a used cylinder. Operation was by treadle power at first, then by electric drive. Interest in these gadgets peaked by 1904 — when Edison stopped putting shavers on the Home and Standard models. After 1908 he ceased providing them except for the Home Recording Outfit sold in 1912. [Frow 1978.]

EDISON SPEAKING PHONOGRAPH CO.

A firm established on 24 Jan 1878 in New York, and incorporated 24 Apr 1878 in Norwalk, Connecticut. It was formed to make phonographs, based on Thomas Edison's tinfoil phonograph patent (U.S. #200,521, granted 19 Feb 1878), the rights having been acquired through a syndicate that had purchased them from the inventor. Edison received \$10,000 in cash for the manufacturing and sales rights, plus a 20 percent royalty on prospective sales. His instinct in selling out was not misguided, for sales were poor in spite of considerable interest in the invention. S. Bergmann, 104 Wooster Street, New York, made the first models to be sold (at \$95.50); one Charles H. Sewall was the first purchaser. Smaller models were made by Brenner Brothers at \$10.00, and by Alexander Poole. In Europe, E. Hardy and Max Kohl manufactured the machines.

All in all there were only about 2,000 phonographs sold by the end of 1879, with an income of \$4,453.97

in 1878, and \$1,581.98 in 1879. In 1880 the sales amounted to \$478.50. The company was no longer listed in the New York telephone directory after 1879, and was finally sold to Jesse H. Lippincott in 1888 or 1889. [Frow 1978; Koenigsberg 1990; Proceedings 1974; Wile 1976.]

EDISON UNITED PHONOGRAPH CO.

An entity established on 24 Feb 1890 to handle Thomas Edison's patents outside of North America. Location was the Mills Building, New York. G.N. Morison was secretary. Edison United acquired British Edison patents and sold them to Edison Bell Phonograph Corp., Ltd. — a firm it set up for the purpose. Activities ceased in 1902 or 1903.

EDISON VENETIAN TRIO

An instrumental group, also known as the Venetian Instrumental Trio, that recorded for Edison in 1908–1909. The members were Eugene Jaudas, violin; Eugene Rose, flute; and Charles Scheutze, harp. Records listed in Koenigsberg 1987 are "Song of the Mermaids" (#10027; 1908), and "Moszkowski's Serenade" (#10152; 1909).

EDISONIA CO.

A firm incorporated in 1898 by Albert O. Petit, Ademor N. Petit, and Arthur Petit. Edisonia bought the Newark branch of the Douglas Phonograph Co. and arranged with the National Phonograph Co. to be its sole Newark distributor. It was active until ca. 1910.

EDISONIA LTD.

A firm established in 1897 by the redoubtable J.E. Hough, located at the 3 Broad Street Buildings, Liverpool Street, London. Hough had been engaged in illicit sales of Edison products, but the new company gave his occupation legitimacy through agreements with Edison Bell Consolidated Phonograph Co., Ltd. Edisonia's letterhead presented itself as "incorporating the London Phonograph Co." (Hough's previous firm). Edisonia was an independent supplier of records and players for about a year, and then became a subsidiary of Edison Bell, devoted to manufacture of cylinders and phonographs as well as sales. Labels offered were London, Standard, Popular, Indestructible, and Indestructible Ebony. In 1903 a factory — Edisonia Works — was set up in Peckham, and gold molded records were made there. There was also a show room at 20 Cheapside, London, and a business office at 25-27-29 Banner Street, London.

In addition to sound recording items, Edisonia distributed x-ray machines, "materials for producing animated photographs," and "other scientific apparatus."

Problems developed in the early 1900s, with slowing sales and a serious fire at the Peckham Works leading to a crisis in 1909. Both Edison Bell and Edisonia went into receivership, and Edisonia was put up for auction on 24 Mar 1909. It was bought by Hough himself, for £10,400 with all its stock, and reborn as J.E. Hough, Ltd., in April. [Andrews 1984; Chew 1981; TMR #10 reproduces an 1898 letter by Hough.]

EDMONDS, KENNY

SEE *BABYFACE* (EDMONDS, KENNY)

EDMUNDS, HENRY

British engineer who observed Edison's tinfoil phonograph while in the U.S. in late 1877 or January 1878. On returning to England he wrote about the phonograph to the *Times*. It was through this notice, which appeared in the newspaper on 17 Jan 1878, that the British public learned about the invention. Edmunds demonstrated the graphophone in Bath on 6 Sep 1888, after Colonel George Gouraud had exhibited Edison's Perfected Phonograph there.

EDUCATIONAL RECORDINGS

The earliest recordings of an educational character were language instruction records dating from 1891. Columbia's "Phono Vocal Method" (1910) offered lessons by means of recorded examples keyed to textbooks. Later Columbia efforts in the educational arena included children's songs, the Columbia History of Music, dramatic audio reenactments of landmark events, poetry readings, and add-a-part discs for use by musicians. In 1928 Columbia issued lectures on physics and astronomy. During World War II it made Morse Code training discs.

After early production of children's records, Victor expanded that area into "education." The 1917 catalog had 28 pages of titles listed in that category, though nearly all were regular issues thought to have some appropriateness in schools. Some are listed as children's records. The general aim of these recordings was "to help in the uplift of the ideals and tastes of children." Adult education was also touched on by Victor, with the "Oscar Saenger Course in Vocal Training" for each voice type, selling at \$25 for a set of 10 discs and a textbook. By the time of the 1927 catalog, Victor had made records with specific classroom connections, explicated through printed manuals such as "The

Victrola in Physical Education," "Music Manual for Rural Schools," and "Music Appreciation with the Victrola for Children," among others.

In the LP era there were hundreds of instruction discs, many in the self-help category, such as "Improve Your Fishing," and "Look Your Loveliest" on the Carlton label in 1961. Folkways had records that taught the dulcimer (1964), and the country fiddle (1965), among other instruments. The BBC Study Records (1969) presented school programs in diverse subjects. In 1975 PolyGram cassettes were produced in music appreciation, literature study, bridge playing, etc.

Museums have introduced cassettes timed to advise the strolling viewer about works on exhibit. Exercise tapes have become commonplace, the most famous being *Jane Fonda's Workout Record* (CBS #8858), and its successors.

See also **Talking Book**

EDWARDS, BERNARD

(31 OCT 1952–18 APR 1996)

American songwriter, producer, musician, born in Greenville, North Carolina. With his partner, guitarist Nile Rodgers, and others, bassist Bernard Edwards formed Chic in 1976. The group was a major success playing disco music in the late 1970s on its platinum albums, *C'est Chic*, and *Risque*. It disbanded in 1983, and Edwards became a successful producer, his hits including Robert Palmer's "Addicted to Love." He died of pneumonia while on tour with a reformed Chic in Japan.

WILLIAM RUHLMANN

EDWARDS, CLIFF

(14 JUNE 1895–17 JULY 1971)

American popular singer and ukulele player, born in Hannibal, Missouri, in 1895. He sang in saloons in St. Louis, then at the Palace Theater there. Edwards was a narrator in movie houses showing silent films. In Chicago he became a regular performer, and earned his nickname, "Ukulele Ike," as he sang and accompanied himself on the ukulele. Edwards appeared in several motion pictures in 1929 and the 1930s, and was on Rudy Vallee's radio show. He also went to Britain and sang in London music halls. He had a false start at recording in 1919–1920, making some discs that were rejected by Columbia. Then he was successful with Gennett, beginning in 1922 with "Virginia Blues" (#4853), in which he did "vocal effects" for an ensemble. He sang with his ukulele for Pathé Actuelle in 1923, doing "Old Fashioned Love" (#021097), then

EDWARDS, JOAN

worked for other labels to 1927. He was with Columbia in 1928–1930, making a famous record of “Singing in the Rain” (Columbia 31869-D; 1929). Then he recorded for Brunswick, Vocalion, and others. Edwards was the voice of Jiminy Cricket in the animated Walt Disney film, *Pinocchio* (1938), and made a chart record of “When You Wish upon a Star” from the soundtrack (Victor 26477; 1939). He died in Hollywood. Edwards’s early recordings in a blues-hokum style were reissued on Yazoo LP 1047, *I’m a Bear in a Lady’s Boudoir*. *Vintage Recordings* (Take Two 419), offers a nice selection of early and mid-period recordings from the 1920s through the 1940s, and *Singin’ in the Rain* (ASV/Living Era 5313), is a good compilation of his biggest “hits” of the late 1920s-early 1930s. [Kiner 1987.]

EDWARDS, JOAN

(13 FEB 1919–28 AUG 1981)

American popular singer, born in New York; niece of Gus Edwards. She was a radio and hotel vocalist, and was with Paul Whiteman from 1938 to 1940. She was the featured female singer on the radio program *Your Hit Parade*, costarring with Barry Wood. She and Wood had a hit record in “Ti-Pi-Tin” (Victor 27865; 1942); and her solo rendition of “All the Things You Are” was one of the finest made of that masterpiece (Victor 27866; 1942).

EDWARDS, JOHN (1932–24 DEC 1960)

Australian authority on American country and western music, and collector of more than 2,000 records of the period 1923–1941. He died in an automobile accident. His will directed that those recordings be sent to the U.S. for research purposes, and the material was eventually housed at the University of California at Los Angeles. The John Edwards Memorial Foundation was established in 1962 to administer the archive, which grew to more than 12,000 records and included sheet music and instruments of famous performers. In 1983, the University of North Carolina (UNC) purchased the John Edwards Memorial Collection, and in the fall of 1986, the UNC Folklore Archives and the JEMF were combined to form the Southern Folklife Collection, a component of the manuscripts department of the UNC-Chapel Hill Academic Affairs Library. The Southern Folklife Collection was officially opened for research during the “Sounds of the South” conference at UNC in April 1989. A periodical, the *JEMF Quarterly* (originally *Newsletter*), was issued from 1965 to 1989; then a new journal replaced it: *American Vernacular Music*. [Website: www.lib.unc.edu/mss/sfc1/sabout.html.]

EFFICIENCY

The ratio of output power (or energy) to input. In an electronic power amplifier, the ratio of the output power to the power drawn from the mains (alternating current source).

EIA

SEE *ELECTRONIC INDUSTRIES ALLIANCE (EIA)*

EIGENTON

A German term (Eigentone in English) identifying the resonance set up in a room or enclosure at frequencies determined by the physical dimensions of the space. The lowest frequency will be at a wavelength corresponding to twice the longest length of the space, and others will be at double and three times that frequency, and so on.

See also **Room Acoustics**

EIGHT FAMOUS VICTOR ARTISTS

An ensemble established ca. 1917, named at first “The Record Maker Troupe,” originally consisting of vocalists Billy Murray, Henry Burr, Albert Campbell, John Meyer, Arthur Collins, and Byron Harlan, supplemented by pianist Teddy Morse and banjo virtuoso Vess Ossman. The group toured and made records. Burr was manager in 1917, and made a number of personnel changes: Frank Croxton replaced Collins; pianist Frank E. Banta replaced Morse, banjo player Fred Van Eps replaced Ossman, and vocalist/comedian Monroe Silver replaced Harlan. Later, saxophonist Rudy Wiedoeft took the place of Van Eps, and xylophone player Sammy Hermann then replaced Wiedoeft. The group disbanded in 1928, after another change of name to “Eight Popular Victor Artists.” Their last record in the catalog was “Miniature Concert” (#35753; 1925). It was the first electric recording made by Victor.

EIGHT-TRACK TAPE

SEE *TAPE*

ELBOW

The part of a disc player that connects the horn to the end of the tone arm.

ELCASET

A modification of the standard cassette introduced by several Japanese firms in the mid-1970s. It used

quarter-inch wide tape, instead of the standard 1/8-inch, and ran at a faster speed. Sony was the only company to promote the Elcaset actively. The format failed in the market because the improvements it offered over the standard cassette did not outweigh the considerable cost difference and the fact that it was incompatible with the millions of cassette players already owned by prospective customers. A European version was named Unisette.

ELDRIDGE, ROY

(30 JUNE 1911–26 FEB 1989)

American trumpeter, born in Pittsburgh. He began playing professionally at age 16, and was performing in Harlem by 1930. In 1935 he joined Fletcher Henderson; a year later he formed his own band in Chicago. "Heckler's Hop" was an important early record with that group (Vocalion 3577; 1937), which made eight other discs for Vocalion and Varsity by the end of 1939. As a member of the Gene Krupa band in 1941 Eldridge was one of the first Black musicians to appear in a big band brass section. With Krupa he made a hit record, "Rockin' Chair" (Okeh 6352; 1941), followed by another, with Anita O'Day doing the vocal: "Let Me Off Uptown" (Okeh 6210; 1941). His most modern jazz style is heard in "The Gasser" (Brunswick 80117; 1943). He was with Artie Shaw in 1944–1945. Eldridge performed in Paris in 1950, creating a sensation. He also did remarkable work with the Coleman

Hawkins Quintet, and in duets with singer Ella Fitzgerald during 1963–1965. After suffering a heart attack in 1980, Eldridge performed only occasionally. He is regarded as a link between Louis Armstrong and Dizzy Gillespie. He died in Valley Stream, New York.

ELECTRADISK (LABEL)

An eight-inch record, later 10-inch, made by RCA for distribution by Woolworth stores in 1932–1934. They sold for \$0.10, offering mostly material that also appeared on Bluebird. [Rust 1978.]

ELECTRIC (LABEL)

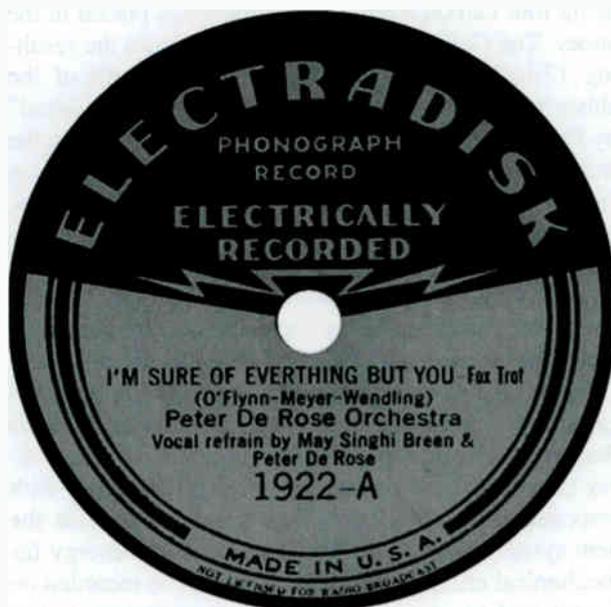
A record that offered dance and popular material ca. 1925 in the U.S. Despite its name, all known examples are acoustically recorded. [Rust 1978.]

ELECTRIC LIGHT ORCHESTRA (ELO)

The Electric Light Orchestra had few equals in achieving a seamless blend of experimental, classically-influenced orchestration and hook-laden pop songcraft. Leader Jeff Lynne, formerly of the Idle Race and the Move, was greatly influenced by the Beatles, particularly the studio wizardry of producer George Martin.

The group was developed as a classical-rock concept in 1971 by the creative core of the surrealist British band, the Move, percussionist Bev Bevan, and the multi-instrumentalists Roy Wood and Lynne. When the eccentric Wood departed in 1972 for a solo career, Lynne — as producer and chief songwriter — assumed creative control of ELO. Despite a reputation for recording highly polished, intricate recordings, ELO quickly evolved into an accomplished performing unit. At the time of the release of *ELO II* (United Artists 040; 1972; #62), the act's commercial breakthrough record, personnel included — in addition to Lynne and Bevan — Richard Tandy (Moog synthesizer, piano, harmonica, guitar), Michael De Albuquerque (bass, vocals), cellist Colin Walker, and violinists Wilf Gibson and Mike Edwards.

ELO II included the hit single, "Roll Over Beethoven" (United Artists 173; 1972; #42, #6 U.K.), which became a metaphor for the group's career. Chuck Berry's wry lyrics about the transcendence of rock 'n' roll backed by the signature motif of Beethoven's Fifth Symphony included all of the ingredients fueling ELO's popularity over the next decade: first-rate melodies, memorable hooks, and an outrageous — occasionally bizarre — sense of humor. The group's long string of chart successes includes the Top 10 singles "Can't Get It Out Of My Head" (United Artists 573; 1974; #9), "Evil



The Electradisk label was a budget label made by RCA Victor for the Woolworths chain between 1932–34. Courtesy Kurt Nauck/Nauck's Vintage Records

ELECTRIC PHONOGRAPH

Woman" (United Artists 729; 1975; #10), "Telephone Line" (United Artists 1000; 1977; #7), "Shine a Little Love" (Jet 5057; 1979; #8), "Don't Bring Me Down" (Jet 5060; 1979; #4; a rave-up rocker notable for its absence of strings), and "Hold On Tight" (Jet 02408; 1981; #10), as well as the LPs *Eldorado* (United Artists 339; 1974; #16), a concept album featuring the use of instrumental and choral interludes to tie the songs together, the disco-tinged *Face the Music* (United Artists 546; 1975; #8), the radio-friendly *A New World Record* (United Artists 679; 1976; #5), the sprawling double-disc set *Out of the Blue* (Jet 823; 1977; #4), the mainstream pop-oriented *Discovery* (Jet 35769; 1979; #5), and the film soundtrack collaboration with Olivia Newton-John, *Xanadu* (MCA 6100; 1980; #4).

When the hits stopped coming, Lynne shifted his emphasis to record production, working with Dave Edmunds, Brian Wilson, and Tom Petty, among others. He would also release solo material and help form — along with Petty, Bob Dylan, Roy Orbison, and George Harrison — the roots-rock supergroup, the Traveling Wilburys, in the late 1980s. Bevan reformed the group as ELO Part II in the early 1990s; however, this aggregate, lacking the songwriting and production excellence contributed by Lynne, failed to achieve any semblance of chart success.

FRANK HOFFMANN

ELECTRIC PHONOGRAPH

A record player driven by an electric motor, with either alternating current or direct current (mains) or direct current (battery) as its power source. Thomas Edison's Perfected Phonograph, which he demonstrated in 1888, had a 2.5 volt battery with a life expectancy of about 15 hours. Certain Edisons had battery power (Class M, certain coin-slots, Domestic, Exhibition, Improved) and/or mains power (Alva, Class E, certain coin-slots). But the principal Edisons (Amberola, Home, Opera, Standard, Triumph, etc.) operated with spring motors. The 1915 Columbia Grafonola was available with an electric motor. And in 1921 Victor was advertising two electric console Victrolas, numbers XVI and XVII. A few disc players had, from 1916, electric attachments that wound spring-operated machines automatically. Brunswick was the first to offer an all-electric record player, the 1925 Panatrope.

See also **Turntable**

ELECTRIC PHONOGRAPH CO. (I)

A New York firm, located in 1916 at 29 W. 34th Street. It sold the Phonolamp line of disc players, which combined a phonograph with a lamp.

ELECTRIC PHONOGRAPH CO. (II)

A New York recording laboratory in operation at least as early as April 1919. A petition for bankruptcy was filed in March 1922.

ELECTRIC RECORDING LABORATORIES INC.

A New York firm, with a pressing plant in Newark, New Jersey. Customers were supplied with the firm's recordings under the buyer's own labels, if requested. A.G. Bryan was manager. Advertising ran from April to July 1921.

ELECTRICAL AND MUSICAL INDUSTRIES

SEE *EMI GROUP LTD. THE*

ELECTRICAL RECORDING

Also known as electromechanical recording. A number of experiments in several countries during World War I developed the components that were to make up an electrical recording system. The earliest effort that resulted in an actual marketed recording was that of Lionel Guest and Horace O. Merriman in London. They produced a moving-coil recording head (U.K. patent #141,790) and set up equipment in a truck outside Westminster Abbey. On 11 Nov 1920 they recorded part of the service for the burial of the Unknown Warrior, using four carbon telephone microphones placed in the abbey. The Columbia Graphophone Co. sold the resulting 12-inch double-faced disc for the benefit of the abbey restoration fund; it contained the "Recessional" by Rudyard Kipling and "Abide with Me." However, the work of Guest and Merriman, as well as that of Adrian Francis Sykes, Frank B. Dyer, W.S. Purser, and others, was eclipsed by the accomplishments of engineers at Bell Telephone Laboratories in America.

Research at Bell Laboratories, directed by J.P. Maxfield, had produced experiments in electrical recording as early as 1919. The Bell electrical apparatus consisted of microphones (principally the type 394 capacitor), amplifiers (two-stage), recording heads (balanced armature, moving-iron type), and loudspeakers (also balanced armature, moving-iron type, with response from 300–7,000 Hz). Essentially, what the new system did was to substitute electrical energy for mechanical energy, so that the signal to be recorded no longer had to provide its own (acoustic) power. The microphone replaced the venerable recording horn. There was also an appreciable increase in the amount of the audio frequency range that could be captured; as

much as 2 1/2 octaves were added, giving audibility for the first time to higher frequencies (ultimately extended to 9,000 Hz), and to bass notes (down to 200 Hz).

Western Electric Co., the manufacturing division of American Telegraph and Telephone (parent company of Bell Laboratories), became the licensed owner of the process. An offer was made to extend the licensing to Victor, which refused. Columbia Phonograph Co., Inc., which had been reorganized in 1924 by a group of American investors, gained a Western Electric license. When Western Electric sent their master waxes to Pathé's office in New York to be processed, Russell Hunting and Frank Capps — Pathé executives — decided to let Louis Sterling (an old colleague of Hunting) in on the invention. They sent some duplicate pressings to Sterling, managing director of Columbia Graphophone Co., Ltd., in London. Sterling was sufficiently inspired by them to sail at once for New York. There he contrived to acquire the American Columbia firm, making it a part of the British one, thus acquiring the license to the Western Electric process. Victor thereupon consented to a contract also, an agreement inclusive of the Gramophone Co., so that the industry giants had legal control of the electrical recording system. This system remained in use, with modifications, by Victor until after World War II.

Nevertheless, it was an independent company, Chicago's Marsh Laboratories, Inc., that first marketed electrically recorded discs, under the Autograph label, in 1924. Columbia and HMV discs appeared first in the summer of 1925. For Columbia, records #3695-140545/140546 were the earliest to come out: they were made by W.C. Polla's Orchestra (under the pseudonym of Denza's Dance Band), and sold in July 1925. A vast choral ensemble was then recorded in the Metropolitan Opera House on 31 Mar 1925, singing "John Peel" and "Adeste Fidelis" (Columbia #9048; September 1925), creating a sensation.

Victor's first electric recording was "A Miniature Concert" by the Eight Famous Victor Artists (#35753; June 1925). "Joan of Arkansas," by the Mask and Wig Club, was made later — according to the matrix numbers — but released earlier (#19626; April 1925). HMV's earliest electricals to be marketed were dance numbers by Ramon Newton, Jack Hylton, and the Mayfair Orchestra, recorded on 24-25 June and sold in August 1925. By the end of the first year of electric recording there were eight labels using the system. Brunswick had not licensed with Western Electric, but instead utilized their own "Palatropé" or "Light-Ray" process, developed by General Electric. The others — Parlophone, Zonophone, Homochord, Sterno, Vocalion — worked with alternative systems that did not infringe on the patent rights of the majors. Crystalate and Pathé joined the electrics in May 1927.

Edison, after holding out because he was concerned about distortions endemic in any electrical system, also began to make electrics in 1927. There was a general reticence by the labels to advertise the nature of their new products, for fear that existing stocks of acoustic records would no longer be salable.

While Victor held to the Western Electric system, Columbia moved to a new process developed by Alan Dower Blumlein in 1929. Blumlein sought to overcome some of the technical problems in the Western Electric apparatus, such as high sensitivity to background noise, the tendency for distortion to be more obvious in the extended frequency range, and certain maintenance requirements. Of course, there was also the need to pay royalties to Western Electric. Vocalion's system was developed by an engineer from the Marconi Wireless Telegraph Co.; it was used from 1926 to 1931.

Many refinements were made in electrical recording through the 1930s, primarily in higher quality microphones (including a notable one by Georg Neumann), which began to resemble those of our own time. Other innovations have included disc cutting with the burnishing facet on the stylus (invented by Frank L. Capps), and the "hot stylus" developed in the CBS laboratories while work was going on there to produce the modern long-playing (LP) record. Different types of equalization came into use, and modern recording was established. [Andrews 1985/6; Brooks; Ford 1962.]

See also **Cartridge; Microphone; Recording Practice; Stylus**

ELECTROFORMING

The technique, originated by Emile Berliner, of producing positive discs from negatives, and vice versa. It permitted the manufacture of positive mothers from negative metal masters, and then the manufacture of negative stampers from the mothers.

See also **Disc**

ELECTROLA (LABEL)

A German classical music record, issued by a firm in Cologne that was the reorganized International Zonophone Co., dormant since the end of World War I. It was owned by the Gramophone Co., and its discs (from 1926) were parallels of the Gramophone Co. HMV label.

FRANK ANDREWS

ELECTROMECHANICAL RECORDING

SEE ELECTRICAL RECORDING

ELECTROMATRIX (LABEL)

ELECTROMATRIX (LABEL)

SEE 5.1 ENTERTAINMENT GROUP

ELECTRONE CO.

A firm incorporated in Delaware, in January 1918 to make records. Nothing more is known about it.

ELECTRONIC CROSSOVER

SEE CROSSOVER NETWORK

ELECTRONIC INDUSTRIES ALLIANCE (EIA)

A trade organization established in 1924 to represent radio manufacturers. It now encompasses the entire audio and video industry. The EIA has headquarters in Arlington, Virginia. In 2004 Dave McCurdy was president; there were 2500 members. The association absorbed the Magnetic Recording Industry Association in 1965, and the Institute of High Fidelity in 1979. [Website: www.eia.org.]

ELECTRONIC MUSIC

Music conceived and created using electronic instruments. Although all recorded music could now be considered “electronic” because of the extensive use of

audio processing, instrumentation, and editing techniques, the term *electronic music* has traditionally been used to describe an experimental branch of contemporary classical music. Using this historical perspective, there exist two firmly rooted branches of the electronic music family tree:

1. *Purely electronic music* created through the generation of sound-waves by electrical means. This is done without the use of traditional musical instruments or of sounds found in nature. This is the domain of computers, synthesizers, and software-generated sound environments. Purely electronic music can be made through either *analog* or *digital* synthesis. The difference between the two merely lies in the way electricity is controlled. There are no aesthetic differences between the outcomes and the listener will probably not be able to tell the difference.

2. *Electro-acoustic music* uses electronics to modify sounds from the natural world. The entire spectrum of worldly sounds provides the source material for this music. This is the domain of microphones, tape recorders, and digital samplers. The term “electro-acoustic music” can be associated with live or recorded music. During live performance, natural sounds are modified in real time using electronics.

Aesthetic Principles

In practice, of course, the fields of purely electronic music and electro-acoustic music cross over all the time, making such distinctions about the origin of electronic sounds no more than an academic concern.

What are more pertinent are the material and aesthetic aspects of electronic music that distinguish it from other music. Distinguishing features include:

The sound resources available to electronic music are unlimited and can be constructed from scratch. One of the key differences between electronic music and music composed for traditional instruments is that its sonic vistas are limitless and undefined. The composer not only creates the music, but composes the very sounds themselves.

Electronic music expands our perception of tonality. The accepted palette of musical sounds is extended in two directions by electronic music. On one hand, the invention of new pitch systems is made easier with electronic music instruments. Microtonal music is more easily engineered by a composer who can subdivide an octave using software and a digital music keyboard than by a piano builder. On the other hand, electronic music stretched the concept of pitch in the opposite direction, toward less and less tonality and into the realm of noise. All sounds became equal, just another increment on the electromagnetic spectrum.



Cashing in on the psychedelic rock movement, budget label Limelight issued *Moog Groove*, electronic covers of pop hits. Courtesy Frank Hoffmann

Electronic music only exists in a state of actualization. Conventional musical notation is not practical for electronic music. You cannot study it as you would a piece of scored music. Experiencing electronic music is, by its nature, a part of its actualization. A work of electronic music is not *real*, does not exist, until a performance is *realized* or played in real time.

Electronic music has a special relationship with the temporal nature of music. The plastic nature of electronic music allows the composer to record all of the values associated with a sound (e.g., pitch, timbre, envelope) in a form that can be shifted and reorganized in time. The ability to modify the time or duration of a sound is one of the most fundamental characteristics of electronic music.

In electronic music, sound itself becomes a theme of composition. The ability to get inside the physics of a sound and directly manipulate its characteristics provides an entirely new resource for composing music.

Electronic music does not breathe: it is not affected by the limitations of human performance. The arc and structure of electronic music is tolerant of extremes in the duration, pace, and complexity of sounds. The ability to sustain or repeat sounds for long periods of time — much longer than would be practical for live instrumentalists — is a natural resource of electronic music. In addition to its sustainability, electronic music can play rhythms and tonal clusters too complex and rapid for any person to perform. The composer is freed of the physical limitations of human performance and can construct new sounds and performances of an intricacy that can only exist as a product of the machine.

Electronic music springs from the imagination. The essence of electronic music is its disassociation with the natural world. Having little basis in the object world, electronic music becomes the pulse of an intimate and personal reality for the listener. Its source is mysterious. It is experienced by engaging the imagination.

History

The earliest electronic music instruments were designed for real-time performance of mostly conventional music. Early landmarks in instrument building included the Telharmonium (1900), by Thaddeus Cahill, the Theremin (1920), by Leon Theremin, the Ondes Martenot (1928), by Maurice Martenot, and the Trautonium/Mixturtratonium (1930/1952), by Friedrich Trautwein and Oskar Sala.

With the widespread availability of tape recorders after World War II, numerous government broadcasting and academic institutions around the world organized tape composition studios for the composition and recording of experimental electronic music. The tape

editing, multitrack recording, and special tape effects developed by these studios during the 1950s greatly influenced techniques later applied to the creation of pop, jazz, classical, and motion picture music. Chief among the most influential electronic music studios were the Groupe de Recherches Musicales (GRM, est. 1948 as the studio of French radio, RTF) in Paris, Studio für Elektronische Musik of West German Radio (NWDR, now WDR, est. 1951) in Cologne, the Columbia-Princeton Electronic Music Center (Tape Center est. 1951, the Studio di Fonologia (est. 1953) in Milan, the Electronic Music Studio of NHK (est. 1953) in Tokyo, the Center for Electronic Music (est. 1956) in Eindhoven, the BBC Radiophonic Workshop (est. 1956) in London, Electronic Music Center (est. 1959) in New York, the Cooperative Studio for Electronic Music (est. 1958) in Ann Arbor, the University of Toronto Electronic Music Center (est. 1959), and the San Francisco Tape Music Center (est. 1961).

The proliferation of electronic music studios led to the development of several specialized electronic music instruments, including the first commercially made synthesizers. Among the early success stories were the Moog Synthesizer and Buchla Synthesizer, both using voltage-controlled analog synthesis and available by about 1965. The popularity of the Moog-based recording *Switched-on Bach* (released 1968) by Wendy (then "Walter") Carlos nearly single-handedly created such demand for synthesizers that an entire industry was born overnight.

Electronic music is currently produced using a variety of analog and digital means. Tape composition has been replaced by digital composition using personal computers, and live performance has been enhanced by increasingly complex and versatile software controllers, instruments, and sound synthesizers.

There has been a quiet transition taking place in the world of electronic music. After several decades of rapid technological evolution — from vacuum tubes to transistors to integrated circuits to microprocessors to software — we are now firmly grounded on a digital world. The technological obstacles that once limited composers — processing speed, computer memory, and permanent electronic storage — have been overcome. For the most part, memory is cheap, processing power is fast enough, and digital storage (CDs, mini-discs, DVDs, etc.) is adequate to allow composers and musicians the flexibility they need to create music.

Exciting and highly original electronic music continues to be made, and it is more accessible than ever before in its history. Arising from this common technology are the works of a new generation of composers who accept technology as a norm, not as an obstacle to be overcome.

THOM HOLMES

ELECTRONICA

Electronica refers specifically to computer based or enhanced popular music. The genre's antecedents include early efforts to integrated the synthesizer within progressive rock, 1980s techno-pop (or, as it is sometimes called, synth-rock), and 1990s techno.

Many keyboard-based progressive rock artists — most notably, Tangerine Dream, Klaus Schulze, and Eno — began moving toward creating ambient music in the 1970s. During the next decade, ex-Be Bop Deluxe guitarist Bill Nelson, Sonic Boom, Spacemen 3, Spiritualized, and others expanded the instrumental palette of electronic ambience, incorporating treated drones, feedback-generated samples, fuzz-tone, tremolo effects, tape-manipulated minimalism, and multitracked orchestration.

The urban club and hip-hop scenes also influenced the development of electronica. New York-based deejay mixers such as Grandmaster Flash and Afrika Bambaataa helped pioneer a dance-based sound built around samples and scratched beats, ultimately known as electro. The seminal recording within this genre was "The Adventures of Grandmaster Flash on the Wheels of Steel" (Sugarhill 557; 1981; #55 R&B), which combined the bass riff from Chic's Top 10 disco hit, "Good Times" (Atlantic 3584; 1979; #1), in addition to borrowings from Blondie, Queen, and the Sugarhill Gang's "Rapper's Delight" (Sugarhill 542; 1979; #36). Afrika Bambaataa created his own brand of electronic funk in 12-inch singles like the electronic beat collage "Planet Rock" (Tommy Boy 823; 1982; #4 R&B, #48 pop), which used Kraftwerk's "Trans-Europe Express" (Capitol 4460; 1977; #67), and "Numbers," a track from *Computer World* (Warner Bros. 3549; 1981; #72).

Although European artists and producers still dominate both the ambient and groove-oriented electronica in the 1990s, the style has retained a substantial audience in America not only in dance venues (most notably through the work of mainstream artists like Madonna), but among progressive rock followers. Despite the relative absence of radio play and print media coverage, commercial websites such as Audiogalaxy.com (whose clients included the likes of Frail, Galaxy 7, Kinetic Daydream, LiscCrap, Poison Drinker, Sounds of Om2, and Sprocket Lunatic in 2001) have proven effective in disseminating electronica via the MP3 format.

FRANK HOFFMANN

ELECTRONIC STEREO

SEE REPROCESSED STEREO

ELECTROVOICE

A maker of microphones and PA systems founded in 1927 under the name Radio Engineers by Al Kahn and Lou Burroughs. Their original offices were in the basement of a local tire manufacturing company in South Bend, Indiana. In 1930, famed Notre Dame football coach Knute Rockne hired them to develop a PA system so he could coach his players while they worked out on four different fields. He called his system his "Electric Voice," from which the company took its new name. Four years later, the company introduced its famous "hum-bucking" microphone, designed to operate in close proximity to other electrical devices without exhibiting the annoying interference — or "hum" — that characterized other mics. In 1940, the firm developed a noise-canceling microphone for military applications. After the war, the company continued to work in the area of amplified sound. In 1957, it invented the stereophonic magnetic phono cartridge, making stereo playback possible of LP recordings. In 1963, it was awarded an Academy Award for its work developing the "shotgun microphone" which became widely adapted in the film industry. During the 1970s and 1980s, the company introduced several new design features to improve the quality and response of their loud-speaker systems. Through the turn of the 21st century, the company continues to work installing sound systems for major theaters, focusing on wireless technology along with improvements in amplification and speaker systems. [Website: www.electrovoice.com.]

ELEKTRA (LABEL)

An early New York-based folk label that later became one of the important labels for 1960s rock and 1970s-



Early '60s Elektra label. Courtesy BenCar Collection

era singer/songwriters. It was founded by then-college student Jac Holtzman in 1950 to record stars of the New York coffeehouse scene. By the mid-1960s it had grown into the premier folk label, thanks to the success of singers like Judy Collins and singer/songwriters like Phil Ochs and Tom Paxton. Holtzman also founded a budget affiliate label, Nonesuch, in 1964 to release classical and world-music recordings. In 1965, the label ventured into "electric music" when it signed the Chicago-based Paul Butterfield Blues Band; a year later, it went further in signing Love, a rock trio out of Los Angeles similar in style to Jimi Hendrix. But it was the 1967 signing of the Doors — and their subsequent enormous success — that transformed the label into a mainstream player. Through the early 1970s, the label focused on rock groups, scoring big with the soft-rock trio Bread. In 1971, Elektra was absorbed into the Warner Brothers-Atlantic family to form WEA (Warners/Elektra/ Atlantic). Holtzman remained with the label through 1973, his last important signings being singer/songwriter Carly Simon and British hard rockers Queen. The label was somewhat dormant through the later 1970s, having been lumped together with David Geffen's Asylum Records in the corporate culture. In the 1980s, Elektra was revived with folk-rockers 10,000 Maniacs and the Pixies. It returned to its singer/songwriter roots in the 1990s signing alternative-country stars like Nanci Griffith and British punk/folksinger Billy Bragg, but by the later half of the decade had expanded to include the popular rockers Phish as well as a number of R&B acts. [Website: www.elektra.com.]

CARL BENSON

ELEPHONE (LABEL)

SEE UNIVERSAL TALKING MACHINE CO.

ELGEPHONE

A disc player manufactured in 1906 by the firm of Léon Gaumont, a French company better known for its activity in the motion picture field. The machine was of interest because it included a natural gas container and a device to allow that gas to flow and burn. The heated gas acted upon the vibrating air in the machine to achieve an increase in the perceived volume of the sound signal. [TMR #42 (1976) has a drawing and a 1906 explanation.]

ELLINGTON, DUKE

(29 APR 1899–24 MAY 1974)

American jazz pianist, composer, and bandleader, born Edward Kennedy Ellington in Washington, D.C., son

of a butler. He began at the piano at age seven, and performed professionally at 17. In 1922 he was in New York, playing with various groups, and leading several of them. He achieved great success in 1927–1932 at the Cotton Club in Harlem with his 12-piece band. Ellington's most acclaimed period followed: he composed extensively, made films, and toured Europe; he and Louis Armstrong were seen as the twin leaders of the jazz universe. He had the advantage of an outstanding arranger in Billy Strayhorn, and star instrumentalists like Barney Bigard, Sonny Greer, Johnny Hodges, Rex Stewart, and Cootie Williams. Ivie (Ivy) Anderson was the principal vocalist. His band offered a new jazz idiom, mixing complex written-out scores with improvised solo playing.

Ellington recorded for the Blu-Disc label in November 1924, "Choo Choo" with "Rainy Nights" (#T-1002). Then he went to Pathé Actuelle in 1925–1926, and Gennett and Vocalion in 1926. He appeared on Okeh, Brunswick, Columbia, and others before settling with Victor in 1940.

Many of his own great compositions became hit records, including "Mood Indigo" (Brunswick 4952; 1930), "Sophisticated Lady" (Columbia DB-625; 1933), "Prelude to a Kiss" (Brunswick 8204; 1938), "Take the A Train" (Victor 27380; 1941), "I'm Beginning to See the Light" (Victor 20-1618; 1944), and "Satin Doll" (Capitol 2458; 1953). Ellington penned more than 2,000 works, including serious concert music as well as popular songs. His musical *Jump for Joy* ran for 101 performances in Hollywood in 1941; it was the first all-Black show to offer a Black viewpoint.

From 1943 to 1952 Ellington appeared in annual concerts at Carnegie Hall. In 1959 he composed the score for the film *Anatomy of a Murder*. He received the Presidential Medal of Honor in 1969, and honorary doctorates from Howard University and Yale University. He died in New York.

His great ability as a pianist was somewhat overshadowed by the unique timbre and tonal subtleties of his orchestra, but he was one of the finest soloists of his time. The recording "Clothed Woman" (Columbia #38236; 1947) exhibits his virtuosity.

The discovery of a unique Ellington recording was reported in 1985. As part of RCA Victor's early effort at making long-playing records, the Ellington orchestra cut a disc in 1932 that was made with two microphones, each directed to a separate wax original disc. This was the basis of a stereophonic record, although it would have required perfect synchronization of two turntables to achieve stereo playback. The company did not follow through with the stereo possibilities; indeed, it is not certain whether the engineers were aware of what they had produced. In any case the stereo effect

ELLIOTT, MISSY "MISDEMEANOR"

was achieved by Steve Lasker and Brad Kay a half-century later, and a record named "Reflections in Ellington" was released by Everybody's Records, c/o Marlor Productions, Hicksville, New York, in 1985. "No other recording made in 1932...could approach the brilliance, the vivid quality, of this innovative recording" (Feather 1985).

Ellington received nine Grammys. In 1959 his composition and soundtrack for the film *Anatomy of a Murder* was honored. He won the awards for jazz performances and compositions of 1965, 1966, 1967, 1968, 1971, 1972, 1976, and 1979. The 1979 (posthumous) award was for a recording made in 1940 at Fargo, North Dakota (VJC 1019-/20-2).

A great many compact disc (CD) reissues have appeared representing all periods of Ellington's career. Ellington's complete recordings for Brunswick and Vocalion, from 1926 to 1931, are available on a three-CD set, *Early Ellington* (Decca/GRP 640). *Okeh Ellington* reissues his 1927 recordings for that label, 50 in all, on two CDs (Columbia 46177), and his Bluebird recordings from the same year are available as *The Early Ellington* (RCA Bluebird 6852). Small group recordings from the mid- to late 1930s are available on two two-CD sets from Columbia as *The Duke's Men* (46995 and 48835); the big band material recorded for Columbia labels during this period was previously available in complete form on LP reissues, but is not currently available from Columbia on CD. All 66 tracks (and nine alternate takes) recorded by Duke's great Blanton-Webster band from 1939 to 1942 are available on a three-CD set from RCA (*Never No Lament*; Bluebird 50857). A live recording from Carnegie Hall in 1943, including the world premiere of Ellington's "Black, Brown, and Beige" suite, is available on Prestige (two CDs, 34004), while the RCA studio recordings from the band of this era, are available on a three-CD boxed set titled *Black, Brown, and Beige, 1944-1946* (Bluebird 6641). Almost all of Ellington's 1950s and early 1960s Columbia LPs are available on CD, as well as his legendary 1956 "comeback" appearance at the Newport Jazz Festival (reissued in "complete" form on Columbia/Legacy 64932; two CDs). His later band recordings are also widely available, including late career classics like *And His Mother Called Him Bill* (RCA 63744; with bonus tracks), recorded following Billy Strayhorn's death in 1967 as a homage to the great arranger and long-time Ellington collaborator. There are many, many more reissues of air checks, live performances, and other recordings made by the band.

The Ellington archives were acquired by the Smithsonian in 1980; they include 200,000 pages of documents, plus scores and tapes. In 1999, he was

awarded a posthumous Pulitzer prize in music. [Feather and Gitler 1999; Timmer 1988.]

ELLIOTT, MISSY "MISDEMEANOR" (1 JULY 1971-)

Missy Elliott has been called "one of the most influential artists in pop and R&B of the late '90s" [George-Warren and Romanowski. 2001.] In addition to her flamboyant performing image — built upon satirical video clips and cutting-edge sense fashion sense — she has been in great demand as a backup singer, songwriter, and producer for such stars as Aaliyah, Mariah Carey, Whitney Houston, Jodeci, Lil' Kim, and SWV.

Born Melissa Elliott in Portsmouth, Virginia, in her early twenties she put together a female rap group, Sista, modeled after the pioneering Salt-n-Pepa. A succession of talent show victories led to a recording contract with Elektra's Swing Mob Records, administered by Jodeci member DeVante Swing. Along with friend Tim "Timbaland" Mosely, she wrote and produced material for Jodeci's *Diary of a Mad Band* (Uptown/WCA; 1993). Swing Mob failed to get off the ground, however, and Sista's efforts to record a debut album went for naught.

Elliott reconnected with Timbaland, and the two collaborated on Aaliyah's second album, *One in a Million* (Blackground; 1996); its minimalist hip-hop feel garnered critical raves and huge sales. Studio work with a wide array of artists followed, ultimately enabling Elliott to sign as a singer with Elektra's EastWest subsidiary in late 1996; the pact was sweetened by a tie-in deal with her production company, The Gold Mind.

Elliott's debut LP, *Supa Dupa Fly* (The Gold Mind/EastWest 62095; 1997; #1 R&B, #3 pop) — also issued in a "clean" version for conservative chain outlets like Wal-Mart — was an artistic tour de force, combining singing and rapping with a humorous edge. In summer 1998, her crossover potential was greatly enhanced when she became the first hip-hop artist featured on the Lilith Fair tour highlighting female pop and rock artists. The follow-up album, *Da Real World* (The Gold Mind/EastWest 62232; 1999; #1 R&B, #10 pop), included her first number one R&B single, "Hot Boyz" (The Gold Mind/EastWest; 1999; #5 pop), featuring guest raps from Nas, Eve, and Q-Tip. In the meantime, she was tapped to appear in television ads for the Gap and Sprite. By the time *Miss E...So Addictive* (The Gold Mind/Elektra 62643; 2001; #1 R&B, #2 pop) appeared in the marketplace — preceded by "Get Ur Freak On" (The Gold Mind/Elektra; 2001; #3 R&B, #7 pop) — Elliott had become something of a pop culture institution.

FRANK HOFFMANN

ELMAN, MISCHA
(20 JAN 1891–5 APR 1967)

Ukrainian/American violinist, born in Talnoye. He studied with Leopold Auer in St. Petersburg, and made his debut there in 1904. European tours followed, and a New York debut in 1908; he then played with the major world orchestras. Romantic works were his specialty, but he excelled also in Mozart and Beethoven. In 1911 he settled in the U.S., and took citizenship in 1923. He died in New York. Elman was a popular Victor artist, making Red Seals from 1908 to 1925, with total sales of around 2 million records. He had 40 items in the 1917 Victor catalog, all arrangements (no sonatas), except for some obbligatos he played for Enrico Caruso and Frances Alda. He also recorded with his own quartet, with members drawn from the Boston Symphony Orchestra. One of his great records was of the Tchaikovsky Concerto with John Barbirolli and the London Symphony Orchestra (HMV DB 1405/8). That concerto had been written for Auer, Elman's teacher, who had refused to deal with it, calling it unplayable. BBC Enterprises reissued the recording in 1990 (#LP REH 717). *The Complete Musician* was a collection of his performances from 1910 to 1930, released by BBC Records on CD #753 in 1990.

ELMAN, ZIGGY
(26 MAY 1914–26 JUNE 1968)

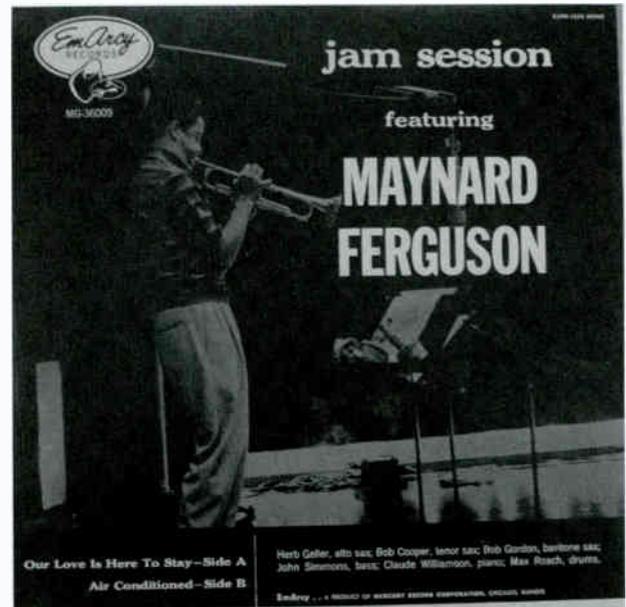
American jazz trumpeter, born Harry Finkelman in Philadelphia. He grew up in Atlantic City, New Jersey, where he played trombone and trumpet, then joined the Benny Goodman band in 1936, staying to 1940. His most famous record was "And the Angels Sing" (Victor 26170; 1939). Then he went to Tommy Dorsey for the years 1940–1943, and—after military service—again in 1946–1947. Elman won the *Down Beat* poll in 1941, 1943–1945, and 1947. He was seen on television in the 1950s, and performed locally in California. He died in Van Nuys.

ELSHUCO TRIO

An ensemble that recorded for Brunswick in 1920. The members were Elias Breeskin, violin; Willem Willeke, cello; and Aurelio Giorni, piano.

EMARCY

EmArcy was established as a jazz imprint by Chicago-based Mercury Records in 1954. Headed at different times by producers Bob Shad and Jack Tracy, the label released LPs by such notables as Julian "Cannonball" Adderley, Clifford Brown,



Emarcy jazz album by Maynard Ferguson, c. late 1950s.
 Courtesy Frank Hoffmann

Maynard Ferguson, Rahsaan Roland Kirk, Helen Merrill, and Buddy Rich.

In the late 1960s the label was inactive, with Limelight Records taking its place within the Mercury family. Polygram revived EmArcy in the 1980s, focusing on classic reissues (e.g., sessions featuring Django Reinhardt, Lionel Hampton, and Chet Baker), the distribution of previously unreleased materials by artists like Erroll Garner, and new recordings of bop-styled performances. The company's catalog is now owned by the Universal Music Group.

FRANK HOFFMANN

EMBASSY (LABEL) (I)

A Paramount subsidiary, with releases in 1923–1924.

EMBASSY (LABEL) (II)

A British 10-inch record produced for F.W. Woolworth in 1954 by Oriole, Ltd. The label was taken over by CBS in England and used for LP discs there and in Australia.

EMBOSSSED GROOVE RECORDING

The use of a blunt stylus in disc recording, in order to push aside the groove material without removing it. Masters can therefore be reused, a factor of value in dictating machines.

EMERALD (GREEN) RECORDS

EMERALD (GREEN) RECORDS

A disc advertised in March 1922 by the Union of Irish Industries, Inc., of 236-238 W. 116th Street, New York. The firm was incorporated with \$1 million by C. Henry, A.E. Claffey, and P.D. Benson.

FRANK ANDREWS

EMERICK, GEOFF (5 DEC 1945-)

One of the most accomplished recording engineers and producers in the business, Emerick had the fortune and native talent to move from a basic English grammar-school education to a job with EMI Recording Studios, in London (later to be known as Abbey Road Studios). While at EMI, he recorded some of the label's top artists under contract, including Manfred Mann, Adam Faith, Peter Gordon, and, of course, the Beatles. He later left EMI to help build the Beatles's own Apple Studios in London, and when the project was completed he went on to record artists such as Badfinger and Tim Hardin, as well as more of the Beatles. His Beatles recording work included *Revolver* (Capitol 2576; 1966; #1), *Sgt. Pepper's Lonely Hearts Club Band* (Capitol 2653; 1967; #1), *Magical Mystery Tour* (Capitol 2835; 1967; #1), *The White Album* (Apple 101; 1968; #1), *Yellow Submarine* (Apple 153; 1969; #2), and *Abbey Road* (Apple 383; 1969; #1), with his work on the last two winning him engineering Grammy awards, in 1964 and 1969. His work with the Beatles also included the group's *All You Need Is Love* live world television satellite broadcast.

Emerick eventually left Apple and joined George Martin's A.I.R. Studios, also in London, and worked with Martin on most of his projects, including a number of releases by the group America. While there, he also recorded, produced, and remixed material by Elvis Costello and Paul McCartney, including Costello's *Imperial Bedroom* (Columbia 38157; 1982; #30) album. His McCartney achievements include *Band on the Run* (Apple 3415; 1973; #1), *Venus and Mars* (Capitol 11419; 1975; #1), and *London Town* (Capitol 11777; 1978; #2), with the former winning him his third Grammy for engineering, in 1974. He has continued to work with McCartney and also other artists, including Art Garfunkel, and in 1991 he won *R.E.P. Magazine's* "Best Acoustic Live Recording" award for McCartney's *Unplugged* (Capitol 94613; 1991; #14). Emerick now works out of Los Angeles, where he continues to engineer top-quality recordings.

HOWARD FERSTLER

EMERSON, VICTOR HUGO (1866-22 JUNE 1926)

American recording engineer and executive. He was employed by Edison and then by the U.S. Phonograph Co., and was manager of the record department for Columbia from 1897 to 1914. In 1915 he established the Emerson Phonograph Co. In 1922 he resigned from the presidency of the firm and organized another, the Kodisk Manufacturing Co. But he had to retire because of ill health, and he died in Downey, California. Emerson received 14 U.S. patents.

EMERSON (LABEL)

A record produced by the Emerson Phonograph Co. of New York from 1916 (first advertised in May); it was a seven-inch disc selling for \$0.25. There was also a 5 1/2-inch disc for \$0.10. A predecessor firm, Emerson Universal Cut Records, had been offering 5 1/2-inch and seven-inch records from October 1915; the discs were obtainable from the Plaza Music Co., New York. In 1918 there was also a nine-inch record, selling at \$0.75, and in 1919 a 10-inch disc selling at \$0.85. Prices rose in the postwar inflation, but quality was good and was maintained. In June 1919 the nine-inch discs were sold as "Hits of the Day." Important artists were signed, including Eddie Cantor in 1920, but the firm was overextended, and in 1920 the label virtually ceased. However, the company reorganized in 1922 and resumed issues. In 1924 the label passed to the Scranton Button Works, which continued to release records until 1927. The Emerson material was dance, popular vocal, and some jazz. Eubie Blake, Fletcher



Emerald label, issued by the Union of Irish Industries, a New York firm, in the early '20s. Courtesy Kurt Nauck/Nauck's Vintage Records



Emerson label with illustrated sleeve, c. early '20s. Courtesy David A. Jasen

Henderson, and Rosa Henderson were among the performers.

During its peak years, Emerson produced a number of subsidiary labels: Amco, Clover, Medallion, Symphonola, and Wise. [Blacker 1989; Rust 1978.]

EMERSON, LAKE, AND PALMER

Although later criticized for their overblown live and recorded work, Emerson, Lake, and Palmer were perhaps unrivaled in melding classical-music conventions with the intensity and rhythmic drive of rock. Seemingly unafraid to take risks, the trio's artistic successes ultimately overshadowed lapses in execution and good taste.

Formed in 1970, ELP personified the idea of a supergroup. Keith Emerson had built a considerable reputation in his native England as a keyboard virtuoso, showman, and arranger with the Nice; guitarist/vocalist Greg Lake had helped found King Crimson; and drummer Carl Palmer had been a key member of both the Crazy World of Arthur Brown and Atomic Rooster. Signing with Island Records, the band was an immediate success; their debut album, *Emerson, Lake, and Palmer* (released in the U.S. as Cotillion 9040; 1970; #18), featured the pyrotechnics of Emerson and Palmer, accented by Lake's subdued acoustic guitar work and warm vocals. The next two albums — *Tarkus* (Cotillion 9900; 1971; #9), and *Pictures at an Exhibition* (Cotillion 66666; 1972; #10) — experimented with extended compositions, the latter representing a rock transcription of the famous Moussorgsky tone poem.

Listener interest was maintained through continual variations in pace, color, and texture (both LPs showcased Emerson's versatility on a wide array of instruments, including piano, organ, and synthesizers).

Trilogy (Cotillion 9903; 1972; #5), and *Brain Salad Surgery* (Manticore 66669; 1973; #11) returned to a somewhat more traditional song layout, albeit with musical surprises (e.g., a rock treatment of Aaron Copland's "Hoedown") interspersed throughout. While the band took several years off to pursue individual projects, a monumental three-disc live set culled from various 1973–1974 concerts, *Welcome Back, My Friends, to the Show that Never Ends—Ladies and Gentlemen* (Manticore 200; #4), was released in August 1974. The threesome regrouped in name to record two essentially solo albums, *Works, Volume 1* (Atlantic 7000; 1977; #12), and *Works, Volume 2* (Atlantic 19147; #37; 1977), both stylistically diversified packages ranging from Emerson's "Original Piano Concerto No. 1" to blues-inflected pieces composed by Lake and former King Crimson mate Peter Sinfield. Following an aimless studio endeavor, *Love Beach* (Atlantic 19211; 1978; #55), the live *In Concert* (Atlantic 19255; 1979; #73), and a career retrospective, *Best of Emerson, Lake, and Palmer* (Atlantic 19283; 1980; #108), the band disbanded.

The relative failure of individual projects during the early 1980s led to a new collaboration between Emerson and Lake in mid-1984. Adding drummer Cozy Powell, a veteran of the Jeff Beck Group, Rainbow, and Whitesnake, they recorded *Emerson, Lake, and Powell* (Polydor 829297; 1986; #23), a likeable, but undistinguished, LP. Disappointing sales led to a personnel reorganization, with Emerson, Palmer, and American bassist/songwriter Robert Berry coming together to produce *To the Power of Three* (Geffen; 1988). Its failure to chart spurred Lake's return to the fold; the resulting album, *Black Moon* (Victory 80003; 1992; #78), did better, but seemed to indicate that the band's best days were far behind them. Nevertheless, the trio soldiered on, releasing *Live at the Royal Albert Hall* (London 828933; 1993), the four-CD box set — containing old and new material — *Return of the Manticore* (London 828459; 1993), *Works Live* (London 828477; 1993), *In the Hot Seat* (London 828554; 1994), *Greatest Hits Live* (King Biscuit Flower Hour; 1997), and *Then and Now* (Eagle Entertainment; 1998).

FRANK HOFFMANN

EMERSON PHONOGRAPH CO., INC.

A firm established in 1915 by Victor Hugo Emerson, who became its president, in New York. Richard D. Wychoff was treasurer and Robert Miles Bracewell was secretary. A deal with Pathé Frères enabled

EMI GROUP LTD., THE

Emerson to produce six-inch discs from Pathé's recorded repertoire. The company also contracted to have its phonographs made, under the trade names Electrola and Ford.

In October 1915 there was advertising for 5 1/2-inch discs at \$0.10 and seven-inch discs at \$0.25, with the promise of future recordings by Enrico Caruso, John McCormack, Mischa Elman, and Titta Ruffo. Those future discs — made by Emerson—were described as Emerson Universal Cut Records, capable of being played laterally or vertically. Ten-inch discs appeared in May 1916. Discs of six-inch diameter were issued in November 1916. Sales were good, although there were also problems for the company. Emerson was sued by Columbia Graphophone Co. in 1916 for infringement of the Jones patents (Emerson was eventually cleared of the charge by the U.S. District Court in December 1919). There were indications that the firm was too heavily invested.

A new line of foreign language records appeared in December 1917, selling for \$0.35. In January 1918 new recording laboratories were opened at 362 Fifth Avenue, directed by Arthur Bergh. New series continued to appear, to handle hits of the day, religious, operatic, and folk repertoires. Gold Seal records were offered in September 1919, and Premier Records in October (for bands, opera, and classical instrumental works). New factories opened in 1920, in Framingham, on Long Island, and in Chicago. The firm described itself as the third-largest record manufacturer in the world.

Nevertheless, in December 1920 it was reported that the two Emerson Phonograph corporations — one registered in New York and one in Delaware—had been put into the hands of receivers. A reorganization developed, and was made final in May 1922. The new company was owned by B. Abrams and Rudolph Kanarak. The only interruption in record releases was from May 1922 through August 1922; production and sales resumed in September. A new subsidiary was chartered in January 1924, Emerson Recording Laboratories, Inc., to make phonographs and records for others. "Race records" were advertised in April 1924. Worldwide distribution was reported for Emerson discs.

The incursion of radio dimmed the bright prospects for Emerson records, but a new firm was created in October 1924 to confront the situation: Emerson Radio and Phonograph Corp. The record interests were subsequently sold to the Scranton Button Works, Scranton, Pennsylvania. Emerson has remained in the radio business to the present time, most recently under the name Emerson Radio Corp. It is located in North Bergen, New Jersey.

FRANK ANDREWS

EMI GROUP LTD., THE

A firm incorporated as Electrical and Musical Industries (EMI) Ltd. in Britain on 20 Apr 1931 through a merger of the Gramophone Co. (encompassing HMV and Zonophone records), the Columbia Graphophone Co., Ltd. (encompassing Columbia, Parlophone, and Regal records), and the Marconiphone Co., Ltd. This amalgamation resulted in the world's largest recording organization, having capital assets in excess of £6.5 million and control of 50 factories in 19 countries. The U.S. Columbia Phonograph Co. was not included. Earlier agreements between the Gramophone Co. and Victor remained in force, allowing each to issue discs from the other's matrices. The founding directors of EMI, Ltd., were Alfred Clark, Louis Sterling, John Broad, George Croydon (Lord Marks), Edward De Stein, Michael George Herbert, David Sarnoff, and Edmund Trevor Lloyd Williams. Clark was the first chairman of the board, and he was also managing director from 1931 to 1939, and president in 1946.

EMI was created in response to the worldwide Depression and its devastating impact on the record industry. By virtually eliminating real competition, the firm was able to sail through the economic storms of the 1930s. Much initiative was demonstrated in several areas: the Abbey Road Studios were opened in 1931, and in the same year EMI's Alan Dower Blumlein took out a patent for stereophonic recording. Research in television started in 1934, and a station was established in London in 1935. In 1936 EMI TV sets were on the market.

After World War II, which brought severe air raid damage to EMI installations in London, Hayes, and



EMI classical label from the '80s. Courtesy Frank Hoffmann

Liverpool, the firm returned quickly to expansion. It commenced distribution of the American MGM label in Britain in 1948, and continued important research and development (e.g., the BTR 1 tape recorder of the later 1940s, based on the Magnetophon; redesigned in 1950 as the BTR 2). Curiously, the firm lagged behind American labels in acceptance of the long-playing record, and did not release an LP until October 1951 (in France, by Pathé-Marconi). In October 1952 EMI offered its first British LP releases, and 45s as well. The HMV label was slow to convert entirely, and continued to issue 78s until February 1960.

A loosening of the EMI monopoly took place in 1952–1953, as reciprocal agreements with American Columbia and Victor were terminated. But in 1955 EMI acquired control of Capitol Records, and in 1958 began to distribute Mercury label discs in Britain.

Research in stereophony led to a demonstration in April 1955, and a release of “stereosonic” tapes in October. Professional quality stereo tape recorders were produced for the use of BBC and others, and a smaller stereo machine was put on the general market in 1957.

EMI issued its first Beatles record in October 1962, thus asserting a dominant position in the popular field. An agreement with Melodiya in 1968 allowed selections from the Russian catalog to be issued in Britain on the HMV label.

In 1979 Thorn-EMI was formed, through a merger with Thorn Electronics, and EMI Music Worldwide became its subsidiary, under the chairmanship of Bhaskar Menon. That new conglomerate entered into an agreement with Japanese Victor Co. (JVC) in 1980 for cooperative marketing and manufacture. Compact disc releases began in 1984. By September 1989, 20 million CDs a year were coming from the U.K. plant at Swindon, another 20 million from the American plant in Jacksonville, Illinois, and up to 35 million units from Gotemba, Japan (a joint venture with Toshiba). At Uden, Netherlands, the needs of the European market were met with the manufacture of about 30 million CDs per year. However, by 2001, the Swindon plant was closed, a victim of the downturn in the world music business. In 1996, the Thorn company was “demerged” from EMI, and the parent company renamed The EMI Group Ltd.

CD reissues of the magnificent 78 and LP repertoire controlled by EMI has been coming forth at a rapid rate. One remarkable LP series, the *Record of Singing*, was issued from 1977 to 1989. It covered — on 47 LP discs — the history of recorded singing from the 1890s to the 1950s, including some 730 voices. Its *Great Recordings of the Century* reissue program in the EMI Classics series has sold more than 2.5 million units as of 2002.

As of the firm’s 2002 financial statement, the company’s overall income was £2,445.8 million, of which

£2,029.4 million came from the company’s recorded music business (including the manufacture of discs along with the sales of recordings). Several attempts to merge EMI with another major label through the later 1990s and early 2000s were thwarted by European regulators, and so for the time being the company remains independent. [Website: www.emigroup.com]

EMINEM (17 OCT 1974 [SOME SOURCES GIVE 1972]–)

Born Marshall Mathers III in Kansas City, Missouri, but raised in Detroit, Eminem (aka Slim Shady) is a highly successful white rap artist of the late 1990s and early 2000s. He attended school in Detroit, dropping out short of his high school diploma in the mid-1990s. He began rapping with local groups, releasing his first solo album, *Infinite*, in 1997 on the local FBT Productions label. His second release, an EP under the name of Slim Shady, created interest in rap circles, and attracted the attention of rap producer/mogul Dr. Dre. Dre signed the rapper to his label Aftermath (a part of Interscope Records), and has subsequently produced all of his albums, beginning with his major-label debut, *The Slim Shady LP* (Interscope 90287). Its heavily misogynist lyrics, directed against both his single mother and his then-wife, were widely criticized, particularly on the track “My Name Is” (Aftermath 95638), cowritten by Eminem and Dr. Dre. Some argued that Slim Shady was simply an alter ego for the singer, and his message was not meant to be taken literally; others were appalled by his violent imagery. Nonetheless, the album won a best rap album award in 2000, as did “My Name Is” for best rap solo performance.

In 2000, Eminem was involved in several court cases arising from a violent confrontation at a bar with his then-wife; after his wife attempted suicide that July, the couple divorced a month later. She subsequently sued him for \$10 million for defamation because of his song “Kim,” which described his disturbed marriage. Meanwhile, his *Marshall Mathers LP* (Interscope 490629), released in May, entered the charts at number one, and won two Grammys: best rap solo performance (on “The Real Slim Shady” [Interscope 497334]), and best rap album. He performed on the 2001 Grammy awards with Elton John, creating further controversy because of Eminem’s propensity for anti-gay lyrics (showcased on an appearance of Dr. Dre’s 2001 single, “Forget About Dre”).

Eminem’s image underwent a considerable rehabilitation in 2002 when he released *The Eminem Show* (Interscope 493290), with its track “Cleanin’ Out My Closet” explaining the difficulty of his upbringing. His image was further enhanced when he appeared that fall in the movie, *8 Mile*. Although the film garnered

EMPIRE (LABEL) (I)

mixed reviews, Eminem was praised for his autobiographical performance as “Rabbit,” a Detroit-born white rapper. In the film, Rabbit shows sympathy for gays and comes across as a warm, caring individual, devoted to his family. It helped to make the angry rap star acceptable to a mainstream audience.

CARL BENSON

EMPIRE (LABEL) (I)

A British label issued by Nicole on subcontract, ca. 1906. [Andrews 1988.]

EMPIRE (LABEL) (II)

A record pressed from Dacapo masters in 1911–1912, not advertised in trade periodicals. It seems that specific discs chosen by the Empire proprietors were offered to customers who would agree to buy a certain number each year. The firm that produced them was named the Empire Record Co. [Andrews 1990.]

EMPIRE (LABEL) (III)

A British disc, its label reading “New Empire Record,” drawn from Edison Bell masters, issued sometime before 1914.

EMPIRE (LABEL) (IV)

An issue of the Empire Talking Machine Co. of Chicago, established in 1915. There were 300



Chicago-based Empire label, made c. 1919. Courtesy Kurt Nauck/Nauck's Vintage Records

selections in a 48-page catalog of August 1917. A 64-page catalog appeared in January 1918. John H. Steinmetz was president of the firm, which was located in 1920 at 429 S. Wabash Avenue, Chicago. A “universal cut” Empire record went on sale in July 1919, but it was “nevertheless vertical cut and in fact [could] play only on phonographs adapted to play Pathé records” (Rust 1978). From January 1920 Empire releases duplicated those of Operaphone, with identical catalog numbers; both Empire and Operaphone were using Pathé masters. [Andrews; Rust 1978.]

EMPIRE (LABEL) (V)

A British label produced by the Globe Record Co., Ltd., London, in 1931. The record was a 10-inch “unbreakable, non-inflammable” flexible celluloid product selling for only 1s 6d. Most of the material was dance music from American Paramount, but there were also items from the German Phonocord (including three sides by Marian Anderson). [Rust 1978.]

EMPIRE (LABEL) (VI)

A British record produced after 1928 for the Metropolitan chain stores, made from Piccadilly masters.

ENCLOSURE

A housing, usually of wood, for a loudspeaker.

See also Acoustical Labyrinth; Bass Reflex system; Folded Horn; Infinite Baffle

ENCORE (LABEL) (I)

A record made from Beka Grand Records masters, sold in Britain before World War I. It had two numbers per 10-inch side. They were really Veni-Vidi-Vici masters, from Beka; and Veni-Vidi-Vici was also seen on labels of British Empire issues. [Andrews.]

ENCORE (LABEL) (II)

An EMI low-cost series of the 1960s, offering reissues from HMV and Columbia.

ENGLISH RECORD CO., LTD.

A firm incorporated in London in November 1909, having apparently been in business for some two years previous. The address was 128 High Holborn, then 44 Bedford Row. John Bull records (made mostly from Beka matrices) were the discs issued; there was also a

player sold under the name of Erco, made by Carl Lindström GmbH. Business was good in 1911, leading to the establishment of branches throughout Britain and in France. An associated firm, the South East Record Co., Ltd., was registered on 26 Feb 1910, and another associated company, the Irolite Manufacturing Co., Ltd., was incorporated on 7 May 1910. Although nothing illegitimate was done by the company, it acquired a reputation for shady business practices. Its method of sale was to require a contract of agreement to purchase a large number of discs in conjunction with the offer of a free gramophone. Some customers committed themselves to expenditures they could not afford.

The company wound itself up voluntarily in April 1911, reorganized in May 1911 (taking new premises at 209–212 Tottenham Court Road and at Alfred Place), then liquidated in July 1913. [Andrews 1988/2.]

ENHANCED RECORDINGS/ENHANCED STEREO

SEE REPROCESSED STEREO; SONIC RESTORATION OF HISTORICAL RECORDINGS

ENIGMA (LABEL)

A leading U.S. independent label, produced by Enigma Entertainment Corp., Culver City, California. The firm also makes the Restless label. In 1988 Enigma acquired Mute, the largest British independent. Capitol is the distributor for all these discs, which offer classical and popular material.

ENO, BRIAN (15 MAY 1948–)

Brian Eno is widely recognized as a pioneer of the ambient music movement, which evolved out of progressive rock experiments with synthesizer-based aural landscapes freed of more conventional applications of melody, rhythm, and other elements of song structure. In considerable demand as a record producer by the 1980s, he also contributed much to rock's visual dimension, from album cover art to its fashion sense.

Born Brian Peter George St. John Le Baptiste De La Salle Eno in Suffolk, England, he left art school to front the hard rock group Maxwell Demon. He joined Bryan Ferry's art rock ensemble, Roxy Music, in 1971, exercising a profound influence on both their image and the glam-disco sound of the group's first two albums. Opposed to Roxy's pop ambitions, Eno embarked on a solo career in 1973. After collaborating with King Crimson guitarist Robert Fripp on an experimental electronics LP, *No Pussyfooting*

(Antilles 7007; 1973) — which would be reprised by *Evening Star* (Antilles 7018; 1975) — he helped expand the vocabulary of synthesizer-based rock with a series of pop-savvy releases, including the dissonant *Here Come the Warm Jets* (Island 9268; 1974; #26 UK), the unabashedly melodic *Taking Tiger Mountain by Strategy* (Island 9309; 1974), the exquisitely crafted *Another Green World* (Island 9351; 1975), the eclectic tour de force *Before and After Science* (Island 9478; 1977), and the first of his visionary low-key, mood concepts, *Discreet Music* (Antilles 7030; 1975).

By the mid-1970s, Eno began working as a producer for artists — most notably for David Bowie on *Low* (RCA 2030; 1977; #11), *Heroes* (RCA 2522; 1977; #35), and *Scary Monsters* (RCA 3647; 1980; #12), and the Talking Heads on *More Songs about Buildings and Food* (Sire 6058; 1978; #29), *Fear of Music* (Sire 6076; 1979; #21), and *Remain in Light* (Sire 6095; 1980; #19) — interested in adapting his avant-garde techniques to a more pop-oriented approach. While continuing to work with big-name artists (he would share a 1992 Grammy with Daniel Lanois for his production work on U2's *Achtung Baby*), his own work — including *Music for Films* (EG 105; 1978; #55 UK), *Ambient 1: Music for Airports* (PVC 7908; 1979), *Ambient (4): On Land* (EG/Ambient 20; 1982; #93 UK), *Apollo: Atmospheres and Soundtracks* (EG/Ambient 53; 1983), the video soundtrack *Thursday Afternoon* (EG/Ambient 64; 1987), and *Neroli* (Gyroscope 015; 1993), which contained one extended piece used in some hospitals to facilitate childbirth — would become increasingly ambient in nature. Having secured his place in pop music history, Eno continues to release obscure, albeit conceptually brilliant, works at irregular intervals, occasionally branching off into various multimedia projects (including book publishing) as it suits him.

FRANK HOFFMANN

ENVELOPE (I)

A graphic representation of a sound wave, showing changes in amplitude.

ENVELOPE (II)

In Britain, another name for a record sleeve during the 78-rpm era.

ENYA (17 MAY 1961–)

Easily the most popular Irish female singer in recorded sound history, Enya — born Eithne Ni Bhraonain in

EPIC (LABEL)

Gweadore, County Donegal — possesses an ethereal voice ideally suited to translate the mysterious beauty of her cultural heritage for worldwide consumption. After recording with her family's group, Clanned, in the early 1980s, she went solo to produce the British film soundtrack, *The Frog Prince* (Island ISTA 10; 1985). It was followed by *Enya* (Atlantic 81842; 1987), the score to a BBC television documentary, "The Celts." The album established the template for Enya's later releases, blending new age-influenced ambient textures and synthesizer washes, bits of traditional instrumentation (uilleann pipes, harps), and her Irish-language singing, placed deep within the overall mix rather than distinctly up-front.

Collaborating with backing musicians Roma and Nicky Ryan (the latter also assuming production responsibilities), on songwriting, Enya would produce a masterpiece, *Watermark* (Geffen 24233; 1988; #25 US, #5 UK). With her pure, lyric soprano voice set amidst lush arrangements built around choral-like effects and aural collages, the album made her an international star. The success of singles like "Orinoco Flow" (Geffen 27633; 1988; #24 US, #1 UK), "Evening Falls" (WEA 356; 1988; #20 UK), and "Storms In Africa" (WEA 368; 1989; #41), singled her out as one of the few so-called new age artists capable of crossing over to the pop charts, despite her apparent aversion to touring. Although not approaching the brilliance of *Watermark*, follow-up releases — *Shepherd Moons* (Reprise 26775; 1991; #17 US, #1 UK), *The Memory of Trees* (Reprise 46106; 1995; #9 US, #5 UK), *A Day Without Rain* (Reprise 47426; 2000; #2) — have maintained Enya's commercial and aesthetic standing within the music industry.

FRANK HOFFMANN

EPIC (LABEL)

An imprint marketed since 1953 in America originally under an agreement between Philips and Columbia. The offerings are both classical and popular. One release of special interest was *The Four Seasons* by Darius Milhaud, conducted by the composer (#BC 1069; 1960). Teen idol Bobby Vinton was a mainstay of the label in the late 1950s and early 1960s. By the early 1960s, Epic was primarily used for pop and country acts. During the mid-1960s British Invasion, acts like the Dave Clark Five, the Yardbirds, and the Hollies were featured on the label. In the later 1960s, Nashville-based producer Billy Sherrill built the label's country line through hits from artists like George Jones and Tammy Wynette. From the late



Epic label from the late '50s. Courtesy David A. Jasen

1970s the label's biggest star was Michael Jackson, whose *Thriller* album has posted more sales than any other LP. The label also had a major seller with the British punk group the Clash's 1988 album, *London Calling* (CASH CD2/Epic 36328), which is considered one of greatest of all rock albums. In the 1990s, the label built its rap and R&B list through signings of groups like Bone Thugs-N-Harmony and Eazy-E, as well as mainstream chanteuses Celine Dion and Gloria Estefan. Singer-dancer Jennifer Lopez became a major hitmaker for the label in the later 1990s and early 2000s. In 1994, corporate owner Sony Music reorganized its family of labels into four label groups; the Epic label group currently consists of Epic, Legacy (devoted to reissues of earlier Columbia label recordings), Sony Wonder (children's music), and a few other specialty imprints. [Website: www.epicrecords.com.]

REV. FRANK HOFFMANN

EQUALIZATION (EQ)

Equalization can be applied to sound recordings at either the recording end or at the playback end.

1. *Recording end.* The process by which a master tape or master disc is edited in such a way that it will sound better after the material is transferred to the final product. The term "pre-equalization" is used to describe the alterations made during recording, and with the older, analog technology, such alterations were made in the recording studio to add emphasis or

reduce emphasis in certain parts of the audio frequency spectrum (to achieve flat overall characteristics), to minimize distortion, and to limit surface noise. A plot of the relative emphasis given to the various frequencies is known as the recording curve or recording characteristic. The reduction is accomplished by lowering or raising the signal level in the appropriate segment(s) of the spectrum. Discs in the electric era, from 1925, were made with treble emphasis, the bass range being restricted to save groove space. Thus the compensation intended by the equalization circuits was to restore the original characteristics of the signal, eliminating the artificial boost in the treble and enhancing the low frequencies that had been attenuated.

Standard equalization circuits have existed for some time for analog (LP) discs, and were established by the Recording Industry Association of America (RIAA). They also existed for tapes, as established by the National Association of Broadcasters (NAB). Modern digital systems, which have inherently low electronic noise and no surface noise at all, do not require preproduction equalization, although recording technicians might apply equalization during the editing process to compensate for problems with studio or hall acoustics or poor microphone placement. *See* SONIC RESTORATION OF HISTORICAL RECORDINGS for a table of recommended turnover and rolloff settings by label.

2. *Playback end.* The term "post-equalization" is used to describe the compensatory devices in the playback equipment with analog recording and playback systems. With specialized equalization curves applied during the mastering phase, proper re-equalization is required during playback. During the height of the LP record era, preamplifiers contained special circuits (mainly to work with the standard RIAA curves noted above) that would restore response to flatness, while reducing the background noise inherent with the analog-disc format. Tape recorders utilized similar playback curves for tapes made to the NAB standard. In analog tape production the treble and bass are both reduced during recording, and playback requires boosting both segments of the range. This is usually accomplished by standard circuits in the playback recorder. However, there can be problems when the recording equalization pattern does not correspond to that of the player. The ideal situation is one in which the tape is recorded and played back on the same machine. High quality playback recorders have equalization controls, based on NAB standards, to compensate for differences between the recording curve and the playback curve. Modern digital systems have

essentially bypassed the problems noted with analog systems.

Customized sound characteristics may also be attained at the playback end with a variable equalizer, a device that allows the operator to increase or decrease the volume level of selected portions of the spectrum. The bass, treble, and sometimes midrange tone controls found on preamplifiers and audio receivers are simple equalizers. In many cases (particularly in good rooms, with good speakers) those are all the equalization the user should require. More sophisticated equalization can be accomplished with parametric or graphic equalizers. The former allows the user to choose specific frequencies to boost or cut, with the additional option of adjusting the frequency span and slope (the Q) of the boost or cut range. Most parametric equalizers only have a few adjustment points, however. Graphic equalizers usually involve multiple controls that will adjust a large number of fixed frequency points over the range from 20 Hz to 20 kHz. Most one-octave graphic equalizers (ten adjustment points) have limited abilities and are probably not much more useful than good tone controls. However, 1/3-octave equalizers (30 adjustment points) can work to make good systems, in good rooms, become even better sounding. Using any equalizer to smooth the *very* erratic response of poor speakers or even good speakers in poor rooms, is often counterproductive, because the equalizer cannot simultaneously compensate for irregularities in the direct-field and reverberant-field responses.

REV. HOWARD FERSTLER

See also Controls; De-Emphasis; Pre-Emphasis; Recording Practice; Sonic Restoration of Historical Recordings

ERASE HEAD

The device in a tape deck that removes any previous pattern on a recorded tape. When the recorded tape has passed the erase head, the sum of the particles' local magnetic fields is zero at any point, and the tape is said to be neutralized or demagnetized. This neutralization is more difficult with metallic tapes than with ferric-oxide tapes, requiring additional field strength in the erase mechanism.

ERATO (LABEL)

Erato is part of Warner Classics, a division of AOL Time Warner, located in London. Among the artists heard on Erato are Daniel Barenboim, Mstislav Rostropovich, and John Eliot Gardner.



Erato label. Courtesy Frank Hoffmann

ERTEGUN, AHMET M. (31 JULY 1923–)

The son of the World War II-era Turkish ambassador to the United States, Ertegun — along with older brother Nesuhi — developed a lifelong love of American jazz music as a youth. His passion for the genre led to the formation of Atlantic Records in 1947 in partnership with New York jazz collector Herb Abramson. Peter Guralnick, in *Sweet Soul Music*, noted that the label “was nurtured by a combination of creative enterprise, cultural sophistication, business acumen, and good taste that would have been rare in any field but that has been practically unheard of in the music industry.”

Following a series of unsuccessful jazz and jump band releases, Atlantic scored the first of many rhythm and blues hits with Stick McGhee’s novelty cover, “Drinkin’ Wine Spo-Dee-O-Dee” (Atlantic; 1949). According to Ertegun biographer George Trow, Ahmet “did not seek to reproduce an older music exactly; rather he sought to introduce Black musicians of the day to Black musical modes older and more powerful than the ones they knew.”

The label’s success with R&B artists such as Ruth Brown, the Clovers, the Cardinals, the Drifters, Big Joe Turner, the Coasters, LaVern Baker, and Ray Charles owed much to Ertegun’s ability to find talented associates with similar musical values, most notably engineer Tom Dowd (who worked on most important Atlantic sessions well into the 1970s), arranger Jesse Stone, producer-executive Jerry Wexler, and songwriters-producers Jerry Leiber and Mike Stoller. Furthermore, he continued to utilize the same

nucleus of New York-based session players and producers as R&B evolved into soul in the 1960s.

In addition to taking a considerable interest in artist development, Ertegun displayed great acumen as a deal maker, transforming Atlantic into one of the most powerful independent record companies through a series of distribution arrangements with recording studios and smaller labels such as Stax. He also expanded into the mainstream rock field, signing both high-profile English bands (e.g., Cream, Led Zeppelin), and hip West Coast acts (e.g., Buffalo Springfield, Crosby, Stills, and Nash).

On 24 Nov 1967, Atlantic signed a merger agreement with Warner Brothers-Seven Arts, thereby providing Ertegun even greater financial and cultural clout. His accomplishments, combined with his wit and personal charm, enabled him to become a key record industry leader. His latter day accomplishments included heading the drive for establishment of the Rock and Roll Hall of Fame Museum in Cleveland.

FRANK HOFFMANN

ERWIN, PEE WEE

(30 MAY 1913–20 JUNE 1981)

American jazz trumpeter, born in Falls City, Nebraska. He grew up in Kansas City, where he won many amateur contests when he was eight years old, and appeared on a radio program. Then he played locally in Falls City, and toured in vaudeville. He worked with various bands, including Joe Haymes, Isham Jones, and Freddy Martin. In 1935–1936 he was with Benny Goodman and Ray Noble, in 1937–1939 with Tommy Dorsey. In the 1940s Erwin had his own group and also worked with many others, becoming one of the most acclaimed Dixieland performers. He was seen on several television shows in the 1960s, and continued playing in public into the 1970s. He died in Teaneck, New Jersey.

Erwin’s first records were with the Joe Haymes band, in 1932. An out-of-print, two-LP set, *Joe Haymes and His Orchestra: 1932–35* (Bluebird 5552), offered a good selection of Erwin’s work. He did some fine solos in August 1934 for Decca while with Isham Jones, notably “Tiger Rag” (#262), and “Dallas Blues” (#569). Jazzology and Quattro issued albums of his later performances in 1980–1981. Although he appears on many of the CD reissues of Benny Goodman, little is available on CD under Erwin’s own name. [Vaché 1987.]

ESP/DISC (LABEL)

ESP Disk was founded in 1964 by lawyer and Esperanto advocate Bernard Stollman. Although the

initial release by the company, *Ni Kantu En Esperanto* (ESP Disk 1001), was an instructional album (the label's name is also a reference to Esperanto), the company was primarily devoted to the release of recordings by avant-garde jazz and rock musicians. The label allowed an unusual amount of artist control of their recordings – their motto read, “The artists alone decide what you will hear on their ESP Disk.” Self-produced albums by jazz artists like Albert Ayler, Sun Ra, and Charles Tyler, as well as underground rock releases by the Godz and the Fugs were vital in promoting some of the unusual music of the late 1960s. In recent years, the reformed label has been marketing reissues of the original catalog as well as recordings of earlier jazz performances by Charlie Parker and Lester Young.

CHRISTOPHER MEEDER

ETTING, RUTH

(23 NOV 1903–24 SEP 1978)

American popular singer, born in David City, Nebraska. She made her debut in Chicago in 1925, then moved to New York. Her first record was “Nothing Else to Do” (Columbia 580-D; 1926). Etting became renowned in *Ziegfeld Follies of 1927*, and made a successful recording of “Shakin’ the Blues Away” from



Ruth Etting, c. late '20s. Courtesy David A. Jasen

that show (Columbia 1113). She was also in the *Ziegfeld Follies of 1931*, and recorded its “Shine On Harvest Moon” (Banner 32229). “Love Me or Leave Me” was a popular release of 1929 (Columbia 1680-D). Etting was popular on radio, and made a number of motion pictures. She was also acclaimed in London appearances. She remained active through the 1940s. A film based on Etting’s life, *Love Me or Leave Me*, starred Doris Day (1955). Her 1926–1930 jazz-flavored recordings are available on a two-CD set, *Ten Cents a Dance* (ASV/Living Era 2008), with 1930s-era material appearing on a second two-CD set, *America’s Sweetheart of Song* (ASV/Living Era 5374).

EUFON

A hornless portable gramophone, advertised in *TMN* in April 1909. It weighed only 17 pounds, and operated with single-spring or double-spring motor.

EUROPE, JAMES REESE

(22 FEB 1880–9 MAY 1919)

Europe was a pioneering early African-American bandleader, arranger, and businessman. Son of a former slave, Europe’s family relocated from his birthplace of Mobile, Alabama, to Washington, D.C. when he was nine. Continuing music lessons on piano, violin, and mandolin, he lived for a time just houses away from John Philip Sousa, whose march compositions and U.S. Marine Corps Band dominated American musical tastes. Moving to New York City around 1903, he began directing Black dance ensembles and — when opportunities presented themselves — working in musical comedy.

In 1913 Europe achieved renown in New York society when his Exclusive Society Orchestra — one of the earliest neo-jazz bands to perform at public venues — was frequently employed by the highly popular dance team of Vernon and Irene Castle. Collaborating with the Castles in early 1914, he played a key role in creating and popularizing the fox-trot. Hoping to capitalize on the popularity of the Castles, Victor signed Europe to record four titles on 29 Dec 1913 and 10 Feb 1914, respectively. His best-selling disc appears to have been “The Castles in Europe One-Step”/“Congratulations Waltz” (Victor 35372; 1914), issued in the 12-inch configuration and retained in the company’s monthly catalog for five years.

Enlisting in the 15th New York Infantry on 18 Sep 1916, Europe was induced to organize and lead a military band to boost troop morale. After the Armistice, he signed a recording contract with the New York-based Pathé Freres Phonograph Company. Four

sessions — three in March and one in May 1919 — produced 11 discs in the military band tradition, albeit punctuated by syncopation and other jazz effects. Their popularity, however, was limited because Pathé employed Edison's vertical-cut process (often termed "hill-and-dale"), as opposed to lateral-cut technology, which was soon to dominate the marketplace. Actively collaborating with such major talents as Noble Sissle and Eubie Blake, Europe's promising career was prematurely ended when one of his drummers stabbed him in the neck backstage during a Boston concert, just two days after recording his last six sides for Pathé. Europe's complete 1919 recordings are available on CD from Memphis Archives (7020) and IAJRC (1012); both have identical contents, with the IAJRC in chronological order, while the Memphis Archives release has better documentation. Europe's 1913–1914 recordings are currently not available on CD. [Badger 1995; Gracyk and Hoffmann 2000.]

FRANK HOFFMANN

EVANS, BILL (16 AUG 1929–15 SEP 1980)

American jazz pianist, born William John Evans in Plainfield, New Jersey. He played violin and flute as well as piano as a child, and at age 16 had formed a band with his brother. He played with various ensembles in the 1950s. In 1956 he made his first recording, with Tony Scott's band. Evans signed with the Riverside label in 1957, and recorded with Charlie Mingus; in 1958 he teamed with Miles Davis. Evans helped to develop the sophisticated post-bebop jazz idiom.

His most acclaimed recordings were *Conversations with Myself* (Verve 68526; 1963, in which he overdubbed his own original performance twice, giving a trio effect), and *Further Conversations with Myself* (Verve 68727; 1967). Other outstanding discs were "Peri's Scope" (Riverside 315; 1959), and the albums *Explorations* (Riverside CD reissue VDJ-1527; 1961), *How My Heart Sings* (Riverside 463; 1962), and *Paris Concert* (Elektra; 1979, his final recording). There have been numerous CD reissues, including a 12-CD set of all of his Riverside recordings as a leader (Riverside 18); the individual Riverside albums are also available with their original cover art and notes on CD. His complete Verve Recordings are available in a massive, 18-CD set (527953), and also individually. He died in New York.

EVERYDAY MIXED QUARTET

A vocal group that recorded in the late 1920s, consisting of Beulah Gaylord Young, Rose Bryant, Charles Harrison, and Wilfred Glenn.

EVERLY BROTHERS

The Everly Brothers revealed the possibilities for close, two-part harmonizing as the primary focus in rock music, thereby greatly influencing later acts such as the Beatles, the Hollies, Simon and Garfunkel, the Byrds, the Turtles, and Crosby, Stills, and Nash. They also pioneered the use of country influences — not only the high-lonesome vocals, but the emphasis on melody and Appalachian-styled acoustic guitar work — within a pop-rock context. Their sound remains timeless, as evidenced by the chart-topping success of Extreme's Everlys knock-off, "More Than Words" (A&M 1552) in 1991.

Don and Phil Everly — born 1 Feb 1937, and 19 Jan 1939, respectively, in Brownie, Kentucky — began singing with their parents, local country performers Ike and Margaret Everly, on KMA-radio, Shenandoah, Iowa, beginning in 1945. Shortly after forming as a straight country duo in 1954, the brothers signed with Columbia. Failing to achieve success, they eventually were taken on by Cadence, in part due to their photogenic good looks; label owner/producer Archie Bleyer was interested at the time in breaking into the newly emerging teen market.

The debut single, "Bye Bye Love" (Cadence 1315; 1957; #2), featuring their aching vocals augmented by electric guitar flourishes and a lilting rock 'n' roll beat, was a smash hit, providing the direction for a long string of chart successes with the label, including "Wake Up Little Susie" (Cadence 1337; 1957; #1), "All I Have to Do Is Dream" (Cadence 1348; 1958; #1), "Bird Dog"/"Devoted to You" (Cadence 1350; #1/#10), "Problems" (Cadence 1355; 1958; #2), "(Til) I Kissed You" (Cadence 1369; 1959; #4), "Let It Be Me" (Cadence 1376; 1960; #7), and "When Will I Be Loved" (Cadence 1380; 1960; #8). In addition to the extraordinary musicality of the Everlys, the popularity of these discs owed much to high quality material (often composed by the husband-and-wife team of Boudleaux and Felice Bryant), and peerless Nashville studio musicians. The lovely echoed guitar work by Chet Atkins in the Bryant's "All I Have to Do Is Dream," for instance, all but guaranteed the song's success.

The duo switched labels when offered a lucrative contract by the fledgling Warner Bros. in 1960. A number of the Warner releases — including the singles "Cathy's Clown" (Warner Bros. 5151; 1960; #1), "So Sad" (Warner Bros. 5163; 1960; #7), and "Walk Right Back" (Warner Bros. 5199; 1961; #7), and the albums *It's Everly Time!* (Warner Bros. 1381; 1960; #9), and *A Date with the Everly Brothers* (Warner Bros. 1395; 1960; #9) — are considered by some to represent their creative apex, thanks in part to more thorough, polished

production work. However, the Everlys also exhibited a greater inclination to record middle-of-the-road, maudlin material during this period, most notably, "Ebony Eyes" (Warner Bros. 5199; 1961; #8), "Crying in the Rain" (Warner Bros. 5501; 1962; #6), and "That's Old Fashioned" (Warner Bros. 5273; 1962; #9).

By 1963, the Everly Brothers were finding it hard to crack the Top 40, despite the release of many excellent recordings. Shifting their artistic focus to albums did little to help matters; the pioneering country-rock concept LP, *Roots* (Warner Bros. 1752; 1968), considered by many to be the duo's most sophisticated effort up to that time, attracted little attention. A string of further commercial failures culminated in an acrimonious split in 1973.

A decade of futile solo projects, however, spurred a reunion in 1983. A moderately successful live album, *The Everly Brothers Reunion Concert* (Passport 11001; 1984; #162), recorded September 1983 at London's Albert Hall led to several well-crafted country-pop releases with PolyGram: *EB 84* (Mercury 822431; 1984; #8) — fueled largely by the Paul McCartney-penned single, "On the Wings of a Nightingale" (Mercury; 1984; #50), and a nostalgic video that received heavy MTV rotation, "*Born Yesterday*" (Mercury 826142; 1986; #83), and *Some Hearts* (Mercury 832520; 1989). Due to increasingly marginal sales, virtually no recordings have been released by the Everlys from 1990 onward. Nevertheless, they continue to perform, regularly receive accolades as elder statesmen of rock — including induction into the Rock and Roll Hall of Fame (1986), and treatment in musicals such as *Bye Bye Love: The Everly Brothers Musical* (1998), and *Dream, Dream, Dream* (2000) — and are well represented on compact disc (CD) by a host of album reissues and anthologies, most notably on Charly in England and Rhino in the U.S.

FRANK HOFFMANN

EVERYBODYS (LABEL)

A New York record from Everybodys (*sic*) Record, Inc., with about 85 releases in 1925. Most of the material — dance and popular music — was from Emerson and Paramount. A firm named Bristol and Barber and Co., Inc., of New York, handled promotion and sales. [Rust 1978.]

EXCELSIOR PHONOGRAPH CO.

A New York firm founded in November 1897. It sold the Excelsior cylinder player and brown-wax cylinders. In 1897 it acquired a manufacturing plant operated by Roger Harding at 18 E. 22nd Street, retaining Harding as manager. William F. Hooley replaced him in August 1898. In advertising of June 1898, the firm's name was Excelsior and Musical Phonograph Co., with the address 57 W. 24th Street. By January 1899 the firm had relocated to 5 East 14th Street. At that time the artists on Excelsior included W. Paris Chambers, S.H. Dudley, William F. Hooley, and Cal Stewart. There were also songs in German and Italian, and there was material for banjo, bells, and cello. The Excelsior Band and Orchestra was a featured ensemble. [Martel 1988.]

EXHIBITION SOUNDBOX

The assembly used by the G&T from 1901, based on the Jones soundbox of 1899. It was identifiable by the tension-nut at the top. The device had many imitators in several countries. [TMR 33 (1975) gives 11 illustrations of authentic and spurious Exhibitions.]

EXPONENTIAL HORN

SEE HORN

EXTENDED PLAY (EP) DISCS

SEE LONG PLAYING RECORD

EXTERNAL PROCESSOR LOOP (EPL)

An input/output feature found in some preamplifiers. Similar to a tape-monitor loop, it allows other components, such as equalizers, sound decoders, expanders, and so forth, that possibly work best in fixed-gain situations, to be inserted into a system. Most EPLs are analog in nature, which limits their use when signal inputs are in digital form.

HOWARD FERSTLER



F

FABIAN (6 FEB 1943–)

A minor teen pop idol of the late 1950s and early 1960s, Fabian was born Fabian Forte in Philadelphia. Fabian was “discovered” in 1957 by Frankie Avalon’s managers Pete DeAngelis and Bob Marucci, who were searching for a good-looking teen they could mold into a pop idol. The duo had a number of business deals with deejay/promoter Dick Clark, and arranged for Fabian to be heavily promoted on Clark’s popular “American Bandstand” television program. All of his hits came in 1959, from “I’m A Man” (Chancellor 1029) released in February through his major hits “Turn Me Loose” (#9 pop, April; Chancellor 1033), “Tiger” (#3 pop, June; Chancellor 1037), and the theme from his first film, “Hound Dog Man,” a vapid Elvis Presley imitation (#9 pop, November; Chancellor 1041). A few minor hits followed, and Fabian disappeared from the charts by 1962. He has since had a minor acting career in B films and on television and toured as part of oldies revival shows.

CARL BENSON

FACTORY (LABEL)

Manchester-based label founded in 1978 by Tony Wilson (b. Salford, Lancashire, 1950), who had previously worked as a local TV reporter, and a local (unemployed actor) named Alan Erasmus. Erasmus and Wilson first opened a club by this name, and naturally began to record the acts featured there. Their biggest success came with Joy Division followed by New Order and the Happy Mondays. The label went

into receivership in 1992 and its assets were purchased by Polygram. However, by the early 2000s it was back in the hands of its original owners. A website (www.factoryrecords.com) was under construction at the time of this writing.

See also Manc Sound, The

CARL BENSON

FAHEY, JOHN (28 FEB 1939–22 FEB 2001)

Although often classified as a folk artist, John Fahey was a true eclectic who mined the blues, country, Native American music, Indian ragas, avant-garde dissonance, and mainstream pop. As both a virtuoso guitarist and record label owner (Takoma, Revenant), he helped father the New Age and inspired an entire school of disciples, including Leo Kottke and William Ackerman.

A native of Takoma Park, Maryland, Fahey issued his first album on his own Takoma label using the pseudonym “Blind Joe Death.” His early albums — most notably *Blind Joe Death* (Takoma 1002; 1959; limited edition — reissued 1964), *Death Chants, Break Downs and Military Waltzes* (Takoma 1003; 1963), *Dance of Death and Other Plantation Favorites* (Takoma 1004; 1965), *Days Gone By* (Takoma 1014; 1965), and *The Transfiguration of Blind Joe Death* (Takoma 9015; 1967) — were, according to popular music deejay/historian Dr. Demento, “the first to demonstrate that the finger-picking techniques of traditional country and blues steel-string guitar could be used to express a world of

FAIRCHILD, SHERMAN M.

nontraditional musical ideas — harmonies and melodies you'd associate with Bartok, Charles Ives, or maybe the music of India.”

With the rise of progressive rock — which Fahey had, through uncompromising experimentation, foreshadowed — he shed his cult image, producing records for major labels, including *Requia* (Vanguard 79259; 1967), *The Yellow Princess* (Vanguard 79293; 1969), *Of Rivers and Religion* (Reprise 2089; 1972), and *After the Ball* (Reprise 2145; 1973). A variety of problems forced a sabbatical from recording beginning in 1986. He returned to the studio in 1997, releasing several independent label LPs, and was overseeing a comprehensive retrospective of bluesman Charley Patton's recordings for his own Revenant label at the time of his death following sextuple-bypass surgery.

FRANK HOFFMANN

FAIRCHILD, SHERMAN M. (1896–28 MAR 1971)

Born in Oneonta, New York, Fairchild was the son of one of the founders of IBM, and himself was founder of the both the Fairchild Camera and Instrument Corporation and the Fairchild Engine and Airplane Corporation. He also became a pioneer in the fields of photography and sound engineering, and he was one of the first to realize the importance of large-scale semiconductor production for a variety of applications. He was keenly interested in music, to the point of being a partner in a music publishing firm, and in 1931 he established the Fairchild Recording Equipment Corporation to carry out his theories of sound recording. In his lifetime he was granted a total of 30 patents, and was the recipient of numerous Audio Engineering Society awards. He was strongly involved with that organization during the 1950s, and had a great deal to do with both expanding society conventions to the point where they were genuinely influential and upgrading the society's journal to the point where it was able to exercise a genuine influence upon audio and the sound-recording establishment.

HOWARD FERSTLER

FAIRPORT CONVENTION

Long-lived English folk-pop band originally founded in 1966. Original members were group leader and bassist Ashley Hutchings, lead guitarist Richard Thompson, rhythm guitarist Simon Nicol, vocalist Judy Dyble, and drummer Martin Lamble. The band first played a mix of singer-songwriter cover material by the likes of Joni Mitchell and Bob Dylan and its own

original compositions. The rather weak singer Judy Dyble was replaced by the powerful Sandy Denny after the band's first album was released, and then fiddler Dave Swarbrick and drummer Dave Mattacks (replacing Lamble, who was killed in an accident when the group's van ran off the road following a late-night gig) came on board by early 1969, and the classic band was formed. This lineup's album *Liege and Lief* (1969; A&M 4257) gained the band fame for its combination of traditional English folk songs and ballads with electrified instrumentation. Influenced by the American group the Band, the group went on to create its own original compositions in drawing on English traditions, notably on the follow-up album *Full House* (1970; A&M 4417), with many songs written by Thompson and Swarbrick. However, by then, Denny and Hutchings had left the group, and with the subsequent parting of Thompson, the band never again reached this creative peak. Various personnel changes followed through the 1970s, including the return of Denny, but the band struggled to achieve commercial success. After “disbanding” in 1979, the group reunited in 1983 around long-time members Dave Pegg (who had replaced Hutchings as bass player at the time of *Full House*), Nicol, and Mattacks; since then, the group has maintained a fairly stable lineup, performing both contemporary folk-styled songs and traditional numbers.

CARL BENSON

FAITH, PERCY (7 APR 1908–9 FEB 1976)

Canadian conductor, born in Toronto. He played violin and piano, accompanied silent movies, and then arranged for bands and for the Canadian Broadcasting Corp. Faith appeared on many radio programs with his orchestra, a large group that emphasized strings. In 1950 he became a conductor and arranger for Columbia Records, and later went to Hollywood to work in various studios. Faith won Grammys for his single “Theme from A Summer Place” (Columbia 41490; 1960), and for the album *Romeo and Juliet* (Columbia CD 31004; 1969). *Themes for Young Lovers* was on the charts for 35 weeks (Columbia CL 2023; 1963). Among his other popular recordings were “Song from Moulin Rouge” (Columbia 39944; 1953) and the soundtrack album from *Love Me or Leave Me*, the Doris Day film about the life of Ruth Etting (Columbia CL-710; 1955). He continued recording through the 1960s, with a total of 19 chart albums.

FAME STUDIO

Fame Studio, an acronym for Florence Alabama Music Enterprises, is among the most famous pop-music

recording centers of the 1960s. Located approximately 20 miles from Tennessee, in Muscle Shoals, Alabama, the facility was, according to founder Rick Hall, "a cinderblock adobe shack" built in 1962 following the specifications of RCA's Nashville studio.

Fame's importance relates to the unique brand of earthy, gospel-inflected soul produced there. The foundation of its sound was the house band, which generally consisted of rhythm guitarist Jimmy Johnson, Junior Lowe or David Hood on bass, Spooner Oldham or Barry Beckett on keyboards, Roger Hawkins on drums, and an assortment of supporting players.

The studio's initial breakthrough came when Bill Lowery brought in his Atlanta-based stable of artists, including Tommy Roe, the Tams, Joe South, and Ray Stevens. In the meantime, Fame actively nurtured homegrown talent such as Arthur Alexander and Jimmy Hughes, whose "Steal Away" (Fame 6401; 1964; #17) established a template for all 1960s productions. Fame's success attracted the attention of established labels such as Atlantic, which sent down, among others, Wilson Pickett — whose recordings there included "Land of 1000 Dances" (Atlantic 2334; 1966; #6), and "Funky Broadway" (Atlantic 2430; 1967; #8) — and Aretha Franklin — "A Natural Woman" (Atlantic 2441; 1967; #8), and "Chain of Fools" (Atlantic 2464; 1967; #2), and Bell, which found success with James and Bobby Purify's "I'm Your Puppet" (Bell 648; 1966; #6).

In April 1969, the Fame house band established its own studio, Muscle Shoals Sound, going on to record countless funk hits as well as working with Paul Simon, Art Garfunkel, Cher, Willie Nelson, Bob Seger, Rod Stewart, and the Rolling Stones — including "Brown Sugar" (Rolling Stone 19100; 1971; #1), and "Wild Horses" (Rolling Stone 19101; 1971; #28). With Atlantic now recording most of its R&B artists in Miami, Fame focused on the pop mainstream, recording "One Bad Apple" (MGM 14193; 1971; #1), by the Osmonds, Paul Anka's "Having My Baby" (United Artists 454; 1974; #1), Mac Davis's "Don't Get Hooked On Me" (Columbia 45618; 1972; #1), and artists like Sammy Davis, Jr., Bobbie Gentry, and Tom Jones. Hall would be named *Billboard's* producer of the year in 1973 after having his records hold the number one position on the *Hot 100* for 17 consecutive weeks. In 1986, the studio, Muscle Shoals Sound label, and related music-publishing business were purchased by Malaco Music.

FRANK HOFFMANN

FAMOUS (LABEL) (I)

A 10-inch record issued by Lugton and Co. in London, from 1912 or 1913 to 1914. Blum and Co., Ltd.,

registered the trademark (September 1912), transferring it, with other Blum trademarks, to Columbia Graphophone Co., Ltd., in September 1916. More than 400 items were released. [Andrews 1988/10.]

FAMOUS (LABEL) (II)

An American label issued by the New York Recording Laboratories, Port Washington, Wisconsin, from 1921 to 1924. Material was blues and jazz, derived from Paramount. Riverside acquired the rights to reissue Famous records in 1953. [Rust 1978.]

FAMOUS SINGERS RECORDS INC.

A New York firm. It issued 10-inch double-sided discs at \$0.85 in 1921. A novelty dance series of records by Charles K. Davis and his orchestra included four waltzes and eight other dance pieces. Davis was music director for the firm, and John Stoge was in charge of recording. [Rust 1978.]

FANIA (LABEL)

Famed New York-based Latin-jazz label founded by bandleader Johnny Pacheco and his lawyer Gerald Masucci in 1963 to release his recordings. Beginning in 1968, the label assembled several "all-star" bands that became well known in the contemporary salsa/Latin-jazz world through their live concerts and recordings. Its holdings were considerably enhanced when in 1974 it purchased the Tico label from George Goldner, bringing the back catalog of noted Latin recording stars like Tito Puente and Machito to the label. In the mid-1970s, the label also boasted noted artists like Willie Colon, Ruben Blades, and Celia Cruz. However, by the early 1990s the label was in financial trouble, and many of its leading acts had moved elsewhere. The label appears to have been dormant through much of the 1990s until 2000, when a few reissues of earlier recordings appeared on CD.

CARL BENSON

FANTASIA

An animated motion picture released by Disney studios in 1940. It employed multichannel recording, called "Fantasound" by Disney, for the soundtrack, and featured the music of J.S. Bach, Tchaikovsky, Dukas, Stravinsky, Beethoven, Ponchielli, Mussorgsky, and Schubert. Deems Taylor narrated the program and the music was performed by the Philadelphia Orchestra, conducted by Leopold Stokowski. The performance was recorded at the center of a cluster of polygonal

FANTASY RECORDS (LABEL)

enclosures with rear walls of sound absorbent material. Each enclosure had a separate microphone, so that instrumental groupings were individually recorded. There were also distant microphones to catch the entire orchestra, and the engineers manipulated the separate tracks to create one of the first, large-scale stereo soundtracks. In the theater, the three primary loudspeakers were placed behind the screen, with surround speakers down the side walls for a "surround-sound" effect. While the audio tracks of *Fantasia* were meant to give an accurate reproduction of an orchestra and not to create sound effects or to synchronize character movements on the screen, the discrete-channel system used in this film added a new dimension to motion pictures, and sound reproduction in general. Unfortunately, World War II and the costs of outfitting theaters with proper equipment put surround-sound motion pictures on hold for a number of years. A new version of *Fantasia*, featuring the music of Beethoven, Respighi, Gershwin, Shostakovich, St. Saens, Dukas, Elgar, and Stravinsky, with James Levine conducting the Chicago Symphony Orchestra, was released in the year 2000 (the only scene they share in common is Mickey Mouse's starring turn in Dukas's *The Sorcerer's Apprentice*). It has been shown in assorted IMAX, 360-degree theaters, as well as theaters in general release. Both the earlier and later versions are also available on DVD, with CD soundtracks also available.

REV. HOWARD FERSTLER

FANTASY RECORDS (LABEL)

Fantasy was founded by Max and Sol Weiss in Berkeley, California, in 1949 as an offshoot of their record-pressing business. Their first artist was jazz pianist Dave Brubeck, who became one of the 1950s most popular jazz performers. Through the 1950s, the label mostly focused on jazz performers from the West Coast, including Gerry Mulligan and Cat Tjaldler, but also recorded comedians like Lenny Bruce and folksingers like Odetta. In the late 1950s, Saul Zaentz was hired by the Weiss brothers to be the label's sales manager; in 1967, backed by a group of investors, he purchased the label from them. A year later, a local group called Creedence Clearwater Revival signed with the label; this group would prove to be a bonanza to the small company, eventually selling hundreds of millions of records. In later years, CCR leader John Fogerty had a major falling out with Fantasy, criticizing label president Zaentz for issuing inferior product by the group. Fogerty even wrote a satirical song, originally titled "Zaentz Kant Dance," about an evil pig, the title of which, under threat of legal action, was changed to "Ganz Kant Dance." Zaentz retaliated by

suing Fogerty for plagiarizing his own song, "Run through the Jungle," in his 1986 hit "The Old Man Down the Road." Fogerty won the suit.

Despite the eventual falling out, the success of Creedence Clearwater Revival's albums enabled Zaentz to purchase many other small jazz labels in the early 1970s, including Prestige, Riverside, and Milestone. In 1977, the label grew again with the purchase of the Stax label; although the label's most famous recordings were still owned by Atlantic Records, Stax still had an impressive catalog of funk and R&B to bring to Fantasy. The label's buying binge continued through the 1980s with more small jazz acquisitions, including Contemporary/Good Time Jazz in 1984, and Pablo, the label that producer Norman Granz founded after selling his famous Verve catalog, which was purchased in 1986. In 1991, Fantasy purchased Specialty Records, a 1950s label famous for Little Richard recordings, but also other R&B acts. Finally, in 1995, Fantasy purchased Takoma/Kicking Mule, an acoustic folk label best known for its catalog of recordings by guitarist John Fahey. Today, Fantasy's business combines rereleasing material from its extensive back catalog and also producing new records, mostly of contemporary jazz. [Website: www.fantasy.com.]

CARL BENSON

FANZINE

SEE ZINES

FARRAR, GERALDINE

(28 FEB 1882–11 MAR 1967)

American soprano, born in Melrose, Massachusetts. At age 17 she went to study in Europe, and in 1901 she made her debut as Marguerite with the Berlin Opera. Then she had three seasons with the Monte Carlo Opera, 1903–1906. Her Metropolitan Opera debut, as Juliette, was on 26 Nov 1906. She remained with the company for 16 years. Her last public appearance was a Carnegie Hall recital in 1931. She published her autobiography, *Such Sweet Compulsion*, in 1938. The Library of Congress has a large collection of her papers and radio transcriptions. She died in Ridgefield, Connecticut.

Farrar's greatest roles were Cio Cio San, which she sang opposite Enrico Caruso in the American premiere of *Madama Butterfly* (11 Feb 1907) and about a hundred more times, and Carmen. She began to record for G&T in Berlin in 1904, singing "Aime-moi" by Bemberg (#33457), the *Manon Gavotte* (#43568), and other arias in French, German, and Italian. Her first *Butterfly* numbers were for Victor in 1907–1909, and



Geraldine Farrar in a Victor advertisement, "marveling" at the quality of her own recording. From the Collections of the Library of Congress

her first Carmen arias were also for Victor, in 1914–1915 (she had done Micaela's aria earlier). Other fine discs, among the 80 or so she did for Victor, were "La ci darem la mano" with Antonio Scotti (#89015; 1908), and the *Boheme* Quartet with Enrico Caruso, Scotti, and Gina Viafora (#054204; 1908). Her complete Victor recordings from 1907 to 1909 have been reissued on CD by Romophone (81036). [Moran 1960; Library of Congress website: <http://lcweb.loc.gov/spcoll/077.html>.]

**FARRELL, EILEEN
(13 FEB 1920–23 MAR 2002)**

American opera and concert singer, known also for her renditions of popular songs; born in Willimantic, Connecticut. She made radio and concert appearances in the 1940s, touring the U.S. and Latin America. She was heard in the Decca album of Sigmund Romberg's *Up in Central Park* (#A-395; 1945). Following a great success in her New York recital of 1950, she was chosen by Arturo Toscanini to sing in his performance

of the Beethoven Ninth Symphony. She won a Grammy for her recording of the Wagner "Wesendonck Songs" in 1962. Farrell was with the Metropolitan Opera from 1960 to 1966, and was a professor of music at Indiana University from 1971 to 1980, and then taught at the University of Maine at Orono from 1983 to 1985.

Farrell's affinity for popular love songs was demonstrated in Columbia LP albums CL 1653 (*Here I Go Again*), and CL-1739 (*This Fling Called Love*). In 1990 she came out of retirement to produce two remarkable CDs: *Eileen Farrell Sings Harold Arlen* (Reference RR-30CD), and *Eileen Farrell Sings Rodgers and Hart* (Reference RR-32CD). She was one of the earliest and finest of the operatic divas to create a musically convincing crossover style. Her autobiography appeared in 1999, *Can't Help Singing*. She died in Park Ridge, New Jersey.

**FARRELL, MARGUERITE E.
(16 SEP 1888–26 JAN 1951)**

American soprano and vaudeville artist, born in Providence, Rhode Island. She performed Shakespeare and also did musical shows, and appeared in 28 operas in a single season for Oscar Hammerstein's company. She turned to operetta and starred in *Step This Way* (1916). Farrell made records for three labels: Columbia and Victor, 1916–1917, and Edison, 1921–1922. Her first disc was "Out of a City of Six Million People" (Columbia A1870; 1915). A popular one came soon after: "Along the Rocky Road to Dublin" (Columbia A1920; 1916). Later that year she made her best-selling record, "If I Knock the 'L' out of Kelly," from *Step This Way* (Columbia A2040; 1916). "To the Strains of that Wedding March" was her first Edison Diamond Disc (#50769; 1921). One of her finest renditions was "I Certainly Must Be in Love" (Edison Diamond Disc 51006; 1922). Her last records date from 1923. She died in Buffalo, New York. [Rust 1989; Walsh 1960/3.]

FAULKNER, TONY (16 NOV 1950–)

A noted recording engineer, researcher, and consultant, Faulkner has a degree in physics (with additional studies in music) from the University of Surrey. From 1972 to 1976, he was with Angus McKenzie Facilities, Inc., in England, as chief engineer. From 1977 to 1980, he was with Enigma Records, and was responsible for running the recording and editing department. From 1980 to date, he has been an independent classical-recording engineer with his own company, Green Room Productions. In 1997–1998, he also worked for Sony Music Entertainment, U.K.

FAVOR, EDWARD ADDISON

Faulkner has engineered more than 2,000 classical recordings for dozens of record labels, many of which are award winners and acknowledged to be technical masterpieces. He has recorded hundreds of notable artists, including Claudio Abbado, Charles Mackerras, Peter Maxwell-Davies, Jessye Norman, Seiji, Ozawa, Bryn Terfel, Kiri te Kanawa, Zubin, Mehta, André Previn, and Michael Tilson-Thomas, as well as hundreds of performing ensembles. He was the first U.K. classical engineering specialist to work with digital audio equipment (1980), and has specialized in cutting-edge digital technology for over 20 years.

He is a member of the Audio Engineering Society technical council, was a member of the board of directors of EUROLAB, is president of the Federation of British Tape Recordists and Clubs, and is a member of the Music Performance Research Centre, in England. He has taught educational courses in recording techniques in England, Canada, and Japan, and has written articles for a number of audio-related and technical publications.

HOWARD FERSTLER

FAVOR, EDWARD ADDISON (29 AUG 1856–10 JAN 1936)

American tenor, one of the first professional artists to make records. His "high, piping, typically Irish voice" (Walsh) suited his preferred repertoire of Irish ditties. He recorded comic songs and show tunes in the early 1890s to about 1914, with the major output on Edison cylinders beginning in 1898 with "I.O.U." (#6101). Koenigsberg lists 85 cylinders to 1912, including such enduring favorites as "Who Threw the Overalls in Mrs. Murphy's Chowder" (#7697; 1901), and "I Love My Wife, But Oh, You Kid!" (#1020; 1909). His most popular record was "Fol-the-Rol-Lol" (Edison 9142; 1905). Favor also recorded four songs for Victor in 1906. He continued singing on Broadway until 1934, when he was 78 years old. He died two years later in Brooklyn, New York. [Koenigsberg 1987; Walsh 1942/3 (with corrections in Walsh 1952/5).]

FAVORITA

A German cylinder phonograph marketed in England in 1906. [Illustration in Chew 1981.]

FAVORITE (LABEL)

A lateral-cut German record, widely distributed in Europe. It was issued by Schallplatten Fabrik-Favorite GmbH in Hanover from 1906 to 1913, and then was absorbed by Carl Lindström. The repertoire was highly varied, covering all popular formats and instruments, from bagpipers to coon songs. Seven-

inch, 10-inch, and 12-inch discs were produced. A Favorite record player was also marketed.

FAVORITE TALKING MACHINE CO.

A New York firm, established in 1916. It made the Favorite line of disc players, in seven models.

FAY HOME RECORDERS LTD.

A British firm established on 15 Mar 1931, with offices in London. Incorporating in November 1932, it was renamed the Fay Radio and Recorders, Ltd. The company was formed to manufacture devices to permit the making of home recordings on existing gramophones, pursuant to a patent application of Hugh Patrick Fay. A workable product resulted, using an acoustic horn or a microphone, with the sound reproduced on a thin disc. However, there was insufficient capital behind the venture, and Fay closed the business in 1933. [Andrews 1974/5.]

FCC

SEE FEDERAL COMMUNICATIONS COMMISSION (FCC)

FEDERAL (LABEL)

An American record, affiliated with the King label, issued in 1950–1963. It offered R&B, jazz, and popular vocal groups. [Rotante 1971.]

FEDERAL COMMUNICATIONS COMMISSION (FCC)

A U.S. federal agency established in 1934, with authority to regulate radio and television, ensuring that broadcasts are in the public interest. While the FCC has no direct control over recordings, it has been able to exert some slight influence on popular song lyrics, endeavoring to expunge more sexual themes and vocabulary.

See also Sexually Oriented Lyrics

FEDERAL CYLINDER PROJECT

A major program of the Archive of Folk Culture in the Library of Congress, which owns one of the largest collections of field cylinder recordings in the world. In 1979 the Library of Congress inaugurated the project, intending to preserve and duplicate wax cylinder recordings, document and preserve cylinder collections, and disseminate the results to the public.



Federal label. Courtesy David A. Jasen

Engineers Robert Carneal and John Howell supervised the delicate task of making tapes from the cylinders. The collection primarily focused on recordings of American Indians made at the turn of the century by ethnographers including Francis Densmore. An inventory of the collection was published in 1984. Further volumes followed through the 1980s on specific regions represented in the total collection.

FEDERAL PHONOGRAPH CO.

A firm incorporated in Albany, New York, in June 1922 with \$100,000 capitalization, originally named Federal Record Corp. It succeeded the Indestructible Phonographic Record Co. of Albany. Some Indestructible cylinders appeared as "Federal" during 1917–1922. Records of dance and popular music were issued on the Federal label. J.P. O'Brien was manager in November 1922. The last reference to the company was in March 1924.

FRANK ANDREWS

FEEDBACK

In a sound system, the return of a fraction of the output signal to the input circuit. It may be positive (increasing the output) or negative (decreasing the output). In most cases feedback is an undesirable distortion, but some rock performers have made deliberate use of it, for example, Jimi Hendrix.

See also Acoustic Feedback; Negative Feedback

FEEDFORWARD

The process of mixing a fraction of the input signal in an amplifier with a small amount of the output signal, inverted in phase. This mixing cancels both portions, leaving only the distortions, which can then be amplified and subtracted from the final output.

See also Negative Feedback

FELDMAN, LEONARD (1928–14 FEB 1994)

Well known as a consulting engineer, writer, lecturer, and technical expert in consumer electronics, Feldman was born in Chicago, and after moving to New York City, enrolled in Brooklyn Technical High School. After a stint in the navy as an electronics technician, he went on to City College in New York, where he earned a B.S. degree in electrical engineering in 1950. The next year, he went to work for Fisher Radio in 1951, as a design technician, and stayed with the company until 1956. Feldman then helped to found another company, Madison Fielding, producing a number of components, including the first transistorized preamplifier. Somewhat later, he merged the company with Crosby-Teletronics. In 1970, Feldman, along with John Fixler, present a modified version of Peter Scheiber's quadraphonic-sound matrixing system to Electrovoice. As a result, the company subsequently developed a quad matrix decoder of its own, which may have been the most compatible of the matrix systems.

After several years of part-time writing while working for the above companies, Feldman decided to start writing full time. He became a senior editor of *Audio* magazine, and wrote regularly for *Video Review*, *Popular Electronics*, and *Popular Science*, as well as several business and trade publications covering the consumer electronics industry. As part of his product-testing work, he also operated one of the country's foremost audio-equipment testing laboratories. He was a technical consultant to the Electronics Industry Association, regularly testified before national and state legislative bodies concerning the regulation of consumer electronics, and served for more than 10 years as one of the U.S. representatives to the International Electrotechnical Commission. He also published several books, was a member of the Institute of Electrical and Electronics Engineers, and became a fellow of the Audio Engineering Society in 1991.

HOWARD FERSTLER

FENDER, [CLARENCE] LEO

(10 AUG 1909–23 MAR 1991)

Starting out in the late 1940s as a radio repairman, Fender began tinkering with guitars as a hobby, and

FENDER GUITAR

eventually became obsessed with producing the best electrical instrument of that kind possible. In 1954, he created the Stratocaster, a design that revolutionized the music business because it could deal with radically different musical styles, from country-western to blues and heavy metal. Fender sold his Fender Guitar company in 1961. For his work, he was eventually inducted into the Country Music Hall of Fame and the Rock Walk of Fame.

HOWARD FERSTLER

FENDER GUITAR

Throughout the 1930s, performers had experimented with using microphone amplification with hollow-body guitars, as a way to make them fill out large areas with sound. However, it was not until the 1940s that Leo Fender perfected a system whereby hard-body guitars and speaker systems could be properly mated, without the feedback problem. In the 1950s, Fender produced and marketed a number of superior designs that allowed the company to become synonymous with high-quality, electric-guitar sound, and his groundbreaking design was the Stratocaster, produced in 1954. The "Strat" was a near-perfect fusion of electronics, ergonomics, technology, and design aesthetics. Besides its distinctive new look, the design involved a neck that was simply bolted on, thereby simplifying its manufacturer and lowering production costs. One innovation that is practically universal today was an arm that could be pushed to change the pitch of the strings.

Fender sold his company to CBS in 1961, and over the next two decades the product line's quality, and therefore its reputation, began to falter. In 1985, a group of employees, led by William Schultz, purchased Fender from CBS, and they gradually returned the enterprise to its prior glory. In 1987, Fender Guitar acquired the Sunn amplifier company, and in 1995 they purchased Guild Guitar. During this period, and since, the company has expanded to become a worldwide powerhouse in the music-instrument industry, providing everything the pop musician might need, from guitars, strings, and accessories to amplifiers and mixing boards. [Website: www.fender.com.]

HOWARD FERSTLER

FESSENDEN, REGINALD AUBREY (6 OCT 1866–22 JULY 1932)

Born in Canada, with his boyhood years spent in Ontario, Fessenden was a physicist and inventor, and was also considered by many to be the father of radio broadcasting. Indeed, his voice was the first-ever to be broadcast by radio waves and heard by another person.

A brilliant student, at age 14 he was granted a mathematics mastership to Bishop's College in Lennoxville, Quebec. After graduation, he eventually went to work for Thomas Edison in the inventor's machine shop, where he so impressed his superiors that he was invited to work in the labs. By 1890, he was Edison's chief chemist, but financial difficulties forced Edison to lay him off. After a stint as a professor of electrical engineering at Purdue university, Fessenden came to Pittsburgh in 1893 to serve as the head of the electrical engineering department at Western University (now the University of Pittsburgh). While there, he read of the radio experiments that Guglielmo Marconi was conducting in England and began experimenting himself at a lab at Allegheny Observatory. Marconi's system could only transmit and receive dots and dashes: Morse code.

One of Fessenden's early accomplishments was perfecting a new means of sending Morse code more effectively than Marconi. His work with code transmitting notwithstanding, Fessenden's primary goal was to transmit the human voice and music. To accomplish this he devised the theory of the "continuous wave," a way to superimpose sound onto a radio wave and transmit this signal to a receiver where the radio wave would be removed, leaving the listener with the original sound. It is this system that continues to be used to this very day.

On 23 Dec 1900, Fessenden made an experimental transmission from an island in the middle of the Potomac River near Washington, and radio broadcasting was born. Six years later, he presented radio's first program from Brant Rock, near Boston. Further experimentation followed, but it was not until after World War I that governments of the U.S. and Canada would issue broadcasting licenses that would permit development of the new medium. At that time, Fessenden's backers were more interested in radio as a point-to-point medium (a radio telephone), than as a way to transmit sound to large groups of people.

Surprisingly, Marconi's theory of radio transmission still prevailed (time has proven Fessenden correct and Marconi wrong), and because of this the partnership between Fessenden and his backers began to sour. In the meantime, the phenomenal interest in radio in the 1920s finally allowed him to gain recognition for his pioneering work, and the Institute of Radio Engineers presented him with its medal of honor, while the city of Philadelphia awarded him a medal and cash prize for "one whose labors had been of great benefit to mankind."

In 1928, Fessenden returned to Bermuda where he had first met his wife more than 40 years earlier. There, the inventor called by the then head of General Electric Laboratories "the greatest wireless inventor

of the age - greater than Marconi," died, largely a forgotten man.

HOWARD FERSTLER

FEURMANN, EMANUEL
(22 NOV 1902– 25 MAY 1942)

Austrian cellist, born in Kolomea, Galicia. He made his debut at the age of 11 in Vienna, and when he was 16 became a faculty member in the conservatory at Cologne. He was appointed professor at the Hochschule für Musik, Berlin, in 1929. Fleeing from the Nazis, he made a world tour in 1934–1935, making an American debut with the Chicago Symphony Orchestra on 6 Dec 1934. He remained in the U.S. until his death, residing in New York.

Feuermann's commercial recordings were made between December 1921 and September 1941. He worked for Parlophon and Telefunken in Germany during 1921–1932, then recorded in London for Columbia beginning in 1934. During 1934 and 1936 he also recorded in Tokyo for Nipponophone. His first American recordings were for Victor in 1939. Among his important discs are the earliest recording of the Dvovák Concerto, made with members of the Berlin State Opera Orchestra under Michael Taube (Parlophone 10856–58; 1928 and 11071; 1929); the Brahms Double Concerto, with Jascha Heifetz and the Philadelphia Orchestra under Eugene Ormandy (Victor 18132–35; 1939); *Schelomo* with Leopold Stokowski and the Philadelphia Orchestra (Victor 17336–38; 1949); and a brilliant series of trio works by Brahms and Beethoven performed with Heifetz and Artur Rubinstein in 1941. [Samuels 1980.]

FEWKES, JESSE WALTER
(14 NOV 1850– 31 MAY 1930)

American ethnologist, born in Newton, Massachusetts. After earning a Ph.D. from Harvard University in 1877, he studied in Germany. He taught at Harvard, then became chief of the Bureau of American Ethnology. Fewkes carried out extensive field work, notably among North American Indian tribes. Working among the Zuni and Passamaquoddy Indians in 1890, he made the first phonograph records for ethnological purposes. [Fewkes 1890/1; Fewkes 1890/2.]

See also **Field Recordings**

FFRR

SEE FULL FREQUENCY RANGE RECORDING (FFRR)

FIEDLER, ARTHUR
(17 DEC 1894–10 JULY 1979)

American conductor and violinist, born in Boston. His father and uncle played the violin in the Boston Symphony Orchestra. He studied in Berlin, then returned to join the Boston Symphony himself, playing violin, viola, and keyboard instruments. In 1929 he began to conduct free open-air summer concerts in Boston, featuring a light classical and popular music repertoire. In 1930 he became conductor of the Boston Pops Orchestra, and remained at its helm until his death in Brookline, Massachusetts. He was awarded the Presidential Medal of Freedom in 1977.

Fiedler made more than 150 Victor 78-rpm records with the Pops Orchestra (waltzes, marches, overtures, and other light fare), helping to bring the symphonic sound into the lives of persons who were uncomfortable with the standard classical repertoire. His recordings continued on LP, where he compiled a list of more than 75 discs; only a smattering of these are currently available on CD.

FIELD RECORDINGS

Recordings of orally transmitted music made on site, that is, in the "field" where it naturally occurs. The earliest such recordings were made by Jesse Walter Fewkes, an anthropologist who studied the songs of the Zuni and Passamaquoddy American Indians in 1890. His cylinders — made, like most early field cylinders, on the Edison Perfected Phonograph — were the basis for research (by B.I. Gilman and others) into the native melodies. His associate Frances Densmore made numerous recordings and carried out most of the definitive studies of the North American Indian repertoire. Early field recordings in Europe were made by Béla Vikár, of Hungarian folksingers, in 1892. He was followed by composer-ethnologists Béla Bartók and Zoltan Kodály, who recorded and analyzed a wide range of folk music in Hungary and (present-day) Romania. By 1912 Bartók had made more than 1,000 cylinders, which he gave to the Budapest Ethnographic Museum.

The Phonogramm-Archiv in Vienna (1899) and its counterpart, the Berlin Phonogramm-Archiv (1905), became major depositories of these recordings. The Berlin institution had the benefit of connection with distinguished research scholars Carl Stumpf and Erich von Hornbostel (director from 1905), who led the project of organizing, analyzing, and copying the folk materials that accumulated. Stumpf made the first records of Asian music in 1901, when the Siamese court orchestra performed in Berlin. Other non-Western music was recorded in Australia, as Charles Baldwin Spencer recorded aboriginal songs, a project pursued later by Percy Grainger.

FIELDS, ARTHUR

Musik des Orients, a set of 12 78-rpm records, was issued by Odeon and Parlophone in 1931; it consisted of material edited by von Hornbostel from the Berlin Archiv. Excerpts from this demonstration collection were issued by Ethnic Folkways in 1963 on two LPs.

Among the major American collections of field recordings are those at the Archives of Traditional Music, Indiana University, and the American Folklife Center.

FIELDS, ARTHUR

(6 AUG 1888–29 MAR 1953)

American baritone, born in Philadelphia. He began singing at age 15 at Coney Island (New York City), traveled with a minstrel show, and appeared in vaudeville. The first of his thousands of recordings (many under pseudonyms) was "Along Came Ruth" (Victor 17637; Columbia A1612; 1914). He worked for Edison from 1917 to 1928, and made some of his best recordings on that label: "Ja-Da" and a stuttering song, "Oh Helen." Fields took part in a number of the Edison tone tests. During World War I he was in uniform as an Army recruiter, and recorded to great effect songs associated with the conflict: "Oh! How I Hate to Get Up in the Morning" (Victor 18489; 1918), and "How Ya Gonna Keep 'em Down on the Farm?" (Victor 18537; 1919). In the 1920s Fields recorded on numerous labels — among them Grey Gull, Emerson, Radiex, Madison, National Music Lover, Phantasie, Harmony, Romeo, and Melva — and utilized various pseudonyms; most notably Eugene Buckley ("Would You Rather Be A Colonel With An Eagle On Your Shoulder Or A Private With A Chicken On Your Knee?", Columbia 2669; 1919). Later he turned to radio, and to writing songs (e.g., "Aba Daba Honeymoon"), and hymns. He died in Largo, Florida. [Walsh 1953/6–8.]

REV. FRANK HOFFMANN

FIELDS, GRACIE

(9 JAN 1898–27 SEP 1979)

English singer, actress, and comedienne, born Gracie Stansfield in Rochdale, Lancashire. She began appearing on stage as a child, and was in a London revue at age 17. Fame arrived with a starring role in *Mr. Tower of London*, in which she did more than 4,000 performances from 1918 to 1925. After many successful revues she turned to film, and was seen in the successful *Sally in Our Alley* (1931). Her later career included stage, screen, and worldwide entertainment of troops during World War I. She was designated Commander of the British Empire in 1935.

Fields's first recordings to be issued were on HMV in 1928, beginning with "Because I Love You" (#B-2733). Her records illustrate her comic side: "What Can You Give a Nudist on His Birthday?" (HMV B8232; 1934), and her way with ballads: "Will You Remember?" (Rex 9117; 1937). One of her popular hits during World War II was "The Biggest Aspidistra in the World," recorded in 1938 (Regal Zonophone MR-3001). More than 700 songs are listed in Rust. A selection of her 1928–1947 recordings is available on CD on *Our Gracie* (ASV/Living Era 5259). [Rust 1989.]

FIELDS, SHEP (12 SEP 1910–FEB 1981)

American big bandleader, born in Brooklyn. He began professional work in the early 1930s, in Miami and New York, then directed the touring Veloz and Yolanda Dance Orchestra. In the late 1930s he became established at the Empire Room of the Palmer House hotel in Chicago, featuring his trademark "rippling rhythm," an introduction to each number accomplished by blowing through a straw into a glass of water at the microphone. Later, he had a new style, in which the orchestra had no brass section, but then returned to rippling rhythm. Fields made more than 300 Bluebird records, of which his theme song, "Rippling Rhythm," was one of the most popular (Bluebird 6759; 1936). He died in Los Angeles.

FIFTH AVENUE PRESBYTERIAN CHOIR

An ensemble that recorded for Edison ca. 1910, one of the earliest choral groups on record. Featured were Mary Hissem de Moss, Cornelia Marvin, Edward Strong, and Frederic Martin.

FIGNER, FREDERICO

(2 DEC 1866–19 JAN 1947)

An early promoter of the Edison phonograph in Brazil. He gave demonstrations in Belém in 1891, and in Rio de Janeiro in 1892, using the machine he called the Máquina Figner (it was the Perfected Phonograph). Figner was a pioneer producer of recordings in Brazil (1897). He was an agent for International Zonophone and Casa Edison. In 1909 he acquired Brazilian patent #3465, for double-sided discs, from Odeon, and took legal actions against all other double-sided labels. He also attempted to register this patent in other countries, and was in some cases successful, but the production of double-sided discs had already gone too far for him to have much impact on it.

FIGNER, NIKOLAI
(21 FEB 1857–13 DEC 1918)

Russian tenor, born in Kazan. He was a naval officer when his “voice was discovered” (Slonimsky 1984), and he changed careers. His debut was in Naples in 1882. As a member of the St. Petersburg company he sang in the premiere of *Queen of Spades*, and became famous as Lenski in *Eugene Onegin*. Figner was the most acclaimed Russian tenor of the 19th century. His few discs, made for G&T in St. Petersburg, in 1900–1903, presented him only in Russian songs, French/Italian operas, and duets with his wife, Medea Mey Figner. The records exhibited a voice that was already declining. The best one was “Bianca al par” from *Huguenots* (#022000). [Yankovsky 1990.]

FILIPETTI, FRANK (30 NOV 1948–)

Raised in Bristol, Connecticut, with a 1971 degree from the University of Connecticut in psychology, with minors in math and physics, Filipetti came to New York City as a musician and songwriter in that same year. Ten years later, with three production deals, two publishing deals, and three record deals under his belt, he decided that his primary interests lay in the technical side of the business, and from then on he dedicated himself to engineering and production. His natural talent resulted in his first number one single in 1983, with Foreigner’s *I Want To Know What Love Is*.

One of the first recording engineers to embrace digital recording and production technology, with its extreme flexibility, Filipetti’s additional credits include mixes for Kiss, the Bangles, Carly Simon, Barbra Streisand, Vanessa Williams, George Michael, 10,000 Maniacs, Elton John, Lisa Minnelli, Luciano Pavarotti, and James Taylor, whose elegant *Hourglass* album Filipetti produced, engineered, and mixed, winning two personal Grammy awards in 1998 for best engineered album and best pop album. He has also worked on projects and with artists as varied as Courtney Love and Hole, Barbra Streisand, Dave Grusin, Celene Dion, Mariah Carey, Paul McCartney, and Bob Dylan.

Filipetti is also an enthusiastic proponent of surround sound. The N2K album, *Dave Grusin - West Side Story*, which he recorded and mixed with producer Phil Ramone in 1997, was one of the first commercially available 5.1 recordings. He has also engineered numerous other 5.1-channel DVD projects, including works for Billy Joel, Meatloaf, Elton John, and James Taylor, who’s *Live at the Beacon Theater* DVD video was a landmark example of proper 5-channel sound technology. He has also

recorded original cast albums for *A Funny Thing Happened on the Way to the Forum* featuring Nathan Lane, the Grammy-winning *Annie Get Your Gun*, and the award-winning *Aida*, for which he won a Grammy. He has also recorded and produced live concerts and television broadcasts, including VH-1 *Storytellers*, *A&E Live by Request*, *PBS Sessions at 54th Street*, *VH-1 Live at the Hard Rock*, as well as the last four *Pavarotti and Friends*’ concerts, and others for Bravo, HBO, and network television.

HOWARD FERSTLER

FILM MUSIC

SEE MOTION PICTURE MUSIC

FILM SPEED

The rate of film travel in a motion picture, typically 24 frames per second. If the speed is for whatever reason increased, as it is for television in some European countries (to 25 frames per second) the pitch of musical signals is raised significantly, almost a half-tone for each additional frame per second.

FILMOPHONE (LABEL)

A British record made by Filmophone Flexible Records, Ltd., London, from ca. 1930 to 1932. The discs were 10 inch, celluloid, light and unbreakable, advertised as particularly suitable for portable phonographs. Repertoire was dance and popular songs. The venture was not successful because the records tended to warp and the stylus — which had to be a special one — did not ride well in the slim grooves. [Rust 1978; *HN* #32 printed a 1932 label list.]

FILTER

An electronic device that removes unwanted frequencies from a sound signal. There are three basic types: (1) a low-pass filter screens all but the lower frequencies; (2) a high-pass filter screens all but the higher frequencies; (3) a band-pass filter allows only a certain range of the audio frequency spectrum to pass, screening the lower and higher components. Audio filters are used in equalization and to combat rumble and hum on early discs.

FINE, C. ROBERT (1922–1982)

After a stint as a radar specialist in the U.S. Marines during World War II, Fine joined Majestic Records in

FIO RITO, TED

New York City, and from there he moved to Reeves Sound, as chief engineer. During the 1950s, he was an innovator in the new science of multichannel sound for motion pictures, and he joined with Arthur Loew to head up a special recording operation dedicated to the production of MGM Perspecta Sound films. In the late 1960s, he also developed a process that would allow for the transmission of video pictures over regular telephone lines. He went on to found his own recording studio, Fine Sound, and went on to pioneer in the production of superior-sounding stereophonic LP recordings, including those mastered with 35mm motion picture film stock. Active in the Audio Engineering Society from its beginnings, Fine was chairman of the New York section at the time of his death. He had received a fellowship from the society in 1973.

HOWARD FERSTLER

FIO RITO, TED (20 DEC 1900–2 JULY 1971)

American big bandleader and songwriter, born in Newark, New Jersey. He began as a pianist, and was with the Ross Gorman band in 1918. In the 1920s he formed his own band, and became established at the Edgewater Beach Hotel in Atlantic City, New Jersey. His sound was sweet if not especially distinctive. Future movie stars Betty Grable and June Haver were vocalists in their younger days. Fio Rito was successful on radio and in several films through the 1930s and 1940s, and became the house leader at Chicago's Chez Paree night club in 1956. In 1970 he led small combos in California and Las Vegas. He died in Scottsdale, Arizona.

Fio Rito recorded primarily for Brunswick Decca, and Bluebird, beginning with his Atlantic City group in 1929; he made more than 250 records in the next 12 years. His own composition, "Roll Along, Prairie Moon," was one of the favorites (Brunswick 7507; 1935). Another was his theme song, "Rio Rita" (Decca 4258; 1942). His band was innovative in recording dance versions of classical music in 1938, including tunes by Wagner, Offenbach, Saint-Saëns, and Chopin. Two radio broadcasts from 1943 and 1945 are available on a budget compilation (Collectors' Choice Music 1024), but his many studio recordings are not currently reissued on CD.

FIRESIGN THEATER

SEE COMEDY RECORDINGS

FISCHER, EDWIN (6 OCT 1886–24 JAN 1960)

Swiss pianist and conductor, born in Basel. He taught piano in Berlin from 1905 to 1914, and from 1931 at the Hochschule für Musik there. He also conducted in Berlin and in other German cities. In 1942 he returned to Switzerland. He wrote books on Bach and Beethoven, and made important recordings in the 1940s and 1950s. He died in Zürich.

Fischer is known for having revived the 18th-century custom of conducting from the keyboard, and for bringing the Bach and Mozart repertoires to the attention of a wide public. He was also acclaimed for his interpretations of Brahms and Beethoven. His first recordings were Duo Art piano rolls, made between 1916 and 1925, including the Brahms Sonata No. 3. On Welte piano rolls he recorded, before 1927, Beethoven, Mozart, and Bach. In October 1931 Fischer made his first commercial discs, a Handel *Chaconne* (HMV DA4401), the Bach *Chromatic Fantasy and Fugue* (HMV 4403–04), and a prelude and fugue from *Wohltemperiertes Klavier*.

From 1933 to 1936 he concentrated on the *Wohltemperiertes Klavier*, completing all 48 preludes and fugues on HMV. He also performed the Bach Concerto No. 1, directing his own chamber orchestra from the keyboard, for HMV (DB 4420–22; 1933). A notable recording of the Brahms Second Concerto was made with Wilhelm Furtwängler and the Berlin Philharmonic Orchestra for the Russian label Mezhdanarodnya Kniga (D09883–84; 1942). He collaborated with Elisabeth Schwarzkopf for an LP of Schubert songs in 1952 (Columbia 33CX-1040). On 10 Dec 1954 he made his final recording, the Mozart Concerto No. 20, with Eugen Jochum conducting (Angel 35593). He died in Basel.

FISCHER-DIESKAU, DIETRICH (28 MAY 1925–)

German baritone and conductor, born in Zehlendorf, a Berlin suburb. He studied at the Hochschule für Musik until 1942, then was conscripted into military service. A prisoner of war, he was not released until 1947, at which time he resumed his studies at the Hochschule. His opera debut was in 1948 with the Berlin State Opera; he then sang in many European opera houses and gave song recitals. Fischer-Dieskau became a renowned Lieder singer, perhaps the greatest of his generation. A New York recital of Schubert on 2 May 1955 brought critical acclaim, but he continued to sing in opera, doing all the major works in Italian, French, and German, and covering contemporary as well as standard repertoire. He took up conducting in the

1970s, and was heard with the Los Angeles Philharmonic Orchestra, the New Philharmonia Orchestra, and other major ensembles. He continued to perform in concert until his final appearance in December 1992.

Fischer-Dieskau's recordings have been mostly for DG and Angel. They include complete recordings of the principal Mozart, Verdi, and Wagner operas, plus *Lulu* and *Wozzeck*, as well as the B-Minor Mass and the Passions of J.S. Bach. He has made definitive versions of the entire Lieder repertoire. Albums made of Schubert songs (1970) and Brahms songs (1972) won Grammys.

FISH, ROYAL

A popular tenor in opera, oratorio, and concert, and an Edison artist from 1913. His Blue Amberol cylinder "In the Shadow of the Pines" (#2073, a duet with Vernon Archibald), was a favorite; and "On Yonder Rock Reclining" from *Fra diavolo* was a steady seller. He made 15 solo and duet recordings for Edison Diamond Discs, the last in 1929. Fish sang in Edison talking films during 1912-1915, one of which presented a version of the Sextette from *Lucia*. [Walsh 1970/12.]

FISHER, AVERY

(4 MAR 1906-26 FEB 1994)

An audio industry pioneer, musician, and philanthropist. Fisher was born in Brooklyn, graduated from New York University in 1929, and worked professionally for two publishing firms. However, his main interest was audio and in 1937, in partnership with Herman Scott (who later went on to found his own company), he began Philharmonic Radio, which specialized in tuners, amplifiers, and speakers. In 1945, he sold Philharmonic and started a new company, Fisher Radio, which produced famously high quality high-fidelity components. Fisher could produce products of that caliber because he made a point of hiring first-rate technicians away from European companies that could not pay as well as he could.

Fisher is known for producing the first commercially available transistor amplifier, and in 1956 his company produced the first stereo radio and phonograph combination. From 1959 through 1961, the company made important improvements in AM/FM tuner design. As the audio industry became more oriented toward mass-market products, Fisher decided to sell out to Emerson, and later on Emerson sold the company to Sanyo, in Japan. Fisher continued to be a consultant for both companies.

As a philanthropist, he was very influential, and was a member of the boards of the New York Philharmonic, Chamber Music Society of Lincoln Center, and the

Marlboro Festival. Fisher also endowed two award projects, the Avery Fisher prize, a tax-free, \$25,000 award to young American instrumentalists, and the Fisher career grant, a \$10,000 fund against which recipients can draw for career-related expenses. Lincoln Center's Philharmonic Hall was renamed Avery Fisher Hall after he donated \$10.5 million to the refurbishing project. Interestingly, Lincoln Center was built over the site where Fisher's first company was located.

HOWARD FERSTLER

FISHER, EDDIE (10 AUG 1928-)

American popular vocalist, born in Philadelphia. He was with several bands in the 1940s, then sang at Grossinger's resort in New York state, leading to an engagement on the Eddie Cantor radio show in 1949, and signed with RCA that same year. He achieved renown as a singer of ballads and musicals, and though his career was interrupted by military service, he resumed it in 1953 and gained stardom on television and in several motion pictures. His major hits included "Oh, My Papa" (Victor 20-5552), and "The Games Lovers Play" (Victor LPM 3726). There are many reissues available of his RCA recordings; a good selection is available on the aptly named *All-Time Greatest Hits* CD (RCA 9592). In 2002, Collectibles began reissuing various Fisher albums from throughout his RCA recording career, two per CD, on budget compilations.

FISHER STEREO

SEE FISHER, AVERY

FISK UNIVERSITY JUBILEE QUARTET

A group that recorded for Victor from 1910, and for Edison from 1912. On their two Diamond Discs they were identified as the Southern Four. All the singers were connected with Fisk University in Nashville, a traditionally Black institution. Members were John Wesley Work (organizer and leader), Noah Walker Ryder, James A. Myers, and Alfred G. King (later replaced by L.P. O'Hara). There were many later changes in the membership, until the group dissolved ca. 1947.

The quartet was famous for its authentic renditions of Negro spirituals. Victor 16448A, the first 1910 recording, offered "Little David Play on Yo' Harp," and "Shout All Over God's Heaven." There was great success for "Swing Low, Sweet Chariot" (#16453A), and "Golden Slippers" (#16453B). On Edison cylinders they began with "All Over This World" (#4045; 1913), and ended with "Band of Gideon" (#5442; 1927). For Columbia they made two discs as the Fisk

FITZGERALD, ELLA

University Male Quartette. The British Document label has reissued their 1909–1940 recordings on three CDs (5533–35). [Turner 1990; Walsh 1962/10.]

FITZGERALD, ELLA (25 APR 1917–15 JUNE 1996)

American popular singer, born in Newport News, Virginia. In 1934 she attracted attention as a teenager on an “amateur night” at the Apollo Theater in New York, and was engaged in 1935 by Chick Webb. She made her first records with him: “I’ll Chase the Blues Away” (Brunswick 02602; 1935), and “Love and Kisses” (Decca 494; 1936). She and Webb had a great success with “A Tisket, A Tasket” (Decca 1840; 1938), and “Undecided” (Decca 2323; 1939). When Webb died in 1939 she led the band for three years. Having begun as a rather typical pop vocalist, she evolved into a scat singer and jazz artist, while retaining her command of the dulcet ballad repertoire.

Her scat style developed in the 1940s, and her finest work came in the 1950s, especially after she joined the new Verve label. Label owner Norman Granz encouraged her to sing in a more jazz-oriented style, and also pointed her toward recording higher quality material; the result was a classic series of albums that established her as one of the greatest singers in popular music. Her series of “songbooks” on individual composers established her in the highest place among American female vocalists. First of those was the *Cole Porter Songbook* (Verve 4001; 1956). Others were devoted to Rodgers and Hart (Verve 4002; 1956), Duke Ellington (Verve 4008/09; 1956), George Gershwin (Verve 4024/29; 1958–1959), Irving Berlin (Verve 4019/20), Harold Arlen (Verve 4057/58; 1960), Jerome Kern (Verve 4060; 1960), and Johnny Mercer (Verve 4067; 1960). Other remarkable interpretations are found in *Porgy and Bess* (Verve 4011/12; 1958), with Louis Armstrong singing Porgy and Fitzgerald delivering a definitive “Summertime”; and another album with Armstrong, *Ella and Louis* (Verve 4003; 1956), which includes her impeccable renditions of “Nearness of You,” and “April in Paris.”

Fitzgerald parted with Verve in 1967, and moved to Capitol and then Reprise; these recordings are not among her best, and reflect the difficulties jazz singers had competing with the popular rock styles of the day. She briefly recorded for Atlantic in the early 1970s, and then reunited with producer Norman Granz on his new Pablo label, and a return to recording jazz primarily in small group settings. Fitzgerald received 12 Grammys, the first for the *Duke Ellington Songbook*. The 1989 album *All That Jazz* (Pablo 2310–938) was her final Grammy winner. In 1992, she retired from singing due to ill health, and died four years later.

Fitzgerald’s extensive discography is well represented on CD. Her recordings from 1937 to 1941 are presented chronologically on a series of six individual CDs by Classics; in the U.S., GRP has reissued much of the Decca material, including both the Webb band recordings and Fitzgerald’s first solo outings (the four-CD *Legendary Decca Recordings* is a good overview; GRP 648). Fitzgerald’s legendary *Songbooks* are available in their original form and also as a 16-CD boxed set (Verve 314–519832). Although her Capitol, Reprise, and Atlantic material is hard to come by on CD, most of her original Pablo albums from 1972 to 1989 are available in their original format.

5.1 ENTERTAINMENT GROUP

Begun in the year 2000, the 5.1 Entertainment Group is divided into various divisions that produce and promote digitally recorded music, including the record labels Silverline, Immergent, and Electromatrix. Silverline is the DVD record label of the group, and was the first company to release music in the DVD format. Immergent is a full-service, independent label with a focus in rock, pop, and alternative music, with releases in both CD and DVD form. Electromatrix is one of the first record labels to release dance/electronic music in the DVD-Audio format. The 5.1 Group also produces and engineers materials for films, video games, and other formats in need of superior sounding technology.

The company owns two fully digital studios equipped with state-of-the-art production equipment. These are used to make both in-house recordings and contracted releases by other record companies. Artists such as Sting, Eminem, Fleetwood Mac, Dishwalla, Big Phat Band, Venice Underground, Billy Idol, No Doubt, Alice Cooper, and Aaron Neville have worked on projects with the company. The company also engaged in providing music supervision and original songs to the movie industry for soundtrack use. [Website: www.5point1.net/.]

HOWARD FERSTLER

FLAGSTAD, KIRSTEN (12 JULY 1895–7 DEC 1962)

Norwegian dramatic soprano, born in Hamar. She made her debut in Oslo on 12 Dec 1913, then sang in Oslo and throughout Scandinavia for 20 years. Her early repertoire was Verdi, Puccini, Weber, and operetta. Substituting in Oslo for an indisposed colleague, she performed *Isolde* (in German) in 1932; Alexander Kipnis, the King Mark of that evening, was impressed enough to recommend her to Bayreuth,

where she sang in 1933 and 1934, establishing herself as a prominent interpreter of Wagnerian roles. She first sang at the Metropolitan Opera on 2 Feb 1935 as Sieglinde, and went on to great success in the *Ring* operas and as Isolde. Flagstad sang also at Covent Garden and elsewhere in Europe, Chicago, and San Francisco. Lauritz Melchior was the tenor in many of her finest duets, on stage and on disc. Her final appearances were in concert, in New York and at La Scala, in 1955. She then directed the Norwegian Opera from 1958 to 1960. She died in Oslo.

After making some records in the 1920s for minor Norwegian labels, she worked with Norwegian HMV in 1923. But it was when she began recording for Victor in 1935 that her eminence as a Wagnerian heroine was made apparent. In "Ho-jo-to-ho" (Victor 1726), and "Du bist der Lenz" (Victor 1901), she presented definitive interpretations. Her duets with Melchior, from *Tristan* (Victor 16238-39), and *Götterdämmerung* (Victor 17729), brought this music to a wide audience. After semiretirement during World War II, she returned with a voice of even greater luster and power, and made her greatest recordings for EMI. Those included her immolation scene from *Götterdämmerung*, with Wilhelm Furtwängler conducting (DB6792-94; 1948), and the 1948 "Liebestod" (EX291227-30). She sang with Ludwig Suthaus, Furtwängler conducting, in a complete *Tristan* (HMV RLS 684; 1953). She sang in only one complete *Ring* opera recording, as Fricka in *Das Rheingold*, under Solti. EMI reissues cover many of the 1930s records (CD GD87915; 1990) and postwar material (CD H7-63030-2; 1989). [Dennis 1952.]

FLAMEPHONE

A disc player advertised in Britain in 1923, in which amplification was produced by the "sympathetic pulsation of the fine gas jets" supplied "by ordinary town gas."

FLANGING

In tape recording, a kind of phasing effect achieved by slowing the tape movement.

FLAT RESPONSE

The ability of an audio system or audio component to produce a constant output level throughout the audio frequency range. A perfect response would exhibit a zero dB level difference from 20 to 20,000 Hz. However, speaker-room combinations, even good ones, often show deviations exceeding ± 5 dB. An outstanding setup (combining an excellent room,

excellent speakers, proper speaker placement, and perhaps a bit of assistance from a good equalizer) should be able to get that down to ± 2 dB. Most good audio amplifiers, CD and DVD players, and digital recorders have negligible variations over the audible bandwidth.

HOWARD FERSTLER

FLATT, LESTER RAYMOND (28 JUNE 1914-11 MAY 1979)

American country singer and guitarist, born in Overton County, Tennessee. As a mill worker in the 1930s he taught himself to play, and made radio appearances in 1939. He was at the Grand Ole Opry in 1944, with Bill Monroe's Bluegrass Boys. In 1948 he teamed with banjoist Earl Scruggs, formed the Foggy Mountain Boys, and began to make best-selling records for Mercury (to 1951), and then Columbia (1951-1969). "Foggy Mountain Breakdown" (Mercury 6230; 1949), was heard on the soundtrack of the motion picture *Bonnie and Clyde* (1968). The Foggy Mountain Boys were recognized as the leading country instrumental group of the late 1950s. "Cabin in the Hills" (Columbia 41389; 1959), was one chart disc, followed by "Ballad of Jed Clampett," theme song of the *Beverly Hillbillies* television show (Columbia 42606; 1962), "California Up Tight Band" (Columbia 44294; 1967), and "Nashville Cats" (Columbia 44040; 1967). They toured Europe and Asia before breaking up the act in 1969; Flatt made no best-selling records after that, although he continued to perform with a bluegrass band called Nashville Grass until 1979. He died in Nashville.

FLECK, BELA (10 JULY 1958-)

Although the banjo has fallen from its position as one of the most popular instruments in American popular music prior to World War I, virtuoso Bela Fleck has helped restore a measure of its former luster through his recorded work. His innovative approach to the instrument has spanned a wide range of styles, most notably bluegrass, R&B, progressive rock, world music, and jazz.

A New York City native, Fleck developed an interest in the banjo in his early teens upon hearing Flatt and Scruggs's "Ballad of Jed Clampett" (Columbia 42606; 1962), and Weissberg and Mandell's "Dueling Banjos" (Warner 7659; 1973). An eclectic at heart, he balanced his exposure to traditional banjo music with attempts to transcribe bop music to the instrument.

After graduating from New York's High School of Music and Art, he joined the Boston group, the Tasty Licks. Before dissolving in 1979, they produced a

FLEMING, AMBROSE, SIR

couple of albums. Fleck then recorded a solo LP, *Crossing the Tracks* (Rounder 0121, 1979), which was named best overall album in a *Frets* magazine's readers' poll. He went on to work with various other units, including the Kentucky-based Spectrum in the early 1980s, the experimental New Grass Revival between 1982 and 1989, and *Strength in Numbers*, which came together briefly to produce the highly regarded bluegrass album, *The Telluride Sessions* (MCA 6293; 1989). "Seven By Seven," a Fleck composition appearing on the album *New Grass Revival* (Capitol 35161; 1986), was nominated for a Grammy.

Recruited by the PBS television network to play on the projected *Lonesome Pine Special* (which eventually aired in 1992), Fleck formed the Flecktones, consisting of Howard Levy on piano, harmonica, ocarina, and other instruments, bass guitarist Victor Lemonte Wooten, and brother Roy "Future Man" Wooten, who played the synth-axe drumitar (an electronic drum shaped like a guitar). The band produced a string of critically acclaimed albums geared to rock and jazz fusion audiences for Warner Bros., beginning with their self-named debut album (Warner Bros. 26124; 1990). Levy left the band in the mid-1990s, but the others soldiered on with various sidemen appearing on their recordings. Meanwhile, Fleck continued to record in traditional bluegrass settings. In 2001, Fleck released an album featuring his interpretations of well-known classical compositions on the banjo, *Perpetual Motion* (Sony 89610, 2001).

Fleck's virtuosity has led many requests for his services in the recording studio; since 1995 he had appeared on albums by Asleep at the Wheel, Ginger Baker, Russ Barenberg, David Benoit, Vishwa Mohan Bhatt, Paul Brady, and Garth Brooks, among others. His compositions have also appeared on many recordings, most notably those of Sam Bush, Chesapeake, Curandero, Jerry Douglas, Maura O'Connell, and Roy Rogers.

FRANK HOFFMANN

FLEMING, AMBROSE, SIR (29 NOV 1849– 18 APR 1940)

A British engineer, born in Lancaster, who worked as a consultant for Guglielmo Marconi when the Italian inventor succeeded in transatlantic broadcasting. In 1899 he conducted experiments on the "Edison Effect" and in 1904 he patented the diode (U.K. #24,850; 1904, and U.S. #803684). Fleming's work was followed by that of Lee De Forest, who transformed the diode into the Audion. He died in Sidmouth, England.

FLEMISH-LYNN PHONOGRAPH CO.

A Brooklyn firm established in 1916. It manufactured and sold a line of disc players, in nine models, under the name Flemish-Lynn.

FLETCHER, HARVEY (11 SEP 1884–23 JULY 1981)

Born and raised in Provo, Utah, Fletcher received his early training at the Brigham Young University, and graduated in 1907. Continuing study at the University of Chicago, he, along with Robert A. Millikan, measured the charge of an electron. (Millikan won the Nobel Prize for this work.) This fundamental research contributed greatly to the field of electronics, which led to the development of the radio and television industry. Upon completion of his studies at the University of Chicago, Fletcher was awarded a Ph.D. *summa cum laude*, which was the first ever granted by the physics department of that university. After graduation, he returned to Brigham Young University and was appointed chairman of the physics department, in 1911.

In 1916, he went to work at Western Electric Company in New York, where he was assigned to do research in sound. In 1927 he became director of acoustical research at Bell Telephone Laboratories, and in 1933 he was appointed director of physical research, continuing in that position until 1949. During his career, he published 51 papers, 19 patents, and two books, *Speech and Hearing* (1929), and *Speech and Hearing in Communication* (1953), which are accepted treatises on the subject. Working with W.A. Munson, Fletcher helped to formulate the well-known Fletcher-Munson equal loudness curves in 1933, and also guided the development of the Western Electric hearing aid (the Model 2A), the first such device to use vacuum tubes. He was also the first to introduce the group audiometer into the school classroom, initiating a program of testing the hearing of school children all over the country.

Fletcher was the first individual to demonstrate stereophonic transmission and stereophonic recording. In 1939 while working with Leopold Stokowski, he presented a concert featuring three-channel stereophonic recording to a capacity crowd in Carnegie Hall in New York. In 1949, He became professor of electrical engineering at Columbia University, and stayed there until 1952. He then moved back to Utah, where he became chairman of the department of engineering science in 1953. From 1966 until his death he was actively involved in the study of musical tones.

Fletcher helped found the Acoustical Society of America and was president from 1929 until 1931. In 1949, he became an honorary fellow of the ASA, and in 1957 he was awarded the society's gold medal. He

was president of the American Society for Hard of Hearing (1929–1930), an honorary member of the Audio Engineering Society (1952, winning the society's Potts medal in 1958), a member of the National Academy of Sciences, and an honorary member of the American Speech and Hearing Society. He was awarded the Louis E. Levy medal for physical measurements of audition by the Franklin Institute in 1924, was elected vice president of the America Association for the Advancement of Science in 1937, and was president of the American Physical Society in 1945. He was a member of the American Institute of Electrical Engineers (IEEE), Phi Beta Kappa, Sigma Xi, and an honorary member of Sigma Pi Sigma. He received the gold medal from the Society of Motion Picture and Television Engineers for development of sound motion pictures.

HOWARD FERSTLER

FLETCHER-MUNSON EFFECT

A characteristic of human hearing that gives the ear variable sensitivity to frequencies, with the result that low frequencies — and less noticeably high frequencies — are perceived to be less loud than they really are. An audio system may endeavor to compensate for this factor by enhancing the projection of those frequencies that are not received naturally at their correct intensity. This is accomplished through loudness controls in the amplifiers or receivers. The concept is similar to that of equalization, except that it deals with a human imbalance rather than one stemming from the recording/playback process. Fletcher-Munson Curves are graphic representations of frequencies showing which ones are susceptible, and to what degree, to the Fletcher-Munson Effect.

FLETCHER RECORD CO., INC.

A New York firm, established by John Fletcher in late 1921 or early 1922 in Queens. Fletcher was vice president of Operaphone. He acquired some of the assets of Remington Phonograph Corp. in December 1921 and revived its Olympic label, which used Operaphone matrices. The firm went bankrupt in December 1923.

FLEXO (LABEL)

A San Francisco label produced by the Pacific Coast Record Corp., from December 1929. The discs were flexible and unbreakable, light enough to carry with a portable player; diameters varied from three inches to 16 inches. Flexo repertoire was typical dance music and popular vocals, with some jazz, but it offered



Flexo label, a flexible disc designed for portable phonographs, made c. 1929-34. Courtesy Kurt Nauck/Nauck's Vintage Records

nothing sufficiently exceptional to counter the depressed economic conditions of the U.S. when it appeared on the market. The corporation filed for bankruptcy on 8 May 1934. [Cotter 1972; Rust 1978.]

FLOATING EARTH (LABEL)

An independent U.K. recording company begun in 1987 by Mike Hatch and Mike Clements, Floating Earth has been responsible for recording more than 1,500 releases since its founding. In the last five years the operation has undertaken many music-based television projects, including many "live to air" shows. It is an acknowledged leader in specialist opera films and made four of these in 2001 alone. A pioneer in mobile recording techniques, in 2001 the company commissioned a state of the art mobile recording truck using the latest fiber optic and network microphone amplifier technology.

HOWARD FERSTLER

FLONZALEY QUARTET

An ensemble formed and sponsored by Swiss banker Edward J. de Coppet, comprised of Adolfo Betti (1875–1950), first violin; Alfred Pochon, second violin; Ugo Ara, viola; and Iwan d'Archambeau, cello. The quartet first performed publicly in Vienna in 1903, toured Europe, and played in New York in 1905. Until 17 Mar 1929, the date of its last public appearance (Town Hall, New York), the group gave more than

FLORIDA PHONOGRAPH CO.

3,000 performances. There were various changes in membership over that 27-year span. The Flonzaley was the first quartet to record extensively.

The quartet recorded exclusively for Victor, beginning on 22 Dec 1913 with the Beethoven Quartet Opus 18 No. 4. It recorded much of the classical and romantic standards, and a number of modern works. (A number of these recordings are reissued on the CD *Plays Romantic Masterpieces* [Biddulph 72].) Ossip Gabrilowitsch and Harold Bauer were pianists who joined the group in performing quintet literature. A pair of novelty numbers were the last pieces to be recorded, on 3 May 1929: "Turkey in the Straw," and "Sally in Our Alley" (#1569). [Samuels 1987; Adolfo Betti's papers are held at the University of Texas: <http://www.hrc.utexas.edu/research/fa/betti.html>.]

FLORIDA PHONOGRAPH CO.

A Jacksonville, Florida, firm established 1890, one of the 33 affiliates of the North American Phonograph Co. J.C. Clarkson represented the company at the National Phonograph Association convention of 1890; he was identified as its superintendent.

FLOWER HORN

A type of horn used on gramophones and phonographs, introduced in 1905 by Charles Eichhorn. The name derives from the shape of the horn, but many of those horns also had flower paintings on them.

FLUTTER

A wavering of pitch produced by analog playback equipment. The immediate cause may be fluctuation in turntable speed or tape-transport speed in a tape deck. It may also result from up-and-down movement of the turntable or disc surface. The latter is often called warp wow. Flutter is most evident on notes of long duration, especially at upper frequencies, so it is particularly annoying in piano recordings or bell tones. The National Association of Broadcasters (NAB) has a standard for cassette decks, requiring that flutter shall not exceed 0.2 percent. For open-reel recorders the NAB standard varies, with tape speed, from .05 percent to 0.10 percent. Modern digital recording and playback systems should have no audible flutter at all.

See also *Wow*

REV. HOWARD FERSTLER

FLUTTER ECHO

A multiple echo with quick fluctuations.

FLYING BURRITO BROTHERS

The Flying Burrito Brothers was a short-lived country rock group that had a big influence on later groups. Formed by Gram Parsons and Chris Hillman in 1968 (after the two had played together in the Byrds on the group's *Sweetheart of the Rodeo* [Columbia 9670; 1968] album), the Burritos combined hippie lyrics with a country sensibility. They were among the first rock bands to feature pedal steel guitar, borrowed from mainstream country instrumentation. Parsons remained with the group only for two albums, the classic *The Gilded Palace of Sin* (A&M 4175; 1969), and *Burrito Deluxe* (A&M 4258; 1970), and then left to pursue a solo career (which was cut short by his death due to drugs). The band lasted until about 1973 with various personnel, and has been revived (at least in name) several times since. Although their music sold poorly originally, many new country acts of the 1980s and 1990s emulated the Burrito sound, not to mention other country rock groups, notably the early Eagles.

CARL BENSON

FLYING FISH (LABEL)

A small label founded in Chicago ca. 1973 by Bruce Kaplan to record blues and folk music. Kaplan had previously worked as a producer for Rounder Records. However, he wanted to record more commercially oriented music than what was then appearing on Rounder, so he relocated to Chicago and started his own label. Flying Fish issued recordings by folk artists like John Hartford (whose 1975 recording *Mark*



Flying Fish records label, late 1970s. Courtesy BenCar Archives

Twang won the label a Grammy award), and the Red Clay Ramblers. Flying Fish also produced blues, jazz, bluegrass, and contemporary singer/songwriter releases. After Kaplan's death in 1996, the label was purchased by Rounder. It continues mostly as an imprint for reissues of the original albums.

CARL BENSON

FM

SEE *FREQUENCY MODULATION (FM)*

FOLDBACK

A method of cueing performers as they record, by sending signals through their headphones.

FOLDED HORN

A loudspeaker designed to channel the signal (usually the bass) through a folded path, in order to save cabinet space. While the design may preserve the acoustic characteristics of the straight horn, cross vibrations can occur at the bend points, so the design has to be worked out carefully. The most notable folded-horn design was worked out by Paul Klipsch in the late 1940s, and it made use of the room's corner to extend the length and enlarge the cross-section of the horn mouth.

See also **Loudspeaker**

REV. HOWARD FERSTLER

FOLEY, RED (17 JUNE 1910–19 SEP 1968)

American country singer, born Clyde Julian Foley in Blue Lick, Kentucky. He appeared on the *National Barn Dance* radio program in 1930, and toured with various groups. From 1937 he was heard at the Grand Ole Opry in Nashville, and in 1939 he became the first country artist to have his own network radio program, *Avalon Time*. During the 1940s he was recognized as a preeminent talent, and he had a significant part in creating a wide audience for country music. From 1954 to 1961 he hosted a television program, *Ozark Mountain Jubilee*.

Foley recorded almost entirely for Decca, from 1941. In 1950 he made two chart records: "Chattanooga Shoe Shine Boy" (Decca 46205), and, with Ernest Tubb, "Goodnight, Irene" (Decca 46255). Foley also excelled in the gospel song repertoire, exemplified by his best-selling "Peace in the Valley" (Decca 14573; 1951). His last hit was "The End of the

World" (Decca 31194; 1961). Foley died in Ft. Wayne, Indiana, on 19 Sep 1968, while on tour with Grand Ole Opry. He was elected to the Country Music Hall of Fame in 1967.

FOLK LEGACY RECORDS

Founded by Sandy and Caroline Patton in 1962, this label was modeled on Folkways Records, even copying its distinctive packaging, including the wrap-around, plain cover and lengthy descriptive booklet with each album. Although originally issuing recordings of traditional musicians such as Frank Proffitt and Harry Cox, the label eventually focused on folk revivalists, including many popular albums by Maine guitarist Gordon Bok. Informal singing sessions held at the company's Connecticut home studios were issued under the group name of "The Golden Ring." Even in its heyday, the label issued only a handful of albums per year; it has survived into the CD era, mostly by reissuing earlier material from its original LPs.

CARL BENSON

FOLK-LYRIC RECORDS

Harry Oster (4 Apr 1923–19 Jan 2001), following military service during World War II, graduated from Harvard University, earned a M.B.A. from Columbia University, then a M.A. and Ph.D. from Cornell University. He began teaching English at Louisiana State University in 1955, and in 1957 started producing albums of local blues and cajun performers issued by the Louisiana Folklore Society. In 1959, he initiated the Folk-Lyric label with a Snooks Eaglin album, quickly followed by Reverend Pearly Brown, and Robert Pete Williams. He had met Williams at the Anglo Prison, where he had been recording other prisoners, and he petitioned the governor for his release. He moved to the University of Iowa in 1963, where he taught literature until his retirement in 1993. His Folk-Lyric label produced 26 albums, some reissues of the Louisiana Folklore Society releases, including blues performers Smoky Babe (Robert Brown), Sylvia Mars, and Jesse Fuller, but he also worked with Kenneth Goldstein to issue British performers Peggy Seeger, Ewan MacColl, Dominic Behan, A.L. Lloyd, and John Burgess playing the bagpipes. Oster also produced albums for other folk labels, including Prestige, Folkways, and Vanguard. Arhoolie Records purchased Folk-Lyric in 1970 and has subsequently rereleased the albums on CDs. Oster published *Living Country Blues* in 1969, based on his fieldwork

RONALD D. COHEN

FOLK MUSIC RECORDINGS

Folk songs of the world were studied primarily as texts prior to 1890. The extra-musical approach began to change when ethnologist Jesse Walter Fewkes took an Edison Perfected (cylinder) Phonograph to Maine in 1890 and recorded songs of the Passamaquoddy Indians. Later in the same year Fewkes recorded music of the Zuni and Pueblo Indians of New Mexico. Ethnomusicologists and folklorists began recording tribal groups on cylinder. Many of those cylinder recordings have been transferred to tape and are available in research collections, such as those of the American Folklife Center at the Library of Congress and the Archives of Traditional Music at the Indiana University. The Library of Congress administers the Federal Cylinder Project, an effort to duplicate cylinders for preservation before they become unplayable. Copies of the recordings are provided to tribal leaders, so that tribal groups are able to hear the music of their ancestors.

Regular use of cylinder machines to collect American folk songs began in the 1920s, when scholars like Robert Winslow Gordon, Martha Beckwith, James Carpenter, and Phillips Barry recorded in New England, the South, California, and Jamaica.

From around the turn of the century, record companies like Edison, Columbia, Victor, and the Gramophone Co. began to issue ethnic records of popular and traditional music from all over the world. This genre became an increasing source of record sales. Between 1908 and 1923 Columbia released about 5,000 disc records in their domestic A series and 6,000 records in their foreign E series. For many American immigrants those recordings were links to their home cultures. Ethnic performers were recorded on disc from the 1920s for specialized markets. For example, Cajun musician Joe Falcon was recorded in 1928 by Columbia, with fiddler Dennis McGee and accordionist Amédée Ardoin recorded shortly thereafter. Most labels had a large number of ethnic releases available for different communities.

Among the earlier folk performers who were recorded for the growing "hillbilly" record market were Texas fiddler Alexander Campbell "Eck" Robertson (in 1922; thought to be the earliest country artist on disc), Henry Whitter, G.B. Grayson, "Fiddlin John" Carson, Riley Puckett, Buell Kazee, and Charlie Poole. The designation "hillbilly" music came from the name of the group Al Hopkins and the Hillbillies. In the eyes of many, the term "hillbilly" had pejorative connotations, and it has been replaced by the term "old-time." A comparable interest was developed by the record labels in blues music recordings, which they originally marketed in the 1920s as race records.

The folk musicians who were recorded had repertoires consisting of Anglo-American folk songs, minstrel songs, and 19th-century sentimental songs. Often the performers did not know the sources of their material. Two artists of the 1920s rate special mention. They are Uncle Dave Macon and Bradley Kincaid. Macon was the first star of the *Grand Ole Opry* show, and a recording artist for Vocalion from 1924. His material consisted of Anglo-American ballads, minstrel songs, and vaudeville songs. Bradley Kincaid was an early folksinger and folklorist; he recorded for many labels through the 1960s.

In August 1927, Victor talent scout Ralph Peer made a notable recording trip to Bristol, Tennessee. He discovered Jimmie Rodgers, the "father of country music," and the highly influential Carter Family. The Carter Family went on to record more than 300 sides for Victor, the American Record Corp., Decca, and Columbia over the next 13 years. Their material consisted of old-time mountain and religious songs, such as "Wildwood Flower," "Keep on the Sunnyside," and "Will the Circle Be Unbroken."

During the 1930s, with commercial record sales in decline, most of the recording of traditional music was noncommercial, done by folklorists in the field. Starting in 1925, Robert Winslow Gordon, later head of the Library of Congress Archive of Folk Song, began to record American folk songs and narratives. John A. Lomax and his son Alan Lomax, who were later heads of the Archive of Folk Song, collected and created what was probably the largest and most diverse collection of traditional American music. They made over 3,000 recordings of ballads, work songs, religious songs, blues, cowboy songs, and others. They are also credited with making the first recordings of folk titan Lead Belly (Huddie Ledbetter). Alan Lomax has continued to collect materials into the 1990s. His material has been released by the Library of Congress, Prestige International, Columbia, Atlantic, and Caedmon, among others. His collections provide insights into all kinds of traditional music both in the United States and abroad. The holdings of the Library of Congress Archive of Folk Culture (the former Archive of Folk Song) include almost 35,000 hours of recordings. More than 80 commercial recordings were made from the material in the archive. The archive's collection contains fieldwork recordings by important ethnomusicologists, collectors, and folklorists. Collections of music recorded by Sidney Robertson Cowell and Herbert Halpert reside there.

The popularity of traditional folk music surged during the 1940s. One important category of performers was the new minstrel, appearing in a refined concert environment, exemplified by John Jacob Niles, Richard Dyer-Bennet, and Burl Ives. Niles collected

actively in the South and authored a number of song collections. He wrote the classic folk-like songs "I Wonder as I Wander" and "Black is the Color of My True Love's Hair." Niles recorded for Asch, Tradition, Folkways, and other labels.

Billing himself as the "Twentieth-Century Minstrel," Richard Dyer-Bennet combined his rich voice with a large repertoire of Anglo-American ballads. His recordings can be found on Asch, Decca, Disc, Mercury, Stinson, and Vox, as well as his own label.

The name Burl Ives was almost synonymous with folk singer for many Americans in the 1940s and 1950s. His songs, including titles like "The Blue-Tailed Fly" and "The Erie Canal," came from a multitude of sources. Many were published in popular songbooks during the folk music revival of the 1950s. Actor-singer Paul Robeson recorded everything from folk music to opera. His music often addressed labor problems and social causes. He recorded for a number of labels including Vanguard.

Throughout the 20th century, folk music has been frequently associated with political, labor, and social causes. One of many American groups to emphasize the social issues of the day was the Almanac Singers. Almanac membership varied, including at times Pete Seeger, Lee Hays, Millard Lampell, Woody Guthrie, Sis Cunningham, Bess Lomax, Butch Hawes, and Arthur Stern. The Almanac Singers recorded for Asch records.

One of the most important folk composers in American history was Woody Guthrie. Alan Lomax recorded Guthrie for the Library of Congress Archive; those recordings were later commercially released by Elektra, and then by Rounder Records. It was Guthrie's association with Moses Asch of Folkways Records that yielded the bulk of Guthrie's recorded legacy. Another seminal figure who emerged during the 1940s was Huddie "Lead Belly" Ledbetter, who was discovered in a prison in Louisiana by John and Alan Lomax during one of their recording trips. The Lomaxes managed to secure Leadbelly's release from incarceration and he traveled with them. His repertoire included a number of styles of African-American music, from work songs and ring chants to straight blues.

Since the 1920s, record companies had tended to segregate their folk and traditional records into separate numerical series that were designed for specific audiences. The 1940s saw the emergence of a number of record companies whose entire output was folk material. Moses Asch, founder of the Folkways label in 1948 made obscure music more accessible. In addition to American folk material, Asch's catalog included speeches, literature, and music from around the world. Asch was in business early in his career with Herbert Harris. When Asch and Harris parted ways they divided many of the original masters. Harris went

on to form Stinson Records. Stinson shares many of the same artists as Folkways, such as Guthrie and Leadbelly. Stinson has kept all its folk recordings of the 1940s available.

No one has done more for folk music in the 20th century than Pete Seeger. He recorded folk songs from all over the world, for Columbia, Tradition, and Flying Fish records, among others, and made more than 60 records for Folkways. Riverside released the Folklore series, which consisted primarily of Anglo and Anglo-American material. A large number of those records were edited by Kenneth Goldstein, later a professor of folklore at the University of Pennsylvania. Many of the performers were urban folksingers who were important during the folk revival of the 1950s. They included Ed McCurdy, Milt Okun, Paul Clayton, Bob Gibson, Ewan MacColl, John Greenway, Oscar Brand, and A.L. Lloyd. Lloyd was an eminent British scholar who edited numerous records and sang on others. He recorded for many labels, including Topic and Tradition, sometimes with Ewan MacColl, another renowned collector of folk songs. MacColl's material ranged from classic Scottish and British ballads to English work songs. For many years he recorded with his wife, Peggy Seeger, for whom he composed his most famous piece "First Time Ever I Saw Your Face." Peggy Seeger is also an important figure. Having grown up in the Charles and Ruth Seeger household, she was exposed to folk music from an early age. She has recorded more than three dozen solo LPs, in addition to two dozen with Ewan MacColl, for Argo, Folkways, Prestige International, Rounder, and Tradition.

Kentucky-born Jean Ritchie played a large role during the folk revival of the 1950s with a repertoire consisting of mountain songs, party songs, and British ballads. Her family had been recorded by the Lomaxes during one of their field collecting trips. She is responsible more than any other for the popularization of the Appalachian dulcimer. She began recording for Elektra in 1950 and continued recording for other labels over the years. Ritchie and George Pickow made field recordings in the British Isles, released by Folkways.

Big Bill Broonzy was a powerful singer who recorded country blues for a number of labels beginning in the 1920s. Some of his classic recordings were "This Train" and the pre-civil rights protest song "When am I Ever Going to Be Called a Man," both on Folkways.

Folk-blues guitarist Josh White also protested against racism. Some of his strongest songs were "Jim Crow," "Silicosis is Killing Me," and "Strange Fruit." He recorded for a number of labels.

Important folk music record labels of the 1950s included Elektra, Tradition, Everest, Caedmon, Prestige International, and Vanguard. Early Elektra releases included songs by Theodore Bikel, Oscar

FOLK MUSIC RECORDINGS

Brand, Ed McCurdy, and Josh White. There also were records by song collector Frank Warner. One classic Elektra release was *The Folk Box*, made in collaboration with Moses Asch and Folkways Records; it contained four discs, with more than 80 songs by various artists, and a 48-page booklet. Elektra continued to be a force during the later folk revival with a roster of such performers as Judy Collins, Tom Paxton, Paul Butterfield, Tom Rush, and Phil Ochs.

In the 1950s, Tradition Records was formed by Diane Hamilton and the Irish singing group the Clancy Brothers. The label presented folk songs from the U.S. and the British Isles. In addition to music by the Clancy Brothers, Tradition's roster included Carolyn Hester, The Kossoy Sisters, Odetta, and Sam "Lightnin'" Hopkins. Prestige International also had a significant folk series, including many of the artists who were on Riverside. One of their interesting series, *Southern Journey*, stemmed from field work by Alan Lomax in the late 1950s. Other Lomax recordings came out on Atlantic in their *Southern Folk Heritage* series.

Caedmon Records, best known for its spoken word recordings, also issued collections of traditional folk music. One important Caedmon series was *Folksongs of Britain*, using the material of Lomax and Peter Kennedy.

Vanguard was another important label for folk music in the 1950s and 1960s. The Weavers, Martha Schlamme, Paul Robeson, Joan Baez, the Country Gentlemen, Ian and Sylvia, Buffy Sainte-Marie, and Odetta were among its artists. Vanguard released performances from the Newport Folk Festival.

Another influential series of the 1950s was Harry Smith's *Anthology of American Folk Music*. It consisted of reissues of commercial recordings from the 1920s and 1930s. Mike Seeger, John Cohen, and Tom Paley formed a revival string band called the New Lost City Ramblers in 1958. Whereas the interest among urban folk musicians had primarily been toward the ballad tradition, there was then a renewed interest in hillbilly and string band music. The New Lost City Ramblers recorded for Folkways, and in 1983 for the Flying Fish label. Bluegrass music was also popular with urban audiences of the 1950s. A group of New York musicians including Bob Yellin, John Herald, and Eric Weissberg (later replaced by Ralph Rinzler) formed the notable bluegrass group called the Greenbriar Boys. They played in coffeehouses and at festivals, and recorded for Vanguard. Rinzler, Mike Seeger, and others began recording older rural musicians on trips to the South. Among the artists they discovered were Arthel "Doc" Watson, Clarence Ashley, Roscoe Holcomb, Dock Boggs, "Mississippi" John Hurt, Son House, Fred McDowell, and the Balfa Brothers. The 2000 series on Folkways is peppered with recordings of those individuals from 1959 to 1964.



Weavers's album from the late '60s. Courtesy Frank Hoffmann

In 1958 the Kingston Trio hit the top of the charts with a North Carolina murder ballad, "Tom Dooley," on the Capitol label. Other record companies scurried to find their own versions of the Kingston Trio. The Chad Mitchell Trio, the Brothers Four, and the New Christy Minstrels were among the new groups, all of them projecting a collegiate look and performing a mixture of popular songs, satirical songs, and folk songs from around the world. Marketing of folk music was centered on campuses and the coffee house circuit.

Groups modeled after the Weavers began to appear also, making records and playing the coffeehouses. The Gateway Singers (on Decca), the Rooftop Singers (Vanguard), and the Limelighters (RCA) were associated with the hungry i, a San Francisco nightclub. The Rooftop Singers had a hit with their 1962 record of the 1920s Gus Cannon jug band song, "Walk Right In."

There were more folk-styled songs in the *Billboard* Top 10 from 1958 to 1965 than at any other time in the history of the charts. Some of the leading records were "Greenfields" by the Brothers Four; "Michael" by the Highwaymen; "Don't Let the Rain Come Down" by the Serendipity Singers; and "Blowin' in the Wind" and "Puff, the Magic Dragon" by Peter, Paul, and Mary.

The popularity of commercial folk music created a star system. Certain artists were guaranteed to sell out large concert halls and to make hit records. Brought to the public eye by performance at the 1960 Newport Folk Festival, Joan Baez was one who captivated the

public. Her first albums (for Vanguard) contained mainly traditional folk material, but later she introduced material on social themes. Judy Collins recorded traditional songs, and then included material by contemporary composers. One of the most influential performers was Bob Dylan. Others who were popular in the 1960s included Elektra's Tom Paxton, Phil Ochs, Tom Rush, and Fred Neil; Vanguard's Odetta, Richard and Mimi Farina, Ian and Sylvia, Eric Andersen, and Buffy Sainte-Marie; and United Artists's Gordon Lightfoot.

Folk music continued to involve political protest. Singer and songwriter Phil Ochs recorded some of the most powerful material during the 1960s with songs like "I Ain't Marching Anymore" and "The Power and the Glory." The editors of *Broadside* magazine recorded folk protest singers like Ochs, Bob Dylan (as Blind Boy Grunt), and Janis Ian (Blind Girl Grunt). The *Broadside* recordings were later released by Folkways. Janis Ian also had a 1967 hit song — about a young woman's battle with her parents over an interracial romance — in "Society's Child" on Verve/Forecast. Folk music was prominent in the civil rights movement. Spirituals were sung, with the words altered, by marchers in the South. This continued the tradition of using folk material with the words changed to fit the current situation in union and political struggles. One of the important groups aligned with the movement was the Freedom Singers, made up of Bernice Johnson, Cordell Reagon, Rutha Harris, Betty Mae Fikes, and Charles Neblett. Folksinger Guy Carawan was also heavily involved with the movement and brought his own compositions to it. Recordings of the Freedom Singers were released by both Folkways and Vanguard.

Aside from protest, another characteristic of the folk song revival was interest in jug and skiffle band traditions, mostly in the coffeehouses. Calypso and Irish folk songs also had an important role in the period.

The band that most symbolized folk rock for many was a Los Angeles group, the Byrds. They added jangly electric guitars and drums to Dylan's "Mr. Tambourine Man" for a Columbia hit in 1965, and had a second chart song in the same year, Pete Seeger's "Turn! Turn! Turn!," also for Columbia. Other groups with folk-rock hits included the Lovin' Spoonful (a folk-rock jug band), the Mamas and the Papas, Simon and Garfunkel, Buffalo Springfield, and Jefferson Airplane.

As the 1960s progressed, more and more artists began to write their own material in folk style. This phenomenon peaked in the 1970s with the great popularity of the singer songwriter. Folk music fans bought the record albums and songbooks of performers like Kris Kristofferson, John Prine, Steve Goodman, Joni Mitchell, Melanie Safka, James Taylor, Jimmy Buffett, Cat Stevens, Mickey Newbury, Arlo Guthrie

(son of Woody Guthrie), and Carly Simon. Some of their songs have become standards and have gone into the repertoires of revival folk performers. Examples include Kristofferson's "Me and Bobbie McGee," Prine's "Paradise," Goodman's "City of New Orleans," and Mitchell's "Both Sides Now." These artists were marketed to the rock audience, and were well received.

By 1970, most of the record companies that had specialized in folk music had either closed or had gone into other styles of music. Elektra turned to rock, and Prestige to jazz. Riverside ceased to exist. Folkways continued to issue folk material but not at its former level. A new generation of record companies sprang up to take their place, among them Rounder, Flying Fish, Shanachie, Green Linnet, Alligator, and Arhoolie. Rounder Records had a repertoire of traditional folk, old-time, bluegrass, and blues. Over the years they have moved to singer-songwriters, urban blues, and world music. Flying Fish released traditional folk music and bluegrass, and was the label most likely to release politically conscious material. Shanachie built a catalog of British folk music, followed by reggae music, and most recently African material. Green Linnet specializes in folk music from Britain, especially Ireland. Alligator Records of Chicago features urban blues bands. Arhoolie records and its subsidiaries have a full catalog of records and films on country blues, Cajun and zydeco, western swing, and norteño music. By the end of the 1980s, the very traditional old-time folk music was left to labels like June Appal and Traditional. After the death of Moses Asch in 1986 the ownership of Folkways Records was transferred to the Smithsonian Institution. The new label, Smithsonian/Folkways, continues to reissue old material as well as issue new material with in the vision of the original label.

In the late 1980s, the music industry saw the reemergence of folk music as a tool for social struggle. New artists began to write socially conscious songs, and perform them with acoustic guitars. Such artists rediscovered folk music of their forefathers. This group included Tracy Chapman, England's Billy Bragg, Lucinda Williams, Michelle Shocked, and Suzanne Vega. Many rock groups have also begun to turn back to the folk-rock sound.

Cajun music and zydeco, the African-American Creole music of Louisiana, were popular in the 1980s. Small Louisiana labels like Swallow, La Louisianne, Maison de Soul, and Jin found their records in demand among urban listeners. The king of zydeco was Clifton Chenier and his Red Hot Louisiana Band. At the same time companies like Folklyric and Arhoolie were recording the Texas-Mexican border music known as norteño.

The great success of Garrison Keillor's radio program, *Prairie Home Companion*, further increased the national audience for folk music, mostly country

FOLK ROCK

music. The lines between folk and country were blurred, and artists who were among the singer-songwriters of the 1960s and 1970s appeared on country radio in the 1980s — among them Emmylou Harris, Nanci Griffith, Hugh Moffatt, Rodney Crowell, Roseanne Cash, and Mary Chapin Carpenter.

A spread of interest in world traditional music has brought forward Bulgarian women's choirs, Tuvan overtone throat singing, and various Brazilian styles among others. Labels like Global Village, Globe Style, Shanachie, and Smithsonian/Folkways have released important international material.

During the 1990s, younger musicians who initially had been drawn to rock music, began to turn to traditional American music sources for inspiration. Their music began to be labeled under the title of "No Depression" music, named for an influential magazine and coming from the Carter Family's song "No Depression in Heaven." Performers like Snakefarm, Wilco, Gillian Welch, John Wesley Harding and others were involved in this movement. Wilco collaborated with singer Billy Bragg, to set heretofore unpublished Woody Guthrie lyrics to music, creating two critically acclaimed recordings called *Mermaid Avenue*. In 2001, the soundtrack recording for the movie *O Brother, Where Art Thou* was a surprise hit, selling millions of copies, while including country and bluegrass musicians performing traditional songs, hymns, and early country material. The old Appalachian ballad "Oh Death" performed by Ralph Stanley from the album was awarded the Grammy award for male country performance and once again the recording industry and mainstream public discovered folk music, but for how long? [Dixon 1982; Lee 1979; Malone 1985; McCulloh 1982; Spottswood 1991.]

See also Country Music Recordings; Folk Rock; Rock Music Recordings

JEFF PLACE

FOLK ROCK

Folk rock fused the commercial folk tradition of the early 1960s with the rock songcraft and sound best exemplified by the Beatles. Its most notable features included the eclectic blending of strummed electric and acoustic instruments, a rock-steady beat, group harmonies, and poetic — often political with a pronounced antiestablishment message — song lyrics. The genre, which reached its commercial and artistic zenith for a brief period during 1965–1966, was a product of experiments by young urban folk interpreters such as Bob Dylan, Jim (later Roger) McGuinn, and Barry McGuire. These, and other

performers, also incorporated traditional country music elements into their music. Folk rock groups drew on the work of topical/protest singer/songwriters including Phil Ochs, Tom Paxton, Eric Andersen, Buffy Sainte-Marie, Tim Hardin, Janis Ian, Leonard Cohen, Joni Mitchell, and Jackson Browne. The keynote of the movement was rebellion — rebellion against a wide range of social mores, the anticommercial snobbery of the urban folk movement (e.g., the organizers of the Newport Folk Festival, who were scandalized by Dylan's use of an electric support band in 1965), and their own pretensions regarding the moral and aesthetic values of traditional music.

Folk rock became a national obsession when the Byrds's cover of a Dylan composition, "Mr. Tambourine Man" (Columbia 43271), reached number one on the pop singles charts in the early summer of 1965. This was followed in short order by Sonny and Cher's "I Got You Babe" (Atco 6359), and Dylan's own "Like a Rolling Stone" (Columbia 43346). Simon and Garfunkel's "The Sounds of Silence" (Columbia 43396) — which topped the charts in early 1966 — represented the quintessential folk rock release. Originally cut with the duo's two-part harmonies and acoustic guitar accompaniment, the single version, augmented by electric guitar work and a rock rhythm section, received heavy radio play (and subsequent sales success).

The experimental inclinations of the leading folk rockers ultimately led to the eclipse of the genre's chart-topping run. For a brief moment, pop stars found they could pursue art while also cultivating monetary success and a large following. As a result, the studio experiments of the Beatles and like-minded artists pulled folk rockers toward the progressive rock vanguard. By mid-1966, folk rock was little more than a lingering memory. Nevertheless, it left a substantial imprint upon the pop world, influencing country rock, the singer/songwriter movement, the softer side of psychedelia, and various regional sounds such as San Francisco rock and Tex-Mex.

Folk rock continued to thrive abroad, in England and the Commonwealth countries. Beginning with Donovan's blend of Dylanesque lyrics and exotic instrumentation, British folk rock evolved back to an emphasis on home-grown song material framed by pop sensibilities. Spurred by the virtuosic talents of bands like Fairport Convention, Pentangle, the Incredible String Band, Lindisfarne, and Steeleye Span, British folk rock thrived for more than a decade beginning in the late 1960s; many of the musicians fueling this movement remained active into the 21st century. [Miller 1980.]

FRANK HOFFMANN

FOLKWAYS (LABEL)

Founded in 1947 by Moses Asch and Marian Distler, in New York City. Asch was barred from participating in a new recording label after the bankruptcy of his previous label, Disc. For this reason, Folkways was originally incorporated with his assistant, Marian Distler, named as “president” and “owner,” although Asch was actually running the label from the start. Asch later claimed that the inspiration for Folkways came to him when he met Albert Einstein, who encouraged him to “document the entire world of sound.” Although the label first issued 78s briefly, it soon turned to 10-inch and then later standard 12-inch LPs.

From the start, the label issued a wide variety of material. Asch had previously recorded on his Asch and Disc labels local New York folk and jazz musicians, and these artists were carried over onto Folkways. Asch was among the first to issue recordings of so-called “World Music,” using the label “Ethnic Folkways Library” for these recordings. Harold Courlander and Henry Cowell, noted world-music specialists, served informally as consultants for these recordings. Eventually, classical and electronic music, historic speeches, literary readings, nature sounds, language and music instruction, and just about any other category of recordable sound appeared on the Folkways label.

During the 1940s through the mid-1960s, Asch operated his own recording studio out of the Folkways office. He took pride in the fact that he was always ready to record; no one need make an appointment, and, particularly in the early days, musicians would show up and Asch simply turned on his recording equipment and let them play. For this reason, he gained the reputation of issuing unedited performances, including mistakes and all. Indeed, his early tapes were not edited, and second takes were rare.

Asch was also a strong believer in the superiority of monophonic, unprocessed recording. While serving on the RIAA standards committee in the 1950s, Asch vigorously opposed the introduction of artificial sound enhancement, then known as “hi-fi.” He also resisted for many years issuing any recordings in stereo, arguing that unaltered, monophonic tapes more closely represented the “true” sound of the original recording.

Asch also maintained a unique packaging for his records. Unlike other labels who issued recordings in colorful sleeves with little or no annotation, Asch used a plain, black cover, which he wrapped with an illustrated sleeve that extended only about 1/3 over the back of the album. Inside each album he included a separate booklet of notes, sometimes running 30 or more pages, depending on the amount of material provided by the record’s producer.



Folkways LP label. Courtesy BenCar Collection

Early on, Asch established himself as an industry gadfly. For one thing, he believed that the major labels had no right to “sit on” masters of recordings that, at the time, they had no intention of reissuing. In 1952, he worked with eccentric New York record collector Harry Smith to assemble a six-record set called the *Anthology of American Folk Music*, completely assembled from previously issued 78s from the 1920s and 1930s. While some in the industry viewed Asch as a “pirate” for reissuing this material without permission, others agreed that he was performing a public service. Asch successfully defended himself in a lawsuit brought in New York courts that challenged his right to issue the *Anthology*. Also in the early 1950s, Asch issued a 10-record “History of Jazz” annotated by Frederic Ramsey, again drawn from earlier 78 recordings. In the early 1960s, Asch formed a subsidiary label, RBF (Record, Book, and Film), primarily for reissued recordings.

Asch’s business teetered on the edge of financial solvency throughout its years of operation. He enjoyed his greatest prosperity during the early 1960s “folk revival,” when artists who he had recorded — including Woody Guthrie, Pete Seeger, and Leadbelly — achieved a new level of popularity. During this period, he started a number of affiliated labels, including the previously mentioned RBF, Broadside (a label for topical singer/songwriters that drew on tapes made by Agnes “Sis” Cunningham and Gordon Friesen, who also published a mimeographed magazine of the same name), and a revived Disc label, to offer reissues of his own Folkways recordings in a more commercial package.

FONTOPIA (LABEL)

In 1965, Asch made a deal with MGM to license a group of Folkways recordings to be marketed under the Verve/Folkways label. At the same time, he made a separate deal with Scholastic magazines to distribute the Folkways line to the educational market. But Asch's idiosyncratic working habits — plus the gradual ending of the folk revival — led both deals to dissolve. MGM gave up within two years, and Scholastic ended its arrangement with Folkways by 1969. During a brief period from 1970 to 1971 — while apparently the rights to the Folkways name and the backlist of recordings was in limbo — Asch revived the "Asch" label for new recordings. Then, Folkways reappeared, along with its by-then substantial back catalog, under Asch's control.

The 1970s and 1980s were difficult times for the label. Younger producers had entered the folk scene, with a more modern approach to recording and marketing. Meanwhile, Asch had a series of heart attacks, plus his hearing began to fail. Looking for a way to retire, he approached several organizations with the idea of continuing the Folkways label. Several deals fell through when it became clear that Asch would insist that all of the Folkways recordings be kept "in print," and that the label be operated in a manner consistent with his original vision. Shortly before his death, Asch finally made a deal with the Smithsonian Institution to carry on the Folkways name. Thanks to folklorist Ralph Rinzler at the Institution, an archive was established to house the business records, tapes, and related material from Asch's businesses.

Anthony Seeger was appointed the first head of the newly named Smithsonian/Folkways Records, a position he held until mid-2000. The label reissued key older albums from the Folkways backlist, plus new material in keeping with the Folkways mission. Plus, the archive continued to make available all Folkways records on a special-order basis, first on cassette, then CD, and, beginning in 2000, via Liquid Audio. Among the label's many successes was a reissue of the classic *Anthology of American Folk Music* (this time, permission was obtained from the various labels for use of the original 78-rpm recordings), and a boxed set drawn from the Broadside label. Folklorist Daniel Sheehy was named the new director of the label, beginning in 2001. [Website: <http://web2.si.edu/folkways>; includes the complete Folkways catalog and information on the label].

CARL BENSON

FONTOPIA (LABEL)

SEE FONOTIPIA LTD.; SOCIETÀ ITALIANA DI FONOTIPIA

FONOTIPIA LTD.

A firm incorporated in London on 24 Apr 1906. Directors were Harry V. Higgins, Baron F.D. d'Erlanger, Duke Uberto Visconti di Modrone, Tito Ricordi, and Francesco R. Queirazza. Alfred Michaelis was general manager until 30 Jan 1907, when Emil Rink replaced him. Two agreements formed the basis of the firm. In one, Fonotipia bought virtually every asset of the Società Italiana di Fonotipia of Milan, which had been issuing discs since early 1905. The second agreement reconstituted the Italian company as the Società Italiana di Fonotipia, Società Anonima, headquartered in Milan and completely controlled by the English Fonotipia, Ltd. After various changes in stock ownership over the years, the Italian firm was incorporated into EMI's Italian branch in June 1947.

The first records offered by Fonotipia, Ltd., were of the Italian Marine Band and Emmy Destinn, in November 1905. Sterling and Hunting, Ltd., operated by Louis Sterling and Russell Hunting, were distributors for the discs, which were first double-sided, of 10 3/4-inch diameter; then from 1906 single-sided and 13 1/2 inches. In 1907 there were operatic offerings, including Giovanni Zenatello's "Vesti la giubba." The new low-priced Jumbo Record label was introduced in February 1908. In that year Barnett Samuel and Sons took over the distribution of Fonotipia records from Sterling and Hunting.

Fonotipia had a number of affiliations. The International Talking Machine Co. GmbH of Berlin was licensed to sell Fonotipia material in all countries except the U.K., U.S., and Canada. Columbia Phonograph Company, General, became exclusive manufacturers and sales agents for the U.S. and Canada from March 1908. Odeon, the label of the International Talking Machine Co., was distributed in Italy by the Società Italiana di Fonotipia, and in Britain by Barnett Samuel and Sons, Ltd., from 1906 (Fonotipia, Ltd., was the holding company).

A double-sided record by Alessandro Bonci (#62300-01) was announced with much fanfare in July 1908: "Mai piu Zazà" from Leoncavallo's *Zazà*, and "Vieni amore mio," a song by Leoncavallo; the composer accompanied the tenor on the piano. Other great artists featured on the Fonotipia-Odeon labels included Mario Sammarco, John McCormack, Leo Slezak, and violinist Jan Kubelik. The recording studio that made these Fonotipias was in Milan.

By the end of 1909 British sales were double those of the previous year. The firm moved to new quarters in November 1909, at 8 Crosby Square. It was successful in a series of legal cases brought by the Gramophone Co., involving use of the word "gramophone" (declared by the British High Court of Justice to be a generic term in common usage), and the tapered tone arm.

Then in July 1911, Fonotipia, Ltd. was acquired by Carl Lindström for about £150,000. Lindström emphasized his various other labels, and the Fonotipia record was scarcely noticeable in Britain thereafter. Barnett Samuel continued selling Odeon (until the outbreak of World War I) and Jumbo. War conditions led to the order by the British Board of Trade, in August 1916, that both Fonotipia, Ltd., and its parent company, Lindström, be closed. In November 1917 a newly created firm, the Hertford Record Co., Ltd., acquired all Fonotipia, Ltd., British assets, and announced it would continue the manufacture of records. However, in April 1919, the Jumbo Record, the only remaining label of the original Fonotipia, Ltd., was taken out of circulation; Hertford kept its repertoire going on a new label named Venus Record until February 1920.

On 3 Nov 1920 Otto Ruhl, former managing director for Carl Lindström (London), Ltd., was appointed agent in England for the Fonotipia records of the Società Italiana di Fonotipia of Milan. Thus two separate enterprises had rights to the Fonotipia record: Ruhl and Hertford — which had been since June 1919 a Columbia Graphophone Co., Ltd., subsidiary. Columbia decided to draw on the stock of matrices held by Hertford, and issued material by Billy Williams on the 10-inch Regal label. Further Regals came in late 1921, and other Odeon matrices of Fonotipia, Ltd. — eight sides by John McCormack — were used on the Columbia Record label. Meanwhile, Hertford began legal action against Ruhl over the Fonotipia rights, but the court eventually found Ruhl not guilty and free to carry on as agent for Lindström and its affiliates. The Fonotipia trademark was removed from Hertford's domain in August 1921.

In February 1921 "new" Fonotipia records were again advertised, by the Gramophone Exchange. Later that year newly pressed Fonotipias, carrying orchestral pieces by Italian composers, were on sale. Fonotipias were marketed into 1922 by the Gramophone Exchange, and (from November 1922) by Davis's Music Stores of Liverpool. The Parlophone Co., Ltd., incorporated in August 1923, became the British agent for Fonotipia records in November of that year, but did little to promote the label. Then advertising of September 1925 indicated the Music Salon, in Edinburgh, was selling Fonotipias; apparently, it continued to do so until some time in 1927.

In June 1927 an advertisement announced the "the cream of the world famous Odeon & Fonotipia Celebrity Recordings [are] now available on Parlophone Records — Odeon Series." Fonotipia electric recordings were included among the Parlophone-Odeon Series in Britain into 1928, and in July 1928 the trademark was formally transferred to the Parlophone Co., Ltd., of London (a subsidiary of

the Columbia Graphophone Co., Ltd.). Finally, in 1931, the label and the Società Italiana di Fonotipia passed to the hands of the new EMI, Ltd. Recording continued sporadically on the Fonotipia label under EMI until 1936. Thereafter, reissues of acoustic material were made until World War II. In 1948 the final closing down of the Milan firm took place, after some 43 years of operation.

The British Institute of Recorded Sound made the final pressings of Fonotipia recordings in August 1971, with a series of 20 discs entitled the Historic Masters Series. [Andrews 1976/5.]

FRANK ANDREWS

FOO FIGHTERS

A spin-off of the Seattle-based alternative band, Nirvana, the Foo Fighters have gone on to realize the promise of the grunge movement. Their sound — a commercially successful blend of postpunk hardcore influences and melodic power-pop — has inspired an entire school of imitators (e.g., Creed, Our Lady Peace) within the 1990s alternative rock movement.

Following the suicide death of Nirvana front man Kurt Cobain, drummer Dave Grohl created the Foo Fighters. The band's debut album, *Foo Fighters* (Roswell 34027; 1995; #3 UK, #23 US), was a one-man tour de force, comprised exclusively of Grohl's compositions and musicianship. Shortly thereafter, however, he enlisted a supporting cast — guitarist Pat Smear, bassist Nate Mandel, and drummer William Goldsmith — while retaining vocal, lead guitar, and songwriting duties.

Active touring, particularly during summer festival season, combined with a seemingly endless supply of radio-friendly tracks, helped boost the band's next two albums — *The Colour and the Shape* (Roswell 58530; 1997; #3 UK, #10 US), and *There Is Nothing Left To Lose* (RCA 67892; 1999; #10 UK, #10 US) — into the upper reaches of the *Billboard Top Pop Albums* chart. The Foo Fighters's arrangements have reflected a growing subtlety and refinement over time, and Grohl — still the creative core of the band in the face of personnel shifts — has begun taking on outside recording projects (e.g., scoring the 1998 film, *Touch*).

FRANK HOFFMANN

FOONG, YUEN SING

The Victor agent in "every city and town" of China, operating from the offices of S. Moutrie and Co., Ltd., Shanghai. He was the first Chinese record jobber to be mentioned in the trade literature (*TMW* 1906).

FORD, TENNESSEE ERNIE
(13 FEB 1919– 17 OCT 1991)

American country and gospel singer, and radio announcer, born Ernest Jennings Ford in Bristol, Tennessee. He announced for Atlanta and Knoxville radio stations in 1937–1941, then served as an airman in World War II. He became a disc jockey in San Bernadino, California, and also gained a Capitol contract as a singer. In 1949 he made a chart song, "Mule Train" (Capitol 40258), and a year later another hit with his composition "Shotgun Boogie" (Capitol 1295; 1950). His greatest success was "Sixteen Tons" (Capitol 3262; 1955), 15 weeks on the charts. He had 11 country chart songs before 1956, after which he turned to gospel songs. His *Great Gospel Songs* album won a Grammy award in 1964. The last of his chart songs was "Sweet Feelings" (Capitol 4333; 1976). Ford had his own television shows from 1955 to 1965, and continued to make concert appearances into the 1980s. He died in Reston, Virginia.

FORDE, FLORRIE
(14 AUG 1876–18 APR 1940)

Australian comedienne, born Florence Flanagan in Melbourne. She appeared in London from August 1897, and made hundreds of popular recordings in Britain during the early years of the 20th century, such as "Is Everybody Happy?" (HMV 120124), and "Meet Me Down at the Corner" (HMV 120135). "I've Got Rings on My Fingers" was one of her great successes, "Down at the Old Bull and Bush" was another. Still in demand when electrical recording arrived, she rerecorded many of her earlier favorites. She died in Aberdeen, Scotland.

FORESMAN EDUCATIONAL MUSIC
RECORDS (LABEL)

A disc produced by the Educational Record Co. of Chicago in September 1917. Sets of 26 double-sided records were offered for teaching music in schools.

FORREST, HELEN
(12 APR 1918–11 JULY 1999)

American popular singer, born in Atlantic City, New Jersey, on 12 Apr 1918. She was one of the most successful vocalists of the big band era, singing with Artie Shaw (1938), Benny Goodman (1939–1941), and Harry James (1941–1943). With James she made her greatest hits, "I Don't Want to Walk without You" (Columbia 36478; 1941), "I Had the Craziest Dream" (Columbia 36659; 1942), "I've Heard that Song

Before" (Columbia 36668; 1942), and "I Heard You Cried Last Night" (Columbia 36677; 1942). Later, she teamed with Dick Haymes on radio and records, and continued to appear into the 1970s. Her complete recordings with Harry James are available on Collectors' Choice (0081), and her complete recordings with Benny Goodman on three CDs (245). She died in Los Angeles, California.

45-RPM DISCS

Records revolving at 45 rpm were introduced by RCA Victor in the U.S. in February 1949. They were seven inches in diameter, made first of vinyl and later of polystyrene. Victor intended that the 45 would compete with the Columbia LP in the classical music field; it did have the same groove dimensions and audio quality. Victor made a two-speed turntable (78 rpm and 45 rpm), while Columbia sold a turntable for 78 rpm and 33 1/3 rpm. The Victor player had a 10-disc changing apparatus to make up for the 45's short playing time, which was no more than five minutes and 20 seconds. Consumers, forced to choose between the rival turntables and discs, selected the more convenient LP. Victor phased out the 45 and the so-called war of the speeds was won by Columbia. Ironically, each company then began to see the advantages of using the other's new format. Columbia began producing 45-rpm discs of popular songs in late 1950 that carried one song on a side (or two songs, in the extended-play ["EP"] format), which proved quickly successful with younger buyers. Victor embraced the LP, and also used the 45 rpm for popular recordings. By late 1951 both manufacturers were selling turntables and discs in all three speeds. By 1954 the sales of 45s in the U.S. reached 200 million, almost entirely in the pop market.

FOSGATE, JAMES (5 DEC 1937–)

Born in Indianapolis, Indiana, Fosgate, whose father owned a radio and TV repair shop, was exposed to electronics at an early age, and was essentially self-trained in audio technology. Later on, he was employed by the Bell System, working on microwave, video, and carrier systems. In 1970, some years after leaving Bell, he started Fosgate Electronics. The company was later renamed Rockford Fosgate, and the current larger organization concentrates on the production of high-end automotive sound systems. In the early 1980s he started Fosgate Research (merging in 1986 with Audionics of Oregon, to form Fosgate Audionics, also a branch of Rockford), which continues to specialize in the manufacturing of high-quality surround-sound processors, speakers, and amplifiers.

Fosgate began his career in multichannel audio with the "Tate" surround technology, a quadraphonic circuit, and worked with Peter Scheiber, the inventor of matrix surround decoding. He has made major technical contributions to the advancement of sound reproduction in both home and automobile audio systems. These include pioneering work in the design of sophisticated equalizers, very high-quality amplifiers, surround processors, and surround technologies (including his proprietary Six-Axis system and the Pro Logic II system currently being licensed to the industry by Dolby Labs), as well as a THX surround speaker specifically designed to automatically switch to either a monopole or dipole. He has received several CES design and engineering awards, and numerous audio video international awards through the years. He currently has more than 25 worldwide patents in effect, with others still pending.

HOWARD FERSTLER

FOSTER, EDWARD J. (10 AUG 1938—)

Born in New York City and raised there and in Bethel, Connecticut, Foster became interested in science as a child and began servicing radios and television sets when he was 12. In 1955, he was among 40 Westinghouse (now Intel) Science Talent Search (STS) winners, with a thesis entitled "Factors Influencing High Fidelity Reproduction in Audio Amplifiers." He went on to work for Electro-Mechanical Research (EMR) and Data Control Systems, going on to earn a B.S. degree in physics from Fordham University in 1959, and graduating with honors and first in his class. He went on to work for Shepard Industries in 1960 and 1961 (joining the same people he initially worked with at EMR), doing research in analog and digital tape recorder development and manufacturing. In 1961, he founded S.E.D. Memories, and there developed the first NASA-approved recording heads for interplanetary use. In 1964 he earned an M.S. degree in solid-state physics from Syracuse University, and between 1963 and 1973, he worked for CBS Laboratories in various positions, including branch manager of electromechanical systems research. As if technological interests were not enough, in 1973 he earned an M.B.A. degree in organizational behavior and finance from Iona College, and between 1973 and 1976, he was vice president of technology at By-Word Corporation, where he developed wireless communication systems for museums, historic sites, and for transmission to automobile radios. Since 1976 he has been president of Diversified Science Laboratories, where he specializes in technical and marketing consultation, product development, and product evaluation for major audio, broadcast-, and recording-industry clients.

Foster has been awarded Woodrow Wilson, National Science Foundation, and National Defense fellowships, is a member of the Institute of Electrical and Electronics Engineers (IEEE), and has been elected to membership in Sigma Xi and Delta Mu Delta national honor societies in science and business. A member of the Audio Engineering Society, he was made a fellow of the organization in 1980, currently serves on the board of editors of the AES journal, and was elected the AES vice president for the eastern region USA/Canada in 1995. He is deputy technical advisor to the U.S. National Committee to the IEC (SC100C), has written two books, has published extensively in technical and mainstream journals (including a current position as technical editor of *Pro Audio Review* and a senior contributing editor to *Audio/Video International*), and has presented numerous papers at AES and IEEE conventions. He served as session chairman at the AES 46th and 49th conventions, and was workshops and seminars chair for the AES 95th convention. Foster has also been chair of the EIA/CEG amplifier and tape recorder standards committees, is a member of the EIA/CEG R-3 steering committee, and is involved with most EIA/CEG standards activity. He has been called as an expert witness before the U.S. Senate in patent cases, and is listed in Marquis *Who's Who in Science and Engineering* and *Who's Who in America*.

HOWARD FERSTLER

FOUNTAIN, PETE (3 JULY 1930—)

American jazz clarinetist, born Peter Dewey Fountain, Jr., in New Orleans. At age 19 he was a member of the Dukes of Dixieland. After five years with that group, Fountain freelanced, joined the Lawrence Welk orchestra (1957–1960), and then formed his own band. He was notably successful in recordings of the 1960s made for the Coral label, including *New Orleans* (Coral CRL 57282; 1960), which was on the charts for more than a year; and *Licorice Stick* (Coral CRL 57460; 1964). Fountain selected 20 of his Coral recordings for reissue on Verve 549365.

FOUR ARISTOCRATS

A male quartet that recorded for Victor and Edison in 1926–1927. "Don't Sing Aloha When I Go" (Edison Diamond Disc #51858; Victor #20314), was one of their popular records. The singers were Fred Weber, Bert Bennet, Ed Lewis, and Tom Miller.

FOUR CHANNEL STEREO

SEE *QUADRAPHONIC RECORDING*

FOUR-IN-ONE (LABEL)

FOUR-IN-ONE (LABEL)

A British record issued from August 1932 to August 1933 by British Homophone Co., Ltd. Each 10-inch disc had four dance numbers, thus the label name; it was an early version of the long-playing record, although at 78 rpm. There were 50 different issues.

FRAAD TALKING MACHINE CO.

A New York firm, established in 1915. An advertisement of 1916 offered 10 models of disc players under the names Symphony, Fraad Jr., and Symphony Jr., as well as 10-inch and 12-inch discs with a Fraad label. The firm went bankrupt in August 1918.

FRANK ANDREWS

FRANCIS, CONNIE (12 DEC 1938–)

American popular singer, born Concetta Franconero in Newark, New Jersey. At age 11 she appeared on the Arthur Godfrey television show, and in high school she sang in cocktail lounges. In 1955 Francis began to record for the MGM label, and in 1958 she had five chart singles beginning with "Who's Sorry Now?" (MGM 12588). She had 58 chart songs by the end of the 1960s, when her ballad style went out of favor. "Where the Boys Are," the little song from one of her films, was one of her most successful discs (MGM 12971; 1961). She also had 19 chart albums, notably *Italian Favorites* (MGM E 3791; 1959), and *Never on Sunday* (MGM E 3965; 1961). Bear Family has reissued comprehensive boxed sets of Francis's recordings, which are also available on various compilations.

FRANCISCO, SIGNOR

SEE DEGOGORZA, EMILIO

FRANKLIN, ARETHA (25 MAR 1942–)

American soul and gospel singer, born in Memphis, Tennessee. Her father was C.L. Franklin, a minister noted for his recordings of sermons. She sang in churches as a child, was heard by John Hammond, and signed by him for Columbia records in 1960. She had only one chart album with Columbia, *Running Out of Fools* (CL2281; 1964), not having established an individual style. She moved to the Atlantic label in 1966, and developed a powerful gospel repertoire that led to 16 hit albums within seven years, including the acclaimed *I Never Loved a Man* (Atlantic 8139; 1967), and *Aretha Now* (Atlantic SD 8186; 1968). She was known for highly emotional performances as well as

for a well-controlled virtuoso voice. The soul classic "Respect," which she sang to great effect in the motion picture *The Blues Brothers*, was a notable single of 1967 (Atlantic 2403). Franklin has received 15 Grammys. Since 1980 she has recorded for Arista. *Through the Storm*, an album made with James Brown, Elton John, Whitney Houston, and the Four Tops, was an important release of 1985 (Arista ARCD-8572). Her most popular solo work of the 1980s was in *Who's Zoomin' Who* (Arista ARCD-8286; 1989). In 1991 she was honored with a commemorative postage stamp in a series devoted to distinguished Black Americans. Franklin has continued to record and perform through the 1990s and into the 21st century, although she has failed to produce any major hits. In 2001, VH-1 presented a special program in their "Divas" series in honor of Franklin, showing her continuing influence among younger singers today.

Most of Franklin's original albums are available on CD, and there are several collections of hits as well. Her output for Columbia is best represented on the two-CD set, *The Queen in Waiting* (Columbia/Legacy 85696), but these recordings will appeal mostly to hardcore fans and those interested in hearing Aretha before she developed her mature style. The four-CD Rhino box, *Queen of Soul* (71063), is the best introduction to her Atlantic years, and contains most of her best recordings.

FRANSSSEN, NICO VALENTINUS (1926–25 DEC 1979)

After completing grammar school in his native Netherlands, Franssen studied at Delft University of Technology, where he earned a degree in electrical engineering in 1952 and went on to win his doctorate in 1960 with a thesis that involved a study of directional hearing. He had already gone to work for Philips in 1954, in the organization's research laboratories, and remained with the company until his death. Franssen was musically as well as scientifically gifted, and was well versed in the fields of hearing, architectural acoustics, electro-acoustics, and musical instruments, holding patents in some areas, and authoring numerous papers. His most important contribution to audio and recording technology involved his theories on directional hearing, which were based upon "attack" phenomena. He also discovered that by using a multiple-channel surround system, acoustic feedback could be reduced and a higher level of amplification achieved.

See also Franssen Effect

HOWARD FERSTLER

FRANSSEN EFFECT

Originally formulated by Nico V. Franssen, it is the phenomenon that allows the leading edge of a bass signal to be localized elsewhere from where the body and tail end of the signal is reproduced. The phenomenon is one reason that subwoofer/satellite speaker systems with small satellites and only one subwoofer can simulate an array of larger systems.

See also **Precedence Effect**

HOWARD FERSTLER

**FRAYNE, JOHN GEORGE
(8 JULY 1894– 31 OCT 1990)**

A pioneer in film sound, Frayne was born in Ireland and migrated to the U.S. as a young man. He earned an A.B. degree from Ripon College, and later on won his doctorate from the University of Minnesota. He first worked for Western Electric, and later on joined the Westrex Corporation, where he did pioneering work in magnetic recording on film. In 1959, he joined Datalab, a division of Consolidated Electrodynamics, in Pasadena, California. While working for those companies, he also developed a noise-reduction system for motion picture use, as well as methods for the measurement of intermodulation distortion.

Perhaps Frayne's most notable achievement for the history of recorded sound was his development of the Westrex 3-A cutter head, which launched the stereophonic long-playing (LP) record. While at Westrex, he also fostered the use of magnetic recording on motion picture film, rather than magnetic tape, which allowed for greater dynamic range and reduced print-through in the era before Dolby and dbx noise reduction. (The 35mm technology was used by Everest and Mercury records to produce some of the best-sounding releases of the era.) Another project involved working with Bart Locanthi on horn-loaded loudspeakers for motion picture theater use. He also coauthored, with Halley Wolfe, *Elements of Sound Recording* (1949), which was the first handbook on the art and science of recording, and which contains information that is still useful five decades after it was published. Frayne was president of the Society of Motion Picture and Television Engineers in 1955–1956, and won several awards from that organization. Among many other awards, Frayne won the Audio Engineering Society gold medal in 1978 and an honorary membership in 1985, won the SMPTE Samuel L. Warner memorial medal in 1959, and also won three awards from the Academy of Motion Picture Arts and Sciences, including the 1984 Gordon E. Sawyer award in 1984, recognizing him as an

individual whose technological contributions brought credit to the industry.

HOWARD FERSTLER

FREED, ALAN (15 DEC 1922–20 JAN 1965)

Perhaps best known for popularizing the phrase “rock ‘n’ roll,” deejay/show promoter Alan Freed played an important role in the development of an aesthetic for the newly emerging genre. For example, he steadfastly refused to play cover versions of rhythm and blues originals on his radio programs in the 1950s. Although his large broadcast audience constituted a major source of power within the record industry, it paled next to the near-monopoly enjoyed on television by Dick Clark's *American Bandstand*, or the king-making positions of a select group of record label executives and producers.

Born in Johnstown, Pennsylvania, Freed first attracted attention in 1951 as a WJW, Cleveland, disc jockey specializing in the latest R&B recordings. He used his popularity as a springboard to organize live shows throughout the Midwest featuring R&B and rock ‘n’ roll artists. The words “rock” and “roll” had appeared, individually and collectively, in a number of R&B songs prior to the early 1950s when Freed began using the phrase to denote the new youth-oriented music appearing on the airwaves with increasing frequency. His identification with the genre led WINS, New York, to hire him as its feature deejay following its decision to adopt a rock format in 1954. His Brooklyn Paramount shows on the Easter and Labor Day weekends in 1955, which featured an interracial mix of rock and R&B stars, drew such large crowds that pop music's industry-wide color bar was soon lifted.

The 1960 “payola” hearings conducted by the House Subcommittee on Legislative Oversight, chaired by Arkansas Democrat Oren Harris, effectively destroyed Freed's career. Indicted for accepting \$30,000 from six labels in return for radio plugs, Freed — whose uncompromising support of rock ‘n’ roll and Black performers offended the record industry's old guard — took the fall for a practice that pervaded all levels of the music business. Under investigation by the I.R.S. for tax evasion and in poor health during the early 1960s, he died of uremia at the comparatively young age of 42.

With the rise of serious rock journalism beginning in the late 1960s, Freed has received widespread credit for his contributions to rock's early stages of development. His legacy also lives on in his 1950s film appearances and Paramount Pictures's *American Hot Wax* (1978), which depicted the events surrounding his

FREE-FORM PROGRAMMING

1959 "First Anniversary of Rock 'n' Roll" concert held at the Brooklyn Paramount theater. [Jackson 1992.]

FRANK HOFFMANN

FREE-FORM PROGRAMMING

An alternative to the prevailing radio disc jockey programming format, boss radio, of 1965; devised by Russ "The Moose" Syracuse at San Francisco's KYA. In free-form, top chart discs are played but interspersed with folk songs, new work of local performers, and other music ignored by the boss stations. The disc jockey has a greater voice in selection of material than in boss.

FREEMAN, BUD

(13 APR 1906–15 MAR 1991)

American tenor saxophonist, born Lawrence Freeman in Chicago. He was one of the Austin High School Gang, a group of white boys who developed the Chicago jazz style. In 1927 he went to New York and joined Ben Pollack's band; in 1929 he moved to Red Nichols. During the 1930s he played with many orchestras, including those of Paul Whiteman, Tommy Dorsey, and Benny Goodman; then he toured with various smaller groups in the 1940s. Freeman won the *Down Beat* poll in 1938. He led his own groups in the 1950s and 1960s, moved to London, and finally returned to Chicago, where he died in 1991.

Among his distinctive records are "Rose of Washington Square" with Red Nichols (Brunswick 4778; 1929), "The Eel" (Brunswick 6743; 1933), and "At the Codfish Ball" with Tommy Dorsey (Victor 25314; 1936). He also made important discs with his Summa Cum Laude orchestra (featuring Pee Wee Russell and Eddie Condon) in a Bluebird session of 1939, and in three Decca sessions of 1939 and 1940. Classics has begun reissuing his complete recorded work in chronological order on CD, beginning with the excellent 1928–1938 period (Classics 781). For an overview of his recordings both under his own name and with other groups made between the late 1920s and mid-1940s, ASV/Living Era's *Swingin' with "The Eel"* (5280) offers a good selection.

FREEMANTLE, FREDERIC C.

(20 APR 1873–21 NOV 1949)

English tenor, born in London. He was a choirboy, then learned to play brass instruments. From 1896 to 1890 he appeared in concert and oratorio in Canada and the U.S., and sang opera in Philadelphia. On stage he was most appreciated for his Beethoven song recitals. He began recording in 1907 for Victor, doing

mostly religious material like "Ave Maria" by Franz Abt (#31691); but he also sang "La donna è mobile" (#5068). Freemantle made one two-minute cylinder for Edison, "Ah So Pure" from *Martha* (#9962; 1908). Later, he made a 12-record set about public speaking for Victor. [Walsh 1948/7.]

FREMSTAD, OLIVE

(14 MAR 1871–21 APR 1951)

Swedish dramatic soprano, born in Stockholm. As a child she was adopted by a Swedish-American couple who took her to Minnesota. She studied piano and voice, and had worked as a church soloist in New York. Then in 1893 she went to study with Lilli Lehmann in Berlin, and made her operatic debut as a contralto in Cologne, as Azucena (1895). She continued to sing contralto roles in Bayreuth in 1896, and throughout Europe, but began a changeover to the soprano repertoire. Her Metropolitan Opera debut was as Sieglinde on 25 Nov 1903. Among the highlights of her 11-year Metropolitan career were appearances in *Carmen* with Enrico Caruso and as Isolde with Gustav Mahler conducting. She sang Wagner with special distinction, but was also popular in works of Verdi, Puccini, and Richard Strauss. After leaving the Metropolitan she sang with other American companies, then gave a final recital in New York on 19 Jan 1920. She died in Irvington-on-Hudson, New York. Willa Cather's novel, *Song of the Lark*, was based on Fremstad's life.

Fremstad's first recording, "Dich, teure Halle" (Columbia 30635; 1911), remains a favorite among collectors. It was reissued by IRCC in 1935. Other fine interpretations include "Oh don fatal" from *Don Carlo* (Columbia 36807; 1912), and "Elsas Traum" (Columbia A5281). Fremstad's 1911–1913 Columbia recordings are reissued on Marston's two-CD set, *Three American Sopranos: Lillian Nordica, Olive Fremstad, and Ada Adini*. [Migliorini 1952; Moran 1977/3.]

FRENCH NATIONAL SOUND ARCHIVES/ BIBLIOTHÈQUE NATIONALE

The French National Sound Archives originated in 1911 with the creation of the Archives de la Parole by Ferdinand Brunot, the first sound library to be established in France. Brunot was among the first to experiment with language instruction using sound recording techniques, and made early ethnographic recordings in the field, as well as recordings of famous voices (Cécile Sorel, Sarah Bernhardt, Apollinaire, Captain Alfred Dreyfus, among others), for the collection. In 1928 the Archives de la Parole became the Musée de la Parole et du Geste, and its mission was extended to

include recorded images. The Phonothèque Nationale (national sound library) was set up on 8 April 1938 for the legal deposit of sound recordings (records, cassettes, and tapes) and to collect all sound recordings of whatever nature. In 1977, it was incorporated into the Bibliothèque Nationale and became its sound archives and audiovisual department. Since 1975, this department has been the legal depository for video recordings and multimedia productions. The Musée Charles-Cros, which forms part of this department, holds a collection of 400 listening devices enabling the public to follow the history of sound recordings from the first invention in 1877, including the oldest documents in the department (cylinders). [Website: http://www.bnf.fr/site_bnf_eng/collectionsgb/indexgb.htm.]

FRENOPHONE

A radio marketed in 1922–1923 by S.G. Brown that had a physical resemblance to a phonograph. It had a “polished oblong oak box, complete with a winding handle and a cygnet horn.” [*TMR* #9 (1971), p. 8, the source of the quote, has illustrations.]

FREQUENCY

The rate of vibration of a sound wave; the characteristic that determines the pitch of the signal.

See also **Audio Frequency**

FREQUENCY DISTORTION

SEE DISTORTION

FREQUENCY MODULATION (FM)

The method of radio transmission in which an audio wave is impressed on a so-called carrier wave (of higher frequency). The carrier wave undergoes modification of frequency, but not of amplitude. The modulation process, and the demodulation process of the FM receiver, give a signal transmission that is much less affected by background noise and static than AM radio.

FREQUENCY RESPONSE

The ability of an audio system or component to reproduce the input signals at their original frequencies. In an amplifier, a uniform response is desired, one that does not favor or degrade any segment of the audio spectrum. When an amplifier emphasizes particular frequencies, the output signal is distorted. In specifications for an audio device, frequency response is often stated in deci-

bels (dB) for a specified segment of the audio spectrum, for example, plus or minus 3 dB from 20 Hz to 20 kHz.

See also **Distortion; Flat Response**

FRESH PRINCE

SEE SMITH, WILL

FRIED, IRVING M

SEE LOUDSPEAKER

FRIEDMAN, IGNAZ

(14 FEB 1882–26 JAN 1948)

Polish pianist, born near Krakow. After study with Theodor Leschetizky in Vienna, he began to concertize in 1904, giving some 2,800 performances in Europe, America, Australia, China, Japan, and South Africa. In 1941 he settled in Sydney. Friedman's special interest was in Chopin, whose works he published in an important edition. Recordings made from 1923 to 1936, mostly for Columbia, were reissued on four CDs in 1990 by Pearl (#1F2000). They display a rich tone and great virtuosity, with a finely controlled pianissimo.

FRIPP, ROBERT

One of the U.K.'s most idiosyncratic and influential guitarists and composers. Fripp was the doyen of the progressive rock era as leader of King Crimson. But his work after leaving the band in 1974 has delivered prime examples of the most experimental, organic, ambient rock ever recorded. Working with Peter Gabriel, Fripp produced his *Exposure* (E.G./Polydor 6201; 1979), whose menacing title track also acted as a vehicle for his maniacally-fretted improvisational style, 'Frippertronics'. On the same album, the pair also rerecorded Gabriel's early, overblown progressive anthem, "Here Comes The Flood," changing it into an ethereal ballad using early taped dialogue and atmospherics. Fripp's early collaborations with Brian Eno — *No Pussyfooting* (Antilles 7007; 1973), and *Evening Star* (Antilles 7018; 1975) — are key releases in English experimentalist rock. They also worked together on David Bowie's groundbreaking *Heroes* (RCA 2522; 1977).

The 1990s saw Fripp in a most prolific vein, issuing vast amounts of material on his own Discipline Global Mobile label either solo or from a reignited King Crimson. His solo work has centered around a guitar/electronics hybrid, often played live, to

FRIZZELL, LEFTY

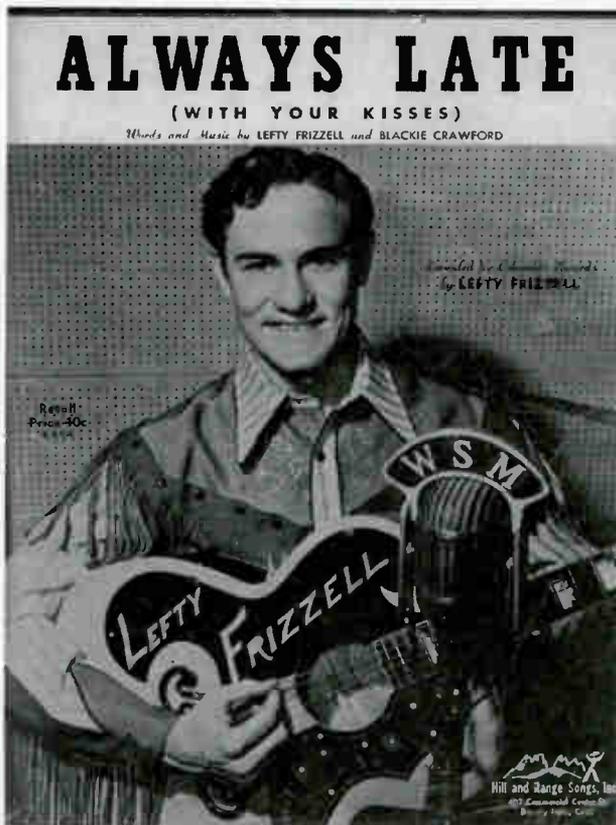
create long, low key instrumental “soundscapes.” Meanwhile, his collaboration with David Sylvian — *The First Day* — veered wildly between minimalism and outright Hendrix-inspired rock. Never afraid to look to the future, some of Frizzell’s best recent work has been with modern dance outfits such as the Orb and Future Sound of London.

IAN PEEL; REV. FRANK HOFFMANN

FRIZZELL, LEFTY

(31 MAR 1928–19 JULY 1975)

Born William Orville Frizzell, in Corsicana, Texas, Lefty Frizzell was one of the most influential of all the honky-tonk singers. The son of an oil-field worker, he began performing in Dallas and Waco-area honky-tonks in the late 1940s. His first hit came in 1950 with “If You Got the Money, Honey, I’ve Got the Time,” a classic honky-tonk song. In 1951 Frizzell had four records that all made the country Top 10 at the same time, a feat never since repeated by any artist. Frizzell was poised to be more popular than Hank Williams, but then his hits dried up. In 1953, he moved to Los Angeles, and became a regular on the popular TV show, “Town Hall Party.”



Sheet music cover for “Always Late (With Your Kisses)” by Lefty Frizzell. Courtesy David A. Jasen

In the late 1950s, Nashville was swept by a craze for story-songs, mini-sagas that, ballad-like, told stories of the mythical Old South. Frizzell abandoned his beer-soaked honky-tonk sound to make a number of popular records in this mold, including 1959’s “Long Black Veil,” and 1964’s “Saginaw, Michigan.” Sadly, this was his last hurrah as a charting performer; alcohol took its toll on his recordings and live performances, although he continued to perform until his death in 1975. There are various reissues of Frizzell’s albums available on CD; the best overall introduction is *Look What Thoughts Will Do: The Essential Lefty Frizzell, 1950–1963* (Columbia/Legacy 64880), a two-CD set featuring all of the hits. Lefty’s younger brother, David (b. Corsicana, Texas, 26 Sep 1941), had a few country hits in the late 1970s/early 1980s.

CARL BENSON

FROLICKERS

A trio that made three Edison Diamond Discs in 1926. The members were Arthur Hall, John Ryan, and Ed Smalle.

FRONT HALL RECORDS

Founded in 1974 by Andy and Bill Spence, initially to issue Bill Spence’s first hammer dulcimer recording. The album was an early hit of the 1970s old-time music revival, and launched a revival of the musical instrument as well as the small label. Recording in their own home studio, the couple issued a series of albums mostly by their friends in the folk revival, including several more by Spence himself. They also ran a related mail-order business, called Andy’s Front Hall, that sold their own and other recordings and books. The label has survived into the CD era mostly by reissuing its earlier product.

CARL BENSON

FROSINI, PIETRO

(9 AUG 1885–29 SEP 1951)

Italian accordionist, born Pietro Giuffrida in Catania. His eyesight was severely limited after a case of childhood measles, but he went to America and began a 40-year career on stage and recordings. In 1911 he gave a command performance for King George V. Frosini’s first record was an Edison Amberol, #103, made in April 1909: “Wedding of the Winds.” He also recorded for Edison Diamond Discs from 1915 to 1924. His best seller was Diamond Disc 51030, “Carnival of Venice — Variations.” Other labels he worked with included Gennett, Master, Harmonia, Pathé Actuelle,

and Decca. Frosini played the button accordion, not the keyboard instrument. He died in Woodside, Queens, New York.

FUGS

A New York-based rock group of the mid to late 1960s, formed by avant-garde poets Tuli Kupferberg, Ed Saunders, and Ken Weaver. The Fugs were among the first groups to feature purposely scatological lyrics, references to the dark underside of New York life ("Sum Goddess"), drug use ("I Couldn't Get High"), and other topics not normally heard in popular music, and thus were influential on the Velvet Underground and the 1970s era punk and do-it-yourself/garage rock movements. Their first albums were released on Broadside (a social-protest imprint of Folkways), and the avant-garde label ESP/Disc; and then signed to Reprise for three albums from 1967 to 1979. The group was augmented by various backup musicians, including Pete Stampfel and Steve Weber of the New York-based old-time/hippie band, the Holy Modal Rounders, guitarist Dan Kortchmar and blues guitarist Stefan Grossman, and bass player Charles Larkey, but instrumental proficiency was never emphasized. Instead, a rough-hewn, thrown-together sound was part of their mission to co-opt popular music to their avant-garde messages. The band split by 1970, with Saunders releasing two solo albums for Frank Zappa's Bizarre/Straight label. Since the mid-1980s Kupferberg and Saunders have reunited from time to time for Fugs reunions. The Fugs's back catalog has been reissued on CD by Fantasy Records.

FULL FREQUENCY RANGE RECORDINGS (FFRR)

A recording system developed by Arthur Charles Haddy, based on submarine detection devices. It was marketed in the U.S. by Decca Record Co. in 1946, with great success. A long-coil, moving-coil recording cutting head was used, later modified into a feedback recorder. When discs thus made were played on Decca's new Piccadilly portable, which had a light magnetic cartridge with sapphire stylus, and a three-tube amplifier, the spectrum covered was 50–14,000 Hz, outperforming all competing machines of the time.

FULLER'S FAMOUS JAZZ BAND

The second jazz ensemble to make records, for Victor on 4 June 1917. The disc made that day was "Slippery Hank" and "Yah-De-Dah" (#18321). The group, led by Earl Fuller, made two more (issued) Victors in 1917–1918, and recorded for Edison, on Diamond

Disc, in 1918–1919. Fuller continued recording with various groups and for several labels until 1921.

FUNDAMENTAL FREQUENCY

The first harmonic (lowest frequency) of a musical sound; the basic identifying vibration that determines the pitch of the sound. Fundamentals of very low frequency, like the lowest C on a piano keyboard, are not reproducible in certain recording systems. However, the pitch of a sound may be supplied by the human hearing mechanism even when the fundamental is inaudible. This is done by perception of the second harmonic (i.e., the first overtone), which has twice the frequency of the fundamental and sounds one octave higher. Unless the fundamental and/or the second harmonic is audible, the pitch cannot be recognized. During the acoustic recording era (before 1924), the lower range fundamentals were often missing.

See also Audio Frequency

FUNK

Funk was a dance-oriented offshoot of soul music that originated in the late 1960s. (The term itself had been widely used in hip urban African-American circles since the early decades of the 20th century; it carried several different off-color meanings.) It originated with James Brown's live jam sessions and with the Stax studio groups such as Booker T. and the MGs and the Bar-Kays. Sylvester Stewart, leader of the band Sly and the Family Stone, was a notable pioneer of the genre. He developed his sound as a session musician in small San Francisco recording studios during the mid-1960s before going on to superstardom with archetypal funk hits such as "Dance to the Music" (Epic 10256; 1968), and "Everyday People" (Epic 10407; 1969).

By the time Sly experienced career burnout in the early 1970s, the chief features of funk were sharply delineated for the next era of practitioners: (1) a polyrhythmic, syncopated dance music usually centered around a repetitious, thickly textured bass pattern, and (2) a greater reliance on instrumental ensemble playing than had been typical of either R&B or soul. Classic exponents of the style who achieved significant success included George Clinton's Parliament/Funkadelic combine, the Ohio Players, Kool and the Gang, and Earth, Wind, and Fire.

The genre dominated the Black music scene throughout the 1970s, absorbing elements of disco and merging its heavy backbeat with punk's rebellious attitude to create a new stylistic offshoot, funk-punk. The most popular funk-punk artists included Prince, Rick James, and Morris Day and the Time. The innovative

FURTWÄNGLER, WILHELM

vanguard of funk was eventually co-opted by the rap/hip-hop movement. Nevertheless, it provided the foundation for virtually every Black-inspired and dance genre to emerge since 1980. Samples of funk hits of the 1970s and 1980s often form the basis of 1990s-era rap hits. [Miller 1980; Romanowski and George-Warren 1995.]

FRANK HOFFMANN

FURTWÄNGLER, WILHELM (25 JAN 1886–30 NOV 1954)

German conductor, born in Berlin. He began conducting at the Strasbourg Opera in 1910, going on to concerts in Lübeck from 1911 to 1915. He became conductor of the Mannheim orchestra (1915–1918), and then of the Vienna Tonkünstler Orchester (1919–1924). While in Vienna he also directed the Gesellschaft für Musikfreunde. Furtwängler was appointed to the directorship of the Berlin Philharmonic Orchestra in 1922. He held concurrent posts with the Vienna Philharmonic Orchestra from 1927, and with the Berlin State Opera from 1933. He had problems with the Nazi government, but remained in Germany until the final months of World War II; then he emigrated to Switzerland. After the war he resumed relatively normal duties, despite growing deafness. He died in Ebersteinburg.

Furtwängler was given to an improvisatory approach, and tended to take slower tempi than most of his contemporaries. Thus many of his recordings are less than satisfactory, although the concerts may

have gained from the conductor's spirit of the moment. He was a specialist in the German romantics, and made an outstanding recording of *Tristan* in 1947 (EMI CDS7-47322-28), and another of the *Ring*. It is of interest that some of his wartime concerts in Berlin were taped on the Magnetophon, providing remarkable fidelity for its period; these have been released on 10 CDs (DG 427773-2GD010; 1989). [Hunt 1985.]

FUSION

A style of jazz popular in the late 1960s through the mid-1970s that began by fusing jazz improvisation and instrumentation with a rock rhythm section and amplification. Miles Davis's album *Bitches Brew* (Columbia 40577; 1969) launched jazz-rock fusion, and was quite controversial among jazz fans at the time of its original release. Some accused Davis of "selling out" to achieve popularity on the rock circuit, while others saw him continuing to push the boundaries of jazz in new directions. Since the 1970s, the term "fusion" has been used to describe various combinations of jazz with other styles of music.

See also Smooth Jazz

FUZZ

A form of distortion, deliberately induced to give a special effect with electronic instruments, for example, guitars, via a device known as a fuzz-box. A harsh timbre can be achieved by means of a frequency multiplier that adds complex harmonics to the fundamental tones.



G

G., KENNY (5 JUNE 1956–)

Soprano saxophonist Kenny G (born Kenneth Gorelick in Seattle, Washington) led the way in making smooth jazz a major force within the record industry. Although considered a purveyor of bland, sentimental fare by jazz purists and critics, he nevertheless sold more than 30 million albums through 2000, one of the highest figures ever for an instrumental artist.

After playing with Barry White's Unlimited Orchestra and the Jeff Lorber Fusion Band, he signed a solo recording contract with Arista in the early 1980s. Following three moderately successful albums, he broke through with *Duotones* (Arista 8427; 1986; #6; triple platinum), aided by the hit singles, "Songbird" (Arista 9588; 1987; #4), and "Don't Make Me Wait for Love" (Arista 9625; 1987; #15). The latter song, featuring Tower of Power lead singer Lenny Williams, was the first notable instance in Kenny G's longstanding practice of using famous guest vocalists as an accent to the low-key sameness of his material. *Silhouette* (Arista 8457; 1988; #8; triple platinum) would include Smokey Robinson, while *Breathless* (Arista 18646; 1992; #2 pop, #2 R&B, #1 contemporary jazz; triple platinum) — which included the Grammy-winning (for best instrumental composition) "Forever in Love" (Arista 12482; 1993; #18) — featured Aaron Neville and Peabo Bryson. He would also record with Michael Bolton, Toni Braxton, Natalie Cole, Aretha Franklin, Whitney Houston, and Dionne Warwick.

His success as a recording artist continued unabated throughout the 1990s. *Miracles: The Holiday Album* (Arista; 1994), would become one of the most commercially successful Christmas releases ever,

spawning a sequel, *Faith: A Holiday Album* (Arista 19090; 1999; #8). *The Moment* (Arista; 1996; #2 pop, #1 contemporary jazz) achieved double platinum sales, and *Classics in the Key of G* (Arista 19085; 1999; #17), found him venturing into new territory with his own interpretations of well-known jazz standards.

FRANK HOFFMANN

GABEL ENTERTAINER

SEE JOHN GABEL'S *AUTOMATIC ENTERTAINER*

GABLER, MILT

(20 MAY 1911–20 JULY 2001)

Milt Gabler's musical contributions spanned many genres — most notably jazz, rhythm and blues, and rock 'n' roll — and three distinct occupations: record retailing, ownership of a record company, and studio production. At a time when activities within the record industry were not as clearly demarcated and specialized as in the present day, he literally did it all: market analysis, contractual negotiations, talent scouting, promotional details, consulting, artist and repertoire work, and writing liner notes.

Gabler began working for the Commodore Music Shop, owned by his father, in 1926. As store manager, he was instrumental in building the enterprise into one of the leading record outlets in the New York area. By the early 1930s, he had begun stocking cutout jazz and blues material, catering to musicians, songwriters, journalists, and other collectors. He would bulk order

GABRIEL, PETER

custom pressings of deleted titles from the American Record Company, which had absorbed many bankrupt labels — including Brunswick, Columbia, Okeh, and Perfect — at the outset of the Depression to be issued as white-label Commodores. He then instituted the UHCA label (United Hot Clubs of America) as an outlet for his reissue program.

In early 1938 Commodore became the first American jazz label, recording a combo lead by Eddie Condon. Run more as a mechanism for creating the type of small-group jazz Gabler loved than as a business enterprise, Commodore continued to produce recordings through 1957. The company often served as outlet to record music that did not generate a favorable response from majors such as Columbia and Decca, including sides by Lester Young and the Kansas City Six, and Billie Holiday. Holiday approached Gabler, a longtime friend, when her label, Vocalion, expressed reservations over recording “Strange Fruit,” a song that addressed lynching in the South in unflinching terms. The record’s flip side, a blues entitled “Fine and Mellow,” became Commodore’s first hit.

Commodore’s output dropped off considerably when Decca hired Gabler as a staff producer in the mid-1940s. In that capacity he worked with jazz, R&B, and pop artists, most notably Louis Armstrong, Ella Fitzgerald, Louis Jordan, and Bill Haley and His Comets. Perhaps his most fabled recording session involved Haley at the Pythian Temple, 12 Apr 1954, when they produced “(We’re Gonna) Rock Around the Clock,” and “Thirteen Women.” The release (Decca 29124), spurred by the inclusion of “Rock Around the Clock” on the soundtrack of the film, *Blackboard Jungle*, spent eight weeks at the top of the *Billboard* pop singles charts in July–August 1955, thereby ushering in the rock ‘n’ roll era. Gabler would continue working for Decca through the 1960s, generally with middle-of-the-road acts like Bert Kaempfert and Burl Ives. By the 1970s he had retired to metropolitan New Jersey.

FRANK HOFFMANN

GABRIEL, PETER (15 FEB 1950–)

An important songwriter on a world scale and a uniquely English eccentric. Peter Gabriel first found fame as front man and founding member of Genesis. Forming the band at Charterhouse public boys school with schoolmates Tony Banks and Mike Rutherford, Gabriel led Genesis from complete unknowns to a powerful musical force, peaking with the epic *Lamb Lies Down On Broadway* album and his theatrical stage shows. Leaving the band at its peak, Gabriel began a rich and varied solo career. His first four albums were all eponymous, the first of which (Atco

147; 1977; #38), saw the singer abandon his traditional theatrical costumes in favor of a plain tracksuit, shaved head and a musical approach that was highly melodious, intriguing, and experimental, but without the pompous bombast associated with his former band. These albums combined both hit singles (“Solsbury Hill,” “Games without Frontiers”) with some of the most experimental music to be put in front of a mainstream audience in the 1970s and 1980s; “DIY” and “Exposure” made the second album (Atlantic 19181; 1978; #45), a minimalist classic, the third (Mercury 3848; 1980; #22), heavily explored synthesizer sounds, and the fourth (Geffen 2011; 1982; #28), computer music and treatments.

Bowing to record company pressure, Peter Gabriel named his fifth studio album *So* (Geffen 24088; 1986; #2), and truly hit the big time with singles including the soul/funk extravaganza “Sledgehammer” (Geffen 28718; 1986; #1), and the spine-tingling duet with Kate Bush, entitled “Don’t Give Up.” Gabriel has used the success of *So*, and the following mainstream album, *Us* (Geffen 24473; 1992; #2), to pursue a variety of musical projects outside of the mainstream. He started the Real World record label in the late 1980s, which has become one of the industry’s most prolific and stable sources of non-western and fusion albums. He has also developed an interest in film soundtracks, writing music or films but at the same time combining his compositions with others inspired by screen images to create ambient soundscapes such as *Birdy* (Geffen 24070; 1985; #162), *Passion: Music for The Last Temptation of Christ* (Geffen 24206; 1989; #60), and *Long Walk Home*.

After 10 years outside of the pop music mainstream, Gabriel returned with a characteristically idiosyncratic pop album, *Up* (Geffen 493388), in 2002. However, it had little impact on the charts, unlike his previous pop outings.

IAN PEEL

GADSKI, JOHANNA

(15 JUNE 1872–23 FEB 1932)

German dramatic soprano, born in Anclam. She began singing as a child, and made her debut at age 17 in Berlin, going on to perform elsewhere in Germany. Her American debut was as Elsa with the Damrosch Opera Co., New York, on 1 Mar 1895. She sang for the first time at the Metropolitan Opera on 28 Dec 1899, and remained with the company until 1917 with a three-year hiatus. She was acclaimed for her interpretations of Isolde and Brünnhilde. During World War I Gadski was in Germany; then she returned to the U.S. in 1929–1931, and went back again to Germany,

where she died. She recorded for Victor in 1903–1904, and in 1906–1910, and 1912–1917, the first disc being “Ho-yo-to-ho” (#81018; 1903). Aside from the Wagnerian roles in which she excelled, she recorded by 1910 several arias from *Aida*, two duets from that opera with Enrico Caruso, and two other duets with Louise Homer, all kept in the catalog as late as 1917 (where she has 40 solo items listed, in addition to duets). She also inscribed Lieder and other songs.

GAELIC PHONOGRAPH CO.

A New York firm organized in 1921 by Hugh P. Fay, Earle W. Jones, and H.G. Schubert to record traditional Irish and Gaelic language material. Fay was replaced by Thomas F. Dwyer in early 1922, but by October of that year it was reported that the firm was placed in the hands of a creditors committee.

FRANK ANDREWS

GAIN

SEE *AMPLIFICATION*

GAISBERG, FREDERICK WILLIAM (1 JAN 1873–2 SEP 1951)

American pianist, and for 60 years a record industry executive, born in Washington, D.C., of German parents. Working part-time for Columbia in Washington, he accompanied cylinder recordings from 1890, including the popular “Whistling Coon” and 35 other numbers by whistler John York Atlee. He moved to Philadelphia and became a studio accompanist for Berliner in 1894, opened (with his brother Will) the earliest disc recording studio, in 1896 or 1897, and then went to London in 1898 to manage Berliner’s new studio. He and his brother were instrumental in finding a wide European audience for the gramophone. The first recording made in London, on 2 Aug 1898, included Fred Gaisberg’s piano accompaniment to Syria Lamonte’s singing of “Comin’ thro’ the Rye.”

As Berliner’s firm became the Gramophone Co., Gaisberg assumed A&R responsibilities, and recruited many great artists to the recording horn: Caruso first and foremost, Battistini, Chaliapin, Elgar, Gigli, Patti, Schnabel, Tetrizzini, and others. In 1902 he took a recording team to the Far East, and in a year on location he made records of native music in China, India, and Japan. He traveled many times to Russia, making discs of the opera and of peasants and tribesmen. He offered the earliest 10-inch discs (1901), and the first Red Label records (1901). He remained with the

Gramophone Co., and when it was assimilated by EMI in the 1931 merger he became international artists manager for the new firm. Later he was a consultant for the organization. Gaisberg died in London. His diary, *The Music Goes Round*, is one of the prime documents of the early recording years (see Bibliography).

GAISBERG, WILLIAM (1878–5 NOV 1918)

Recording engineer and executive, brother of Fred Gaisberg, usually called Will. He worked in the Volta Laboratory in Washington, then moved to Philadelphia and opened (with his brother) the first disc recording studio in 1896 or 1897. He went with his brother to London in 1898 to comanage with him the recording department of the new Berliner firm, the Gramophone Co. While Fred Gaisberg was on a recording field trip to the Far East in 1902, Will brought the temperamental opera star Francesco Tamagno in to record, paying him the first royalties of the record industry. He was a victim of a World War I gassing, which occurred as he was making the first on-site documentary recording (of a gas shell bombardment near Lille, France). He died in England.

GALLAGHER AND SHEAN

American vaudeville team of 1910–1925, consisting of Ed Gallagher (1872–1929), and Al Shean (1868–1949), makers of the highly popular disc “Mr. Gallagher and Mr. Shean” (Victor 18941; 1922), from the *Ziegfeld Follies of 1922*. The record was thought by some to have certain offensive lyrics, which were deleted in certain reissues, e.g., Veritas VM-107. In its original version the record sold nearly a million copies.

GALLI-CURCI, AMELITA (18 NOV 1882– 26 NOV 1963)

Italian coloratura soprano, born in Milan. A piano student at first, she graduated with a first prize in that instrument from the Milan Conservatory in 1903. She taught herself to sing, in part by listening to herself on cylinder records. On 26 Dec 1906 she made her opera debut as Gilda in *Traviata*, then sang throughout Italy, South America, and Europe. When World War I started she moved to the U.S., making a sensational debut with the Chicago Opera on 18 Nov 1916 as Gilda, and then at the Metropolitan on 14 Nov 1921 as Violetta; she remained with the Metropolitan until 1930, singing the Italian/French repertoire. Galli-Curci died in La Jolla, California, where she had retired.

After a rejected test recording for Edison in 1912 or 1913, she worked for Victor, doing 14 arias in



Galli-Curci recording in London in the teens. © Bettmann/Corbis

1916–1917, another eight in 1918–1919, four more in 1920–1921, and about 25 between 1922 and 1924. In the electric era she did another 25 Victor discs. Her first Victor was “Caro nome” (74499; 1916), which remained one of her most popular renditions (reissued on HRS 2011). Another great success was “Sempre libera,” from the 1918–1919 group (64820; also reissued on HRS 2011). The 1927 Victor catalog had 33 items by her; 26 were in the 1940 catalog. Many LP reissues appeared, on Victor, HMV, and Camden labels. Nimbus released a CD (17806) of many favorites in 1990, and Pearl issued two CDs in 1997–1998 (9435 and 9450). Romophone has reissued her complete Victor recordings on 3 two-CD sets and one final CD (81003, 81004, 81020, 81021), made between 1916 and 1930.

GALVANIC, MARIA (1874–2 NOV 1949)

Spanish soprano, born in Granada. She studied at the Conservatory in Madrid, and made her debut in Cartagena as Lucia in 1897. She was engaged by the Real in Madrid for two seasons, doing Lucia, other Donizetti and Bellini roles, plus Ines in *L’Africaine* and the Queen in *Huguenots*. In 1901 she was heard in Italy and Russia, and the next year in Buenos Aires.

Her career took her through Europe, but she did not appear in the U.S. She died in Rio de Janeiro.

Galvanic’s earliest recordings were for G&T in Milan, 1903; she sang “Caro nome” (#53293, with HRS reissue 2011), and three other arias. She made Pathé cylinders in 1905, and more G&T discs in 1907–1908. Among the finest recordings were “Prendi l’anel,” from *Sonnambula*, a duet with Fernando De Lucia (G&T 054217; 1908, reissued on IRCC 64), the *Dinorah* “Ombra leggera” (G&T 53307; 1903 and Victor 82222, with an HRS reissue #1010). A nonoperatic song, “L’incantatrice” by Arditì (G&T 053165; 1908), and the *Lucia* mad scene (G&T 053181; 1908, with IRCC reissue) are two other remarkable interpretations.

GALWAY, JAMES (8 DEC 1939–)

Born in Belfast, North Ireland, Galway has achieved international fame both as a classical and popular flutist, through solo tours and recordings. Galway began playing classical flute as a child, and by the age of 10 won a place in the prestigious Belfast Youth Orchestra. His talent earned him scholarships at both London’s Guildhall School and then the Paris Conservatoire. While studying, he played in the Sadler

Wells Opera orchestra and also in other venues. In 1969, he was invited to join the Berlin Philharmonic. He became a solo touring artist in 1975, and three years later had a pop hit with his instrumental version of John Denver's ballad, "Annie's Song." That same year, he published his autobiography. Galway has continued to record a mix of Irish traditional, popular ballads, and classical selections, including a 1991 hit with his instrumental version of "Wind Beneath My Wings." He has also collaborated with a range of other artists, including folk fiddler Jay Ungar and guitarist Molly Mason on the 2002 release, *A Song of Home* (RCA Victor 68833). In 2001, he was knighted.

CARL BENSON

GAMAGE (LABEL)

A department store record issued by the A.W. Gamage, Ltd. of London in 1924. Material was from Aco-Homochord; it was mostly dance music. [Rust 1978.]

GAMBLE AND HUFF

American songwriter-producers Kenny Gamble (b. 11 Aug 1943-) and Leon Huff (b. 8 Apr 1942-) pioneered the Philly Sound, a precursor to disco, in the late 1960s and early 1970s, particularly on their own label, Philadelphia International, for which they created hits by the O'Jays, Harold Melvin and the Blue Notes, Teddy Pendergrass, the Three Degrees, and others. By the late 1970s, their style was in popular decline, but they had already scored dozens of major hits.

WILLIAM RUHLMANN

GAP

In tape recording, the space between the record head and the tape. In open-reel recording the normal gap is between 100 and 500 microinches. In cassettes the normal gap is 50 microinches. To minimize distortion, especially in higher frequencies, the gap has to be absolutely straight.

See also **Gap Alignment**

GAP ALIGNMENT

The adjustment of the magnetic gap in tape recording. Adjustment in relation to the direction of tape motion is called azimuth alignment; the desired angle is exactly 90 degrees, and even a slight deviation results in loss of high frequency response. Lateral alignment refers to adjustment of the gap parallel to the plane of the tape. Pole face alignment refers to the rotation of

the contact surface in a plane, at right angles to the direction of tape motion.

GARAGE ROCK

The genre proved to be a viable vehicle for the rock star dreams of American youth in the 1960s. For every television and movie teen idol fabrication (e.g., Rick Nelson, James Darren, Annette Funicello, Connie Francis, Frankie Avalon, Fabian) — propped up by Brill Building compositions and studio production wizardry inspired by the likes of Phil Spector and Norman Petty — thousands of heartland teens belonged to bands dedicated to churning out covers of the leading instrumental, surf, and pop hits of the day at local school dances, mall promotions, and church socials. The recording careers of most were limited, at best, to regional pressings that were generally ignored even by hometown radio stations. However, the energy and passion of the best of these bands — many of whom honed their chops in the garages of their parents' suburban homes — combined with distinctive songwriting skills, enabled the Count Five ["Psychotic Reaction"; Double Shot 104; 1966; #5], the Knickerbockers ["Lies"; Challenge 59321; 1965; #20], the Seeds ["Pushin' Too Hard"; GNP Crescendo 372; 1966; #36], the Shadows of Knight ["Gloria"; Dunwich 116; 1966; #10], the Thirteenth Floor Elevators ["You're Gonna Miss Me"; International Artists 107; 1966; #55], and others to transcend the limitations of low-fi production values and amateurish management, thereby providing the impetus for the 1970s punk revolution and the indie/alternative rock movement beginning in the 1980s.

Although originally inspired by the leading instrumental and surf touring bands of the late 1950s and early 1960s — most notably the Champs, Johnny and the Hurricanes, the Ventures, Dick Dale and the Deltones, the Trashmen, the Astronauts, Paul Revere and the Raiders, and the Kingsmen — later ensembles would be influenced by the pop songcraft of the British Invasion artists (the New Colony Six's "I Will Always Think About You" [Mercury 72775; 1968; #22], and "Things I'd Like to Say" [Mercury 72858; 1968; #16]), the beat poetry and antiestablishment stance of folk-rock (Mouse and the Traps' "Public Execution," the Leaves's "Hey Joe" [Mira 222; 1966; #31]), and sonic experimentation and hippie fashion statements of psychedelia (the Electric Prunes' "I Had Too Much to Dream" [Reprise 0532; 1966; #11], and "Get Me to the World on Time" [Reprise 0564; 1967; #27]). Still other bands — particularly the Standells, who enjoyed some measure of chart success with "Dirty Water" (Tower 185; 1966; #11), "Sometimes Good Guys Don't Wear White" (Tower 257; 1966; #43), "Why Pick on Me" (Tower 282; 1966;

GARBER, JAN

#54), and "Can't Help But Love You" (Tower 348; 1967; #78) — drew heavily upon soul music conventions in attempting to express perpetual teen angst in the face of social conformity, the demands of authority figures, and general hormonal frustration.

The flood of creative garage band releases slowed to a trickle by the late 1960s, due to tightened radio playlists, changing social mores (which elevated issues such as drugs and the Vietnam War to the forefront), and the transition of former band members to college life and the military draft. In the early 1970s, however, the genre enjoyed a revival spurred by the release of various installments of the *Nuggets* compilations (Sire 3716; 1972; later volumes issued by Rhino), followed by the *Pebbles* (AIP) series.

FRANK HOFFMANN

GARBER, JAN (5 NOV 1897–5 OCT 1977)

American violinist and big bandleader, born in Morristown, Pennsylvania, on 5 Nov 1897. He played violin in the Philadelphia Orchestra; then directed a military band during World War I. He and pianist Milton Davis formed the Garber-Davis Orchestra in 1921, and recorded for Columbia and Victor until 1924; the first item was "O sole mio" (Columbia A-3792; 1921). The style of this band was on the "hot" side, resulting in a few jazzy records, like "Steamboat Sal" (Victor 19175; 1923). Garber then formed his own orchestra in 1924, which gradually became a sweet band, and achieving great popularity on radio in the 1930s as the "Idol of the Air Lanes." Garber recorded prolifically, for Victor, Decca, Vocalion, Okeh, and Brunswick; Lee Bennett was the featured vocalist. The band appeared in two Hollywood films, *Here Comes Elmer* (1943), and *Make Believe Ballroom* (1949). Garber was active through the 1950s. Material has been reissued on various labels, including Hindsight; his early, more jazz-oriented sides are available on *The Hot Years, 1925–30* (The Old Masters 119).

GARDE REPUBLICAINE BAND

A French military band, formed in 1852 and directed first by Monsieur Paulus. Winner of international competitions and successful in world tours, the band held a high place among ensembles that made early recordings. Victor recorded the band in 1904, making 19 discs; the first was "La rentrée à Paris" (#4113). Other pieces were marches, waltzes, and operatic excerpts. A popular record was "La Marseillaise" (#4120), which remained in the catalog along with three other numbers into the 1940s. The group also recorded for Pathé under director Gabriel Pares in 1912.

GARDEN, MARY

(20 FEB 1874–3 JAN 1967)

Scottish soprano, born in Aberdeen. She was brought to Chicago as a child, and studied violin and piano as well as voice. She went on to study in Paris, and made her debut as Louise at the Opéra Comique on 10 Apr 1900. Claude Debussy chose her, over Materlinck's objections, to sing in the premiere of *Pélleas et Melisande* (1902). Back in America, she sang Thais at the Manhattan Opera Co. on 25 Nov 1907, and was the first U.S. *Mélisande* on 19 Feb 1908, gaining acclaim as a superb singing actress. Garden returned to Chicago in 1910 to begin a long association with the opera there (her last appearance being 24 Jan 1931). During 1921–1922 she was impresario of the company. After her semiretirement in 1930, she taught at the Chicago Musical College; then moved back to Scotland in 1939. She died in Inverurie.

Garden made her first recordings for Pathé in London in 1903; beginning with "Comin' through the Rye" (cylinder #50088), and five other Scottish songs. Then she worked for G&T in Paris, in 1904, recording first the aria "Mes longs cheveux" of *Melisande*, accompanied by Debussy at the piano (#33447). Three Edison two-minute cylinders were made in Paris, 1905. From 1926 to 1935 she made records for Victor, one of the most popular being "Depuis le jour" (#6623); however, none were carried to the 1938 catalog. She also made successful discs for Columbia from 1911 to 1914, e.g., "Liberté" from *Jongleur de Notre Dame*, and "Il est doux, il est bon" from *Herodiade* (#A5289); these remained in the catalogs through the 1930s. Altogether she made 30 record sides and three cylinders. Romophone has reissued her complete Victor recordings made from 1926 to 1929 (81008).

GARDNER, SAMUEL

(25 AUG 1892–23 JAN 1984)

Russian violinist, an infant immigrant to the U.S. He studied in Boston, and became a member of the Kniesel String Quartet in 1914. When that group dissolved in 1917, Gardner formed the Elshuco Trio (with Richard Epstein, piano, and Willem Willeke, cello). Gardner made only a few records. For Victor he played "Long, Long Ago" (#17888) and other songs and arrangements, none of which remained long in the catalog. He was heard also on four Edison cylinders, two of which had works by Fritz Kreisler. [Lewis 1985.]

GARLAND, JUDY

(10 JAN 1922–22 JAN 1969)

American popular singer and actress, born Frances Ethel Gumm in Grand Rapids, Michigan. At the age

of two she was appearing in vaudeville acts with her parents, and she went on to become a juvenile star in Hollywood. Between 1935 and 1950 she made about 30 motion pictures for MGM, notably musicals with Mickey Rooney, and *The Wizard of Oz* (1939); her recording of "Over the Rainbow" from the *Wizard* was her greatest success on disc (Decca 2672; 1939). "I'm Nobody's Baby" (Decca 3174; 1940), and "For Me and My Gal" with Gene Kelly (Decca #18480; 1942) were other outstanding interpretations. Garland recorded for Decca from 1936 through the early 1950s, although some of her soundtrack material after World War II came out on MGM. She made several successful albums for Capitol in the mid-1950s, beginning with *Miss Show Business* in 1955 and then the classic *Judy* a year later (with arrangements by Nelson Riddle; Capitol 734). Her later albums were primarily cut live, where she was most comfortable performing. Her 1961 release *Judy at Carnegie Hall* (1569; reissued on CD as 27876) won five Grammys, spent an astonishing 95 weeks on the pop charts, and helped relaunch her career as a stage performer. Her last major success was 1967's *At Home at the Palace* (ABC 620), recorded live in London. She died in London two years later. Her daughter, Liza Minelli, became an internationally famous actress and singer.

Garland's recordings are available on CD in various compilations as well as rereleases of her original albums of the 1950s and 1960s. Her complete Decca recordings were reissued in 1994 on a three-CD set (MCA 11059), and her Capitol recordings from 1955 to 1965 are anthologized on the two-CD set *Classic Judy Garland* (Capitol 39281; 2002). Twenty-three of her soundtrack recordings from 1936 to 1963 are gathered on *The Best of Judy Garland in Hollywood* (Rhino 75292).

REV. CARL BENSON

GARNER, ERROLL (15 JUNE 1921–2 JAN 1977)

American jazz pianist and composer, born in Pittsburgh. He had no formal training in music, but began playing on radio at age seven, then in clubs and on riverboats in the Pittsburgh area. In 1944 he went to New York to perform with various groups, forming his own trio in 1946. The first of many European tours was in 1948. In the 1950s and 1960s he was a featured artist on television. He continued to tour through 1975, when he was diagnosed with pneumonia. Two years later, he died in Los Angeles.

Garner's inimitable style of playing included subtle syncopations and complex chord structures. He composed about 200 songs, notably "Misty," which became his hit record (Mercury #70442;

1954). Other great Garner discs include "Laura" (Columbia 39273; 1951), and "Lullaby of Birdland" (Columbia 39996; 1953).

Garner recorded for many labels through his long career, often recording for two different labels at the same time — including Blue Note (1944), Savoy (1945–1949), Dial (1947), Atlantic (1949–1950), Columbia (1950–1960), Mercury/EmArcy (1954–1963), MGM (1964–1966), and others — and most of these recordings have been reissued on CD, both in rereleases of the original albums and in various compilations. The Classics label has been reissuing his complete recordings in chronological order, to date reaching 1950. [Doran 1985.]

GASKIN, GEORGE J (1863–1920)

Irish/American tenor, born in Belfast. Coming early to the U.S., he sang in churches and in vaudeville, and was a member of the Manhasset Quartet. He began recording in 1891, for the New Jersey Phonograph Co., and went on to inscribe his "strident, piercing voice" (Walsh) for all the major labels. He had 41 records in the 1896 Columbia cylinder catalog. In the late 1890s Gaskin was a prolific Edison artist, with about 100 cylinders made; he sang popular items like "Annie Laurie" (#1503), "Sally in Our Alley" (#1540), and "Sweet Rosie O'Grady" (#1551). Gaskin made the first Berliner record in Montreal, "God Save the Queen," before February 1899. An earlier U.S. Berliner was "I'se Gwine Back to Dixie" (#192; 1895). He was said to earn \$25,000 a year for his appearances and recordings, but his career died out after 1900. He made a final disc for Pathé in 1916. [Brooks 1979; Moogk 1975; Walsh 1944/10 with corrections in 1952/5.]

GAUMONT, LEON (10 MAY 1864–1946)

French inventor, photographer, and motion picture producer, born in Paris. He has a place in the history of sound recording as the first person to speak publicly on film, in an address to the Societe Française de la Photographie, November 1902. Gaumont founded a company bearing his name to make and sell photographic equipment in 1885, and then was a backer and collaborator of inventor Georges Demeny — this led to the production of the film apparatus called the Bioscope in 1895. He made feature films in the early 1900s, both in London and Paris, and established branches in Germany and America. The first practical sound system for films, linking a projector and phonograph electrically, was his work; in his demonstration cited earlier the sound was faint, so he

GAY, MARIA

improved it with a compressed air amplifier. His firm used the air-jet principle to make the Elgephone disc record player (operated with a gas jet) in 1906. He also made two-minute wax cylinders.

GAY, MARIA

(13 JUNE 1879–29 JULY 1943)

Spanish mezzo-soprano, born Maria Pitchot in Barcelona. She studied in Paris, and made her debut in Brussels as Carmen in 1902; sang the same role in Covent Garden, La Scala, and at the Metropolitan Opera (3 Dec 1908). She stayed only the one season in New York, then joined the Boston Opera (1909–1917), singing Verdi, Carmen, and Santuzza, while appearing also in Chicago. She retired in 1927, taught in New York with her husband, Giovanni Zenatello, and died there 16 years later. Lily Pons was one of Gay's students, and Gay recommended her to the Metropolitan Opera.

Gay began recording in 1904 for G&T in Paris, with a song by Saint-Saens, "La brise" (#33384), "Les tringles des sœurs" from *Carmen* (#33385), and Fuentes's "La feria" (#33412). In 1905 she made one more G&T, then in 1907 she sang two Carmen arias and two Spanish songs for the Favorite label before returning to G&T in 1908–1910, doing 13 arias. Columbia (U.S.) recorded her in 1913–1914 and 1920–1921; Victor inscribed two *Carmen* pieces with Zenatello in 1930. Her 1911 recording of "L'amour est un oiseau rebelle" from *Carmen* is available on the three-CD set, *Great Singers at the Opera Houses of Europe Covent Garden, La Scala, Berlin State Opera* (Prima Voce/Nimbus 1783).

GAYE, MARVIN (2 APR 1939–1 APR 1984)

American popular singer, pianist, drummer, and songwriter, born in Washington, D.C. A minister's son, he was involved in church singing from childhood. He taught himself piano and drums, and after high school joined a vocal group, the Moonglows. Motown's Berry Gordy heard him sing in Detroit, and signed him; there was a quick success with "Stubborn Kind of Fellow" (Tamla 54068; 1962). Many hits followed; Gaye had 48 chart songs between 1950 and 1981. Among the greatest hits were "Let's Get It On" (Tamla 54234; 1973), and "Got to Give It Up" (Tamla 54280; 1977). He also recorded vocal duets, most famously with singer Tammi Terrell, who died in his arms on stage. His 1971 album, *What's Going On?* (Motown 1190; reissued on CD as Motown 530883), was a landmark for Motown for its overtly political message, addressing issues related to the civil rights movement and the Vietnam War; it is considered one of the great R&B

concept albums, and among Gaye's best work. Over the following years, his material became overtly sexual. In 1982, he made a comeback with *Midnight Love* (Columbia FC38197), featuring the hit single, "Sexual Healing," which won a Grammy. He was riding a new wave of acclaim when his father shot him to death during a family dispute. Most of Gaye's original albums have been reissued on CD, and there are several compilations of his Motown era recordings.

GAYLE, CRYSTAL (9 JAN 1951–)

Born Brenda Gail Webb in Paintsville, Kentucky, the younger sister of well-known country singer Loretta Lynn, Gayle was one of the most successful female vocalists of the 1970s. She began her career when she was 16, backing her sister and Conway Twitty. Lynn gave her sister her stage name, perhaps inspired by the country chain of Krystal hamburger stands. She made her first solo recordings at age 19, but did not crack the country charts until 1975. Three years later, Gayle scored a major pop crossover hit with her biggest and best-known song, "Don't It Make My Brown Eyes Blue" (1977; #2 pop, #1 country; United Artists 1018). However, she only had a few more pop successes in the late 1970s, and dropped off the country charts after the mid-1980s. Although no longer a major recording star, Gayle continues to perform on the country circuit.

CARL BENSON

GEDDA, NICOLAI (11 JULY 1925–)

Swedish tenor, born in Stockholm as Nicolai Ustinov. He took his mother's surname as a nom de plume; his father was a Russian who had sung in the Don Cossack Choir. When the boy was three years old his family moved to Leipzig, where his father directed the choir of a Russian Orthodox church. In 1934 they returned to Sweden.

After study in Stockholm, Gedda made his debut there on 8 Apr 1952, and went on to La Scala in the following year. Engagements followed at the Paris Opera, Covent Garden, Vienna, and the Metropolitan Opera (as Faust, 1 Nov 1957). He created the role of Anatol in Samuel Barber's *Vanessa* (1958). Gedda's repertoire has covered the tenor roles of the Russian operas as well as the German, French, and Italian works.

Among his early records were the Cavatina from *Prince Igor* and the portrait aria from *Zauberflöte* (Odeon SD6080; both in Swedish). He made two important discs for Columbia later, "Je crois d'entendre encore," and "Le rève" (#1614), and arias from *Rigoletto* and *Martha* (#1617). Gedda recorded also on LP, for Columbia and HMV, in 1954–1962. Walter

Legge, EMI recording executive, heard Gedda in Stockholm in 1952 and signed him for the HMV recording of *Boris Godunov* with Boris Christoff. He made an acclaimed recording of the Bach *B Minor Mass* for Angel, under Von Karajan. He is also heard on complete recordings of *Faust*, *Madama Butterfly*, *Carmen*, *Così fan tutte*, and the *Damnation de Faust*, all available on HMV CDs.

GEFFEN RECORDS

David Geffen founded Geffen Records in 1980, marking his reentry into the music business after a period of illness. The label quickly attracted major pop stars such as John Lennon, Donna Summer, and Elton John, and it later achieved major success by developing heavy-metal performers like Guns N' Roses and, on the DGC subsidiary, grunge rockers Nirvana. Geffen sold the label to MCA (now Universal) in 1990, although it continued to function under his name.

WILLIAM RUHLMANN

GEFFEN, DAVID (21 FEB 1943–)

American manager, record company executive, film company executive, born in Brooklyn. David Geffen rose from the mailroom at William Morris to become one of the most powerful people in Hollywood. As an agent, his first major client was singer-songwriter Laura Nyro; he became a millionaire by selling her song publishing to CBS Records in 1969. He then formed a management company with fellow agent Elliot Roberts that handled the careers of such folk-rock performers as Crosby, Stills, Nash, and Young and Joni Mitchell. In 1972, he formed Asylum Records to release the work of new clients like Jackson Browne and the Eagles. He sold Asylum to Warner Communications, Inc., for \$7 million in 1973; Asylum then was merged with Elektra/Nonesuch Records, and he became president of the combined subsidiary. Under his aegis, the company prospered, even signing Bob Dylan away from Columbia Records. (He later returned.) Geffen became vice-chairman of Warner Bros. Pictures in 1975, but he dropped out of the entertainment business due to a cancer scare in 1976. He returned in 1980 and formed Geffen Records, quickly signing such major stars as John Lennon and Elton John and developing hard-rock acts like Guns N' Roses. He also became involved in producing Broadway musicals and movies. Geffen Records had a distribution deal with Warner during the 1980s, but in 1990, Geffen sold it to MCA (now Universal Music Group) in a deal that reportedly made him a billionaire. In

1994, he, Steven Spielberg, and Jeffrey Katzenberg formed the movie studio DreamWorks, including a related record label.

WILLIAM RUHLMANN

GEISSLER, H.D.

American recording industry executive. In 1920 he was president of both the New York Talking Machine Co. and the Chicago Talking Machine Co.

GEISSLER, LOUIS FREDERICK (8 OCT 1861–14 NOV 1936)

Recording industry executive, born in Evansville, Indiana. He went into the musical instrument business in Nashville, remaining there until 1883. Then he moved to San Francisco, and became associated with Sherman Clay and Co., a major dealer in musical products. Geissler was invited by Eldridge Johnson to be general manager of the Victor Talking Machine Co. in 1906, a post he held until 1922. He remained as a director of the company until retirement in 1923. Under his guidance the firm became one of the great commercial institutions of the world, recognized for quality and a high artistic standard. He died in Fort Salonga, New York.

GELATT, ROLAND (24 JULY 1920–3 DEC 1986)

American music critic and writer on recorded sound, born in Kansas City, Missouri. He graduated from Swarthmore College and served in the U.S. Navy during World War II. Then he joined the *Musical Digest* as an associate editor, and moved to the *Saturday Review* in 1947, becoming features editor in 1948. In 1954 he became music editor of *High Fidelity*, and he was editor-in-chief of that journal from 1958 to 1968. From 1969 to 1971 he was managing editor of *Saturday Review*. Gelatt edited several years of the *Records in Review* annual published by *High Fidelity*, and wrote many periodical articles on music and the arts. He is best known for his book *The Fabulous Phonograph*, a survey history of the invention and the industry, first published 1954, and since revised twice (see Bibliography). He died in Philadelphia.

GEM (LABEL)

A record of the 1930s, pressed by Victor for the Crown Record Co. of New York, and to some extent duplicating issues of the Crown label. [Rust 1978.]

GENERAL (LABEL)



Gem label, produced in the '30s by Crown for RCA Victor as a budget label. Courtesy Kurt Nauck/Nauck's Vintage Records



Jelly Roll Morton's version of Scott Joplin's "Original Rags" released on the General label. Courtesy Kurt Nauck/Nauck's Vintage Records

GENERAL (LABEL)

An disc produced by General Records Division of Consolidated Records, Inc., of New York. The list included some fine jazz offerings, including several by Jelly Roll Morton. [Rust 1978.]

GENERAL ELECTRIC CO.

An American firm established in 1892, the result of a merger between the Edison General Electric Co. and the Thomson-Houston Co. Thomas Edison was one of the original directors, but he left the firm in 1894. Various electric products were produced successfully. General Electric (GE) was one of the companies that participated in the establishment of RCA, then sold its RCA holdings in 1930 because of an antitrust ruling. The company was involved in development of the Panatrope, Brunswick's all-electric phonograph of 1926. It also perfected the Photophone sound film method. GE research led to one of the prototype magnetic stereo cartridges in 1958. The British affiliate, General Electric Co., Ltd., was a notable high-fidelity equipment manufacturer in the 1950s.

GE bought RCA in 1986, including the National Broadcasting Co., and including RCA Victor Records (which GE then sold to Bertelsmann). The company continues to manufacture and sell consumer audio products, including radios, televisions, and VCRs.

GENERAL PHONOGRAPH CO.

An American firm established by Otto Heineman in 1919, succeeding an earlier company, the Heineman Phonograph Supply Co. The main products were Okeh records and a line of record players. Victor brought an unsuccessful suit in 1922 over the tapered tone arm used on the General phonographs. General went into the radio business in 1922, through a subsidiary named the General Wireless Co. In 1926 Heineman sold the Okeh label to Columbia, while renaming his firm the General Phonograph Manufacturing Co.

GENERAL PHONOGRAPH CO., LTD.

A London firm established in 1907, with addresses in that year at 26 Euston Buildings on Euston Road, and at 1 Worship Street, Finsbury Square. Vertical-cut discs were sold, as well as cylinders, and a disc player named the "White," which could play both vertical cut and lateral cut records. Neophone records were handled by General. In April 1908 the firm began to shut down, and sold no more discs thereafter.

GENESIS

One of the bulwarks of the 1970s progressive rock movement, Genesis is probably better known for the solo work of alumni such as Peter Gabriel, Phil Collins, Michael Rutherford, Anthony Phillips, and Steve Hackett than for their group releases. Ironically, the edition of the band achieving major commercial success in

the U.S. was many years removed from the innovative powerhouse that won widespread critical acclaim.

Genesis was formed in Godalming, Surrey, England, in 1967 when ex-Garden Wall members Gabriel (vocals) and Tony Banks (keyboards, vocals) joined forces with bassist/guitarist Rutherford, guitarist/vocalist Phillips, and drummer Chris Stewart, all formerly of the Anon. Their early releases — including the albums *From Genesis to Revelation* (Parrot 4990; 1969), and *Trespass* (Impulse 9295; 1970) — featuring lushly textured arrangements dominated by keyboards and synthesizers, were commercial failures. Following a personnel shake-up — Hackett replacing Phillips on guitar and Collins solidifying the until then unstable percussion seat — Genesis staked out new musical territory (described by a *Stereo Review* journalist as “the Moody Blues with teeth”), centered around Gabriel’s surrealistic lyrics and theatrical flair, in a string of increasingly popular LPs: *Nursery Cryme* (Charisma 7208 552; 1971), *Foxtrot* (Charisma 7208 553; 1972; #12 UK), *Genesis Live* (Charisma 7299 288; 1973; #9 UK), *Selling England by the Pound* (Charisma 7208 554; 1973; #70 US, #3 UK), and the rock opera *The Lamb Lies Down on Broadway* (Atco 401; 1974; #41 US, #10 UK).

When Gabriel left in 1975 for a solo career, Genesis — with Collins becoming the full-time lead vocalist — retrenched a bit artistically, opting for an overly ripe, AOR-compatible sound in *A Trick of the Tail* (Atco 129; 1976; #31 US, #3 UK), and *Wind and Wuthering* (Atco 144; 1977; #26 US, #7 UK). Slimmed down to a trio in June 1977 with the departure of Hackett, the band’s recordings — most notably the albums *Duke* (Atlantic 16014; 1980; #11 US, #1 UK), *Abacab* (Atlantic 19313; 1981; #7 US, #1 UK), *Genesis* (Atco 80116; 1983; #9 US, #1 UK), *Invisible Touch* (Atco 81641; 1986; #3 US, #1 UK; which included the chart-topping title song), and *We Can’t Dance* (Atco 82344; 1991; #4 US, #1 UK) — would acquire an additional coat of production polish, thereby ascending to the upper reaches of the charts state-side. Collins himself would leave in the early 1990s to concentrate on his acting and solo recording career (he was replaced by ex-Stiltskin vocalist Ray Wilson). Since then, the bulk of the recordings issued by Genesis have consisted of live collections and retrospective anthologies.

FRANK HOFFMANN

GENNETT (LABEL)

A record issued by the Starr Piano Co., Richmond, Indiana, named for the Gennett family that owned the business from October 1917 to December 1930. For



Gennett label. Courtesy Kurt Nauck/Nauck's Vintage Records

the first year and a half the releases were vertical-cut discs, then in April 1919 lateral cuts were introduced. The records were cut with extra-fine grooves, 150 to the inch, allowing for longer playing time than the typical discs of the day: up to five minutes on a 10-inch side. Prices ranged from \$.65 to \$1.25; there was also a \$4 disc. In November 1921 the price was \$.75.

Gennett was also important because it were the first label to defy Victor and to refuse to pay a royalty to produce discs. A suit was brought by Victor, alleging infringement of Eldridge Johnson patent #896,059; the suit was dismissed in March 1921, and Victor’s subsequent appeal was denied. (The patent in question was finally ruled invalid in 1922). This opened the door to hundreds of independents issuing their own product.

Gennetts are significant because of the pioneer jazz material they offered. Masters were licensed to various other labels, e.g., Aco, Bell, Beltona, Black Patti, Black Swan, Challenge, Champion, Coliseum, Conqueror, Edison Bell Winner, Guardsman, Herwin, Homochord, Okeh, Paramount, QRS, Scala, Sterno, Superior, Tower, and Vocalion. Sears, Roebuck, and Co. used Gennett masters for its Supertone and Silvertone labels.

Important artists were recorded on the lateral-cut discs of 1919 and thereafter: Louis Armstrong, Gene Autry (discovered by the firm’s Fred Wiggins), Bix Beiderbecke, Hoagy Carmichael, Vernon Dahlhart, Johnny Dodds, Duke Ellington, Wendell Hall (“The Red Headed Music Maker”), Charles Harrison, Earl Hines, Lewis James, Sam Lanin, Guy Lombardo (his first records), Wingy Manone, Jelly Roll Morton, the

GEORGIA PHONOGRAPH CO.

New Orleans Rhythm Kings, Red Nichols, King Oliver, the Original Dixie Land Jazz Band, Muggsy Spanier, Mary Lou Williams, and the Wolverines.

Jazz recording began with the New Orleans Rhythm Kings (named at that time the Friars Society Orchestra) on 29 Aug 1922, as those eight musicians drove from Chicago to perform "Eccentric" (#5009), their first disc. They stayed two days, making five sides, and returned in a memorable spring of 1923 to make eight more sides; a week later King Oliver was in the studio with his Creole Band, recording "Just Gone" (#5133; 6 April 1923), and eight more numbers. It was the fate of Gennett, however, to lose its star performers to other labels; Wendell Hall was with them one day only; Oliver left for Okeh in June 1923, returned for another Gennett session in October, then moved among various labels. Jelly Roll Morton and the New Orleans Rhythm Kings recorded in July 1923, then Morton went over to Okeh, Paramount, and others; and the Kings went to Okeh, Decca, and others.

Poor studio conditions in Richmond and some unfortunate recording practices led to a poor quality disc during the acoustic period. With electrical recording, from 1925, Gennetts improved in reproduction and had less surface noise. "Electrobeam" was the name given to the electric records, which were recorded in New York, Chicago, Birmingham (Alabama), and St. Paul (Minnesota), as well as Richmond. Records named Starr-Gennett were produced in London, Ontario; they included Guy Lombardo's first recordings in 1924.

Gennetts are scarce today, and some are extremely rare. "Zulu's Ball" by King Oliver (#5275; 5 Oct 1923), is described by Stroff as "the rarest jazz record of all time." Hoagy Carmichael playing his "Stardust" (#6311; 31 Oct 1927), is in great demand; as is his cornet playing on "Friday Night" (#6295; 31 Oct 1927). The Wolverines' "I Need Some Pettin'" is their rarest record (#20062; 20 June 1924).

With the termination of Gennett label records in 1930 because of poor sales and the Depression, Decca acquired rights to some of the masters and shipped them overseas for reissue. In 1944 there was an unsuccessful attempt to revive the label in America, by Joe Davis, but the new jazz material released was of poor quality. Finally, Riverside purchased the entire Gennett catalog in 1953, and eventually some LP reissues appeared in the 1970s on the Milestone label, with which Riverside had merged. Riverside/Milestone was subsequently purchased by Fantasy Records. [Henricksen 1968, listing the 6000-7000 series of late 1926+; Kay 1953; Rust 1978; Record Changer Dec 1950/Jan 1951 reprinted the 1926 cumulative catalog, and listed releases in Dec 1953/Jan 1954; Robertson 1983; Stroff 1989.] (For material on the Gennett family see STARR PIANO COMPANY.)

GEORGIA PHONOGRAPH CO.

One of the 33 companies that constituted the North American Phonograph Co. It was in operation from 1890 to 1992, in Atlanta, Georgia. J.C. Clarkson was superintendent in 1890; F. Wohlgenuth was general manager in 1891-1892.

GERVILLERACHE, JEANNE

(26 MAR 1882-5 JAN 1915)

French contralto, born in Orthez. She grew up in Guadeloupe, West Indies, where her father was governor. In 1898 she began studies in Paris, and a year later made her debut at the Opera Comique, remaining until 1903. Her American debut was in New York, with Hammerstein's Manhattan Company, in 1907; she remained with that organization until 1910, then sang in Chicago, Boston, Philadelphia, and Montreal. She quickly became one of the most admired opera singers of the time, and has been referred to as the "contralto of the century." She made Victor records from 1909 to 1911, notably "Plus grand dans son obscurite" from *Reine de Saba* (#88205; 1909, and IRCC reissue #73), and her finest disc, "Chanson du tigre" from *Paul et Virginie* (#88317; 1911, also on IRCC 73). She made two Columbia records in 1914, before her death in New York.

GERZON, MICHAEL (1945-6 MAY 1996)

A notable researcher in the fields of acoustics, surround sound, digital reverberation techniques, and signal processing, and father of the ambisonic recording technique that was built on the pioneering discoveries of Alan Blumlein, Gerzon spent his childhood in Birmingham, England, and graduated from Oxford, with a degree in mathematics, in 1967. After a spell at Oxford's Mathematical Institute, he worked for 20 years as a consultant on digital audio, video, and computer projects.

In addition to his work in surround sound, Gerzon was also responsible for the theory behind the coincident, four-cardioid-capsule cluster Soundfield microphone (with matrixed "B-format" and decoded, steerable 2/4-channel outputs) that was produced by Calrec in 1975. In 1971 and 1976 he published papers on multichannel versions of the Schroder-Loagan algorithms for unitary networks, a methodology that permits the design of true stereo-in stereo-out reverb algorithms with complex directional patterns of echoes related to the stereo position of individual input sounds.

In the 1980s Gerzon moved on to digital audio and video, laying the foundation for many contemporary systems. With Peter Craven, he wrote the theory for noise shaping, which lets recording studios squeeze

higher fidelity on to compact discs (CDs). By 1992, he had published more than 100 papers on a variety of topics ranging from the digitally and mathematically arcane to how to record a typical rock-music group. In designing equipment for the consumer, he was able to bridge the gap between abstract mathematical ideals and the cost constraints of the real world. He had won an Audio Engineering Society fellowship in 1978 for his work on directional psychoacoustics, won the society's gold medal in 1991, and won the AES award for excellence in 1992.

HOWARD FERSTLER

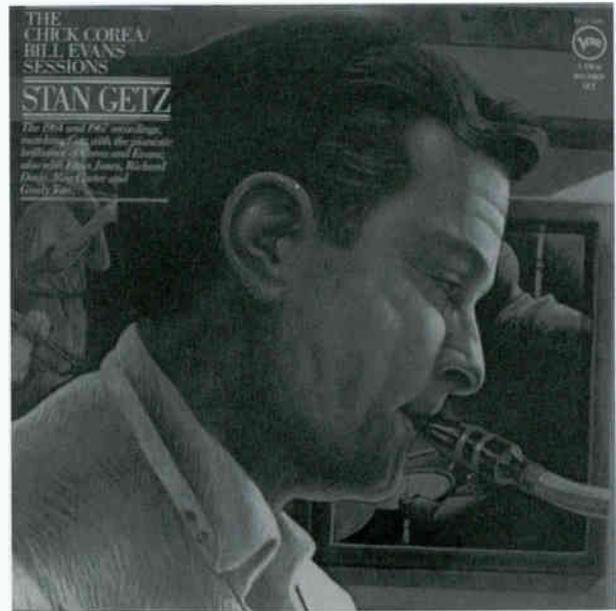
GESELLSCHAFT FÜR MUSIKALISCHE AUFFHRUNGS UND MECHANISCHE- ERVIELFLTUNGSRRECHT (GEMA)

German performing rights organization, operating (under various names) from 1903.

GETZ, STAN (2 FEB 1927–6 JUNE 1991)

Jazz tenor saxophonist, born Stanley Getz in Philadelphia. He left school at age 15 and joined the Dick Rodgers orchestra; a year later he was with Jack Teagarden, and in 1944 he joined Stan Kenton. Getz then played with the Jimmy Dorsey and Benny Goodman bands, and formed his own trio in California. He achieved wide fame from 1947 with Woody Herman, making a hit record of "Early Autumn" (Capitol 57-615; 1948). He formed a quartet in 1949, signing with Prestige Records, and then recorded for Roost Records from 1950 to 1951. Soon after, Getz formed a long-lasting partnership with producer Norman Granz, recording for Granz's Verve and related labels through the 1960s. Getz was in Denmark from 1958 to 1961. He returned to the U.S. and earned renewed popularity with his bossa nova albums. Getz scored great popular success in the early 1960s when he created a jazz-bossa nova fusion music, partnering with leading Brazilian musicians. Getz had a light tone with little vibrato, and although he flourished in the bebop era he did not partake of its rough style, preferring to stay with his own easy and elegant manner. Getz moved to major label Columbia in the mid-to-late 1970s, and then recorded for a variety of smaller jazz labels, including Concord Jazz. He continued performing and recording until his death in 1991.

Albums that illustrate Getz at his best include *Captain Marvel* (Columbia KC32706; 1972); *Stan Getz with the Oscar Peterson Trio* (1957; available on Verve CD 827826), including the remarkable "Three Little Words"; and *Stan Getz with European*



Stan Getz reissue cover from the late '80s. Courtesy Frank Hoffmann

Friends (made in Stockholm, 1983; available on Vogue CD 651-600034; including the fine interpretation of "They All Fall in Love"). Getz was awarded Grammys for his 1962 single "Desafinado" (Verve 10260), and the 1963 album *Getz/Gilberto* (Verve V-8545; CD reissue 810048), which partnered him with guitarist/singer João Gilberto and composer/pianist Antonio Carlos Jobim. His "Girl from Ipanema" (Verve 10322; 1964) from that album was the Grammy record of the year, and helped launch a bossa nova craze.

Getz's Prestige recordings are collected on *Early Stan* (Prestige/OJC 654; 2 CDs), and his complete recordings for Roost on a three-CD boxed set from Roulette (59622B). One particularly notable CD reissue is Mosaic's *Stan Getz Quintet with Jimmy Raney* (131154; 1990), three discs containing material recorded in 1951-1953. Most of Getz's original Verve albums have been reissued on CD, and in various anthologies and "best of" collections.

REV. CARL BENSON

GIALDINI, GUIDO (CA. 1883-1940)

German/American whistler. He was heard on record as early as 1907, when Odeon advertised in Britain his rendition of "The Whistling Bowery Boy" and "La Matichiche" (#34514). Transferring to America, he achieved great success on national tours and on records with Victor, Columbia, and Edison. An early hit disc, recorded in Europe, was "Tout Passe Waltz"

GIANNINI, FERRUCCIO

(Victor 52007; 1908). He made his first record in a U.S. studio in January 1911 for Columbia ("Señora" and "Song of the Wood Bird"; #A934), but made only eight records for that firm before moving over to Victor. Gialdini's repertoire for the U.S. labels was classical and light classical, without popular songs. Sixteen of his performances were issued by Victor, the last in 1913: "Love's Smile Waltz" (#17369). After falling from the catalog in 1925, Gialdini's Victors were restored in 1927. He made two Edison Amberol records, "Birds of the Forest Gavotte" (#701; 1911), and "Spring Voices" (#902; 1912). On Blue Amberols he was represented by four items, the last being "Parla Waltz" (#2742; 1915). Other American labels he worked for included Indestructible and U-S Everlasting; plus the American branch of Pathé, and one disc for Okeh. In Europe he recorded widely for many labels, on into the 1930s.

GIANNINI, FERRUCCIO (15 NOV 1869– 17 SEP 1948)

Italian tenor, one of the earliest to record operatic arias. He made his debut in Boston in 1891, and toured America with the Mapleson Company until 1894. Then he settled in Philadelphia, and was heard by Fred Gaisberg in Atlantic City, New Jersey. In Berliner's Philadelphia studio, Giannini recorded "La donna à mobile" on 21 Jan 1896 (#967), and made at least 21 other discs by 1899. Later he worked for Columbia, in 1903–1904, and for Victor and Zonophone. Two of his children became famous: Dusolina as an opera singer, and Vittorio as a composer. He died in Upper Darby, Pennsylvania.

GIBSON, DON (3 APR 1928–)

American country singer and guitarist, born in Shelby, North Carolina. He was singing professionally at age 14, appearing throughout the South and on many radio stations. From the late 1940s he was based in Knoxville, Tennessee. Gibson wrote and performed hit country songs like "I Can't Stop Loving You" (RCA 7153; 1958), and "Sweet Dreams" (RCA 7805; 1960). His most popular singles, both written by him, were "Oh! Lonesome Me" (RCA 7133; 1958), on the charts 20 weeks, and "Blue Blue Day" (RCA 7010; 1958), with 17 chart weeks. He had 70 singles on the country charts by the end of the 1970s, and also made successful duets with Sue Thompson and Dottie West. After the mid-1970s, he was less active as a recording star, although he continued to perform regularly on the road. In 2001, he was elected into the Country Music Hall of Fame.

GIESEKING, WALTER (5 NOV 1895–26 OCT 1956)

French/German pianist, born in Lyons. He began his concert career after service in the German army during World War I, playing across Europe. His American debut was in New York on 22 Feb 1926, and was soon recognized as "one of the supreme colourists of the instrument" (*Gramophone* review of CD cited below), and for his "profound and intimate interpretations" (Slonimsky). His finest performances were of Debussy, Ravel, Bach, Beethoven, Mozart, and Scarlatti. Giesecking recorded for Columbia, most notably the *Preludes* (M-352 and 382), and several single works by Debussy; Ravel's *Gaspard de la nuit* (X-141); and the Beethoven "Waldstein" Sonata (M-358). He died in London.

There are many CD reissues of Giesecking performing in both formal and informal settings. Music and Arts/Harmonia Mundi has issued several CDs of radio and public performances made by Giesecking, including *Broadcast Recitals 1949 – 1951* (743), and *Public Performances and Broadcasts from the Collection of the Deutsches Rundfunkarchiv* (four-CD set; 1070). Giesecking was famous for his interpretation of Beethoven's piano sonatas, and recorded various sonatas throughout his career. CD reissues include one drawn from recordings made in 1919 (VAIA 1088), a second from recordings made shortly before his death in 1956 (EMI 762857), and a six-CD boxed set based on 1949–1950 radio recordings (TAH 394–400). A radio performance of Bach's "Well Tempered Clavier," recorded in front of his students, is available on Deutsche Grammophon (429 929). Other reissues include EMI's complete Ravel for solo piano (574793), and *De Beethoven à Ravel* (TAH 409–412), a four-CD set drawn from various performance sources that features a lavish booklet and complete discography for the performer.

GIGLI, BENIAMINO (20 MAR 1890–30 NOV 1957)

Italian tenor, born in Recanati, the son of a poor shoemaker. He went to Rome in 1907 for singing lessons, and won a scholarship to the Academy of Santa Cecilia. In 1914 he won an international competition in Parma, and made his debut in *Rovigo* in 1914, as Enzo Grimaldo. After singing to great acclaim throughout Italy for four years, he made his La Scala debut under Toscanini on 19 Nov 1918, and his Metropolitan debut (to 34 curtain calls) on 26 Nov 1920, both times as Boito's Faust. He remained with the Metropolitan to 1932 — leaving after a salary dispute — and again in 1938/39, singing 29 roles there

(from the 60 he knew) in 375 performances. He appeared in six operatic Vitaphone motion pictures beginning in 1927. Later he made 16 full-length films in Hollywood, Italy, and Germany, and his voice was heard in several others. During the 1930s he won great popularity in London. He spent World War II in Italy, gave a series of farewell concerts around the world (the last in Washington, D.C.), and retired in 1956. He died in Rome.

Gigli is one of the three singers (the others being Jussi Björling and Giovanni Martinelli) widely regarded as the proper successor to Enrico Caruso. He had an emotional involvement with his roles, a factor that tended to produce sobs and breaks that somewhat diminished the impact of his extraordinary voice. He began to record in Milan for HMV during October and November 1918 and again in December 1919. From 1921 to 1930 his discs were made for Victor in the U.S.: 31 acoustics and 60 electrics. Between 1931 and 1954 Gigli recorded in Europe for HMV. Perhaps his finest recorded work is in complete operas and in ensembles, although the "Improviso" from *Andrea Chenier* is one of the acoustics most prized by collectors (Victor 6139; 1922), and "Una furtiva lagrima" (Victor 7194; 1929), is another favorite single. Complete operas made for EMI in Italy, with their original recording years, were *Pagliacci* (1934), *Boheme* (1938), *Tosca* (1938), *Madama Butterfly* (1939), *Cavalleria rusticana* (1940; with Mascagni conducting), *Andrea Chenier* (1942), *Ballo in maschera* (1943), *Aida* (1946), and *Carmen* (a film soundtrack, 1949). Felicitous casting of these sets has made many of them definitive recordings; e.g., the *Boheme* with Licia Albanese, and the Puccini works with Maria Caniglia. All have been reissued on EMI CDs. There are also numerous CD releases of his early Victors, on Pearl and EMI; and various recitals on Conifer, Legato, Suite, Joker, and other labels. The British Romophone label hopes to issue his complete recordings in chronological order; CD sets completed to date cover 1918–1938. [Tesoriero 1990 includes lists of the LP and CD reissues; *Record Collector* 1990 has a discography.]

GILBERT AND SULLIVAN OPERAS

This group of works by Sir William Schwenck Gilbert (1836–1911) and Sir Arthur Sullivan (1842–1900) has a separate article here because of its recording history. From 1906 to 1950 there were 29 complete recordings of 10 operettas; no other stage composer received such intensive attention (Verdi is second, with 24 complete recordings of eight operas). Most of the 78-rpm recordings have had LP and CD reissues. *Mikado* was recorded first, in 1906 in London for G&T (#3–2476,

3–2491, 3–2493, 3663, 4407/14); Peter Dawson sang the title role, and appeared in many later recordings.

Among the other singers who became identified with the Gilbert and Sullivan repertoire on stage and record were Elsa Sinclair, Ernest Pike, Willie Rouse, Derek Oldham, Violet Essex, George Baker, Muriel Harding, Darrell Fancourt, and (most famous of all) Martyn Green. Sir Malcolm Sargent directed some of the finest recordings, in 1928–1932, with the D'Oyly Carte Opera Co.; EMI has reissued these on CD. Beginning in 1949, The D'Oyly Carte Opera Co., directed by Isidore Godfrey, remade the entire repertoire for the new LP era; these are available on CD through Decca. In 1958, a third series of D'Oyly Carte recordings of the complete works commenced, some now with dialogue along with the songs. Meanwhile, Malcolm Sargent assembled a team of singers, along with the Pro Arte Orchestra and the Glyndebourne Festival Opera Chorus, to record the entire repertoire in the 1950s. [Francis 1989 lists the 78-rpm complete recordings; the website <http://www.cris.com/%7Eoakapple/gasdisc/>, gives a complete discography.]

GILLESPIE, DIZZY

(21 OCT 1917–7 JAN 1993)

Jazz trumpeter, born in Cheraw, South Carolina, as John Birks Gillespie. At age 18 he moved to Philadelphia and played with local groups, then joined Cab Calloway in 1939. In 1941 he teamed with Ella Fitzgerald, Benny Carter, Charlie Barnet, Earl Hines, and Billy Eckstine; then formed a successful big band in 1946 (to 1952). Gillespie played with various ensembles through the 1960s, 1970s, and 1980s. In 1990 he attended ceremonies at the Kennedy Center, Washington, D.C., and received that institution's merit award. He is one of the most influential of jazz trumpeters, having been — with Charlie Parker — a prime innovator in the bebop movement. Gillespie continued to tour and record until a year before his death.

Gillespie's first record was "San Anton" (Bluebird 36988; 1937), with Teddy Hill's orchestra. In 1939, with Calloway, he recorded four pieces for Vocalion. "Billie's Bounce," with the Charlie Parker Beboppers, typifies his work of mid-1940s (Savoy MG 12079; 1945). Other outstanding discs of that period were "Woody 'n' You" (Apollo 751; 1944), and "Salt Peanuts (Manor 5000; 1945). He made a famous series of recordings in 1945–1946 for the New York-based Musicraft label, including seven classic recordings with Charlie Parker (among them the first recordings of "Salt Peanuts" and "Groovin' High"). A 1946 record of Jazz at the Philharmonic, "Crazy Rhythm," teamed Gillespie with tenor saxophonists Charlie Ventura and Lester Young, and pianist Mel Powell

GILLHAM, ART

(Disc 2003). He assembled a star team for his sextet in 1951 and recorded for his own Dee Gee label (which operated briefly between 1951–1952), e.g., “Lady Be Good” (#3602), then for the Vogue label in 1952; among the sextet members were Art Blakey, John Coltrane, and Milt Jackson. The Vogue CD 600047 chronicles Gillespie’s European appearances of 1953: *Dizzy in Paris*. Gillespie recorded for various labels through the 1950s, primarily for Norman Granz’s family of labels (Verve, Clef, Norgran), although also for Savoy and Atlantic. He moved to Philips in the early 1960s, and then in 1974 was reunited with Norman Granz at Granz’s new label, Pablo. He continued to record and perform widely up to his death.

There is a wealth of Gillespie material available on CD, including reissues of many of his original albums, and compilations of various sorts. His early recordings for Manor, Musicraft, Prestige, Savoy, and Dee Gee have been reissued many times on various labels, both domestic and foreign. His complete RCA recordings made from 1939 to 1949 are collected on a two-CD boxed set (Bluebird 66528; 1995), showing the evolution both of bebop and Gillespie’s nascent interest in Latin jazz. Recordings made for Norman Granz’s labels from 1950 to 1964 are anthologized on the three-CD set, *Dizzy’s Diamonds* (Verve 314–513875; 1992). [Koster 1985 has the 1937–1953 discography; Jepsen 1969 has the issues of 1937–1952; Shipton 1999 is a complete biography, and features a discography.]

GILLHAM, ART

(1 JAN 1895–6 JUNE 1961)

American popular pianist and composer, born in Georgia. His family was from Atlanta, Georgia, but he was born in St. Louis while they were traveling. When Gillham was five years old, the family settled in St. Louis, where his mother taught piano. As a teen, he went to the West Coast in search of dance-band work. He was nicknamed “The Whispering Pianist” because he sang along in a whisper as he played. An early radio artist, he played on the election night program for President Calvin Coolidge (4 Nov 1924) with Will Rogers officiating. He was heard on WBBM, Chicago, from 1932 to 1937. His first recordings were made for Gennett (unissued) in May 1924, followed by sessions for Pathé; some of his Pathé recordings were issued on the disc name of “Fred Thomas.” Gillham was a Columbia performer from 1924 to 1931, beginning with “How Do You Do” (238D; 1924). His best sellers were “You May Be Lonesome” (328D), and “So Tired” (1282D). He recorded more than 40 of his own compositions. Gillham also had the distinction of being the first artist to make an electrical recording, on February 25, 1925, in a test session for Columbia. On 24 July

1930 he made four sides with Benny Goodman, the most interesting being “Confessin’ That I Love You” (Columbia #2265). Gillham’s last recordings were made in the early 1950s for King, and he continued to work on Atlanta radio until he suffered a heart attack in 1955. He died at his home outside of Atlanta in 1961. [Walsh 1957/9; website: lwhisper.home.mindspring.com/ArtGillham.html.]

REV. CARL BENSON

GILLILAND, EZRA TORRANCE (1848–13 MAY 1903)

American inventor and record industry executive, born in Adrian, Michigan. He was a telegraph operator during the Civil War, and then became interested in the telephone. Among his inventions were the telephone switchboard, and the exchange. Gilliland was for many years in charge of the Bell Telephone Company’s laboratory in Boston, and he was one of the organizers of the Western Electric Co. He became an associate of Thomas A. Edison and general agent for the Edison Phonograph Co. in 1887. He made the first working model of the new type of Edison phonograph, based on the 1878 British patent, and developed other Edison ideas. As payment for his work, Edison gave Gilliland exclusive sales rights in the U.S. on Edison products. The Gilliland (Edison) Sales Co. was established to handle those transactions in June 1888. Gilliland patented the Spectacle device, which permitted an easy switch from record to playback mode on the phonograph (U.S. #386,974), and made improvements on it; it was used until after 1900 on Edison business machines. A financial imbroglio led to a break with Edison, and to a sale of the Gilliland stock to Jesse H. Lippincott in June 1888 for \$250,000. He became associated with the Automatic Phonograph Exhibition Co., and secured a patent on a coin-op for them (#443,254) in 1890. Gilliland died in Pelham Manor, New York. [Koenigsberg 1990; Read 1976.]

GILMORE, PATRICK S.

(25 DEC 1829–24 SEP 1892)

Irish/American bandmaster, born in County Galway. He moved first to Canada, then to Salem, Massachusetts. In 1859 he organized Gilmore’s Band, and became with it “the first American bandmaster to gain international fame” (Brooks). He was with the Union Army in the Civil War, and composed the classic “When Johnny Comes Marching Home” under the pseudonym of Louis Lambert. He gained acclaim for directing huge forces at the Peace Jubilees of 1869 and 1872, the latter with a chorus of 20,000 and an orchestra of 2,000. His band

toured Canada, the U.S., and Europe. After he died, in St. Louis, Victor Herbert directed the band and made recordings with it. Gilmore began recording in 1891 for Edison. His band was heard on brown wax cylinder #2, doing the "Coronation March" from *Prophète*, and on other marches as well as a medley of college songs (#35). In 1896, the band recorded for Columbia.

GIRARD, GILBERT (CA. 1868–1910)

Animal imitator, storyteller, singer, clown, comedian, trapeze performer, born in San Francisco. This versatile entertainer recorded for many labels in 1901–1902, most notably with Len Spencer in "A Scene at a Dog Fight," and "Imitation Chinese Song," both for Columbia, where he worked until 1921. He also teamed with Russell Hunting, Steve Porter, and the American Quartet. His later Victor and Columbia records include material for children about Santa Claus (1920–1922). His last recording was "Duck's Quack" for Edison in 1923. [Walsh 1948/2.]

GIRARDI, VITTORIO (ALEXANDER) (5 DEC 1850–20 APR 1918)

Italian basso, born in Graz, Austria, heard in the opera houses of Moscow, St. Petersburg, and Buenos Aires, who recorded virtually the entire bass repertoire for Bettini cylinders: 32 items are listed in the 1899 catalog. He died in Vienna.

GIRL GROUPS

With the exception of the teen idols, girl groups were the only genuinely distinctive genre to peak in the early 1960s. The genre owed its success largely to the 1959 payola investigations, combined with increased attacks on rock 'n' roll's alleged bad influence on teenagers. These factors stimulated a change in image and musical focus among record companies and radio disc jockeys. Radio's efforts to clean house led to the concentration of power in the hands of the program director who, in turn, adopted national playlists and a tightened Top 40 format. There was a resulting decline in regional hits produced by small record labels; the pop music industry was driven by the ongoing search for the next big trend. Heavy reliance on proven formulas became the *modus operandi* as the balance of power shifted to a select group of record executives, studio producers, staff songwriters, and media personalities.

Girl groups proved to be one of the more successful formulas to be mined again and again by those labels committed to the youth market. Music historians have sometimes fallen prey to a revisionist perspective of

that era, which interprets the rise of girl groups — and female performers in general (e.g., Connie Francis, Brenda Lee, Lesley Gore) — as early evidence of the increasing assertiveness of women in the workplace and within society in general. However, the girl groups were strongly manipulated by powerful men who were well-connected within the record industry. Successful girl groups were prized largely because they were easily pliable, generally submitting to outside control with a minimal display of rebellious attitude. The younger the performers, the more likely they were to accept the strict order of the system. This, at least in part, explains why few groups were able to sustain a successful recording career beyond a hit recording or two.

The Chantels were the first girl group to rise above the one-hit wonder status, which had limited the impact of acts such as the Paris Sisters ("I Love How You Love Me," Gregmark 6; 1956), the Teen Queens ("Eddie My Love," RPM 453; 1955), and the Poni-Tails ("Born Too Late," ABC-Paramount 9934; 1957). The group — originally a quintet whose members were all classmates at Saint Anthony of Padua School in the Bronx — were discovered backstage at an Alan Freed rock 'n' roll revue by Rama/Gee/Gone record producer Richard Barrett while waiting to meet their idol, Frankie Lyman (of the Teenagers). The Chantels's second release, "Maybe" (End 1005; 1958), proved to be a seminal event in the girl group genre featuring lead vocalist Arlene Smith in one of the most searing and honest vocal performances ever. The disc's dramatic intensity and steady sales profoundly influenced musicians and producers for years to come.

The Shirelles were the first girl group to achieve both artistic and commercial success following in the stylistic path established by the Chantels. When the Shirelles's first few releases made little impact, producer Luther Dixon decided to sweeten up their heavily R&B sound through the use of strings. He first achieved success with the West Indian-inflected "Tonight's the Night" (Scepter 1208; 1960), followed by the Carole King/Gerry Goffin composition, "Will You Love Me Tomorrow" (Scepter 1211; 1060). The latter song was a hit around the world, remaining number one for five weeks on the U.S. singles charts. The arrangement — featuring swirling strings accented by a snare drum figure that inverted the traditional rock beat and added on a slight rhythmic shuffle — spurred record industry movers and shakers to emulate its techniques. In addition, its success drove home the idea that the right song, combined with the right singer, arranger, and producer, represented the best blueprint for making a pop record.

While the Shirelles were recording a long string of hit singles (most notably "Soldier Boy" [Scepter 1228; 1962; #1]), many other competitors were attempting to

GIULINI, CARLO MARIA

interpret the formula in their own ways. Producer Phil Spector was building his own roster of girl groups on the Philles label and many of Berry Gordy's biggest hits for the Motown-Tamla-Gordy (aka the Motown Sound) combine were recorded by all-female aggregates. Don Kirshner and his Aldon publishing company, located in the heart of the Brill Building complex in Manhattan, supplied songs to many record companies who, in turn, matched them up with contracted girl groups. By 1962, his firm had 18 writers on staff between the ages of 19 and 26, including the Barry Mann-Cynthia Weil, Gerry Goffin-Carole King, and Neil Sedaka-Howard Greenfield teams. In addition, a number of record companies achieved success in large part due to girl group recordings, including Red Bird-Blue Cat (founded by the songwriting team of Leiber and Stoller), Cameo-Parkway, Chancellor, Jamie-Guyden, and Swan.

The decline of the girl group sound was a product of a complex chain of events. Although the British Invasion dominated the media in 1964, girl-group records continued to sell well. Mary Wells, the Dixie Cups, the Supremes, and the Shangri-Las resided at the top of the charts for a quarter of the year, while major hits were recorded by the Ronettes, Martha and the Vandellas, Lesley Gore, the Jelly Beans, and numerous others. More importantly, the innocent romanticism of the girl-group sound seemed out of step with an era colored by the assassination of John F. Kennedy, Vietnam, and the civil rights movement. With many of the key composers and producers turning to other pursuits, the public grew tired of the weak girl group recordings flooding the market. Finally, psychedelic rock, soul, Motown, the singer-songwriters, folk-rock, and the surfing sound provided stiff commercial competition.

Despite the relatively short duration of the girl group sound, its legacy continues to shine brightly. The classic songs of the genre — e.g., "The Locomotion" (Little Eva, Dimension 1000; 1962), "Will You Love Me Tomorrow," "Da Doo Ron Ron" (Crystals, Philles 112; 1963) — have regularly been revived by contemporary stars, while its stylistic features have been recreated by countless other performers. New Wave girl groups (e.g., the Go-Gos, the Bangles), the riot grrrl movement, and pop confections like the Spice Girls all represent variations of the original mold. [Betrock 1982.]

FRANK HOFFMANN

GIULINI, CARLO MARIA (9 MAY 1914–)

Italian conductor, born in Barletta. He studied violin as a boy, then viola and composition. He played viola in the

Augusteo Orchestra in Rome (and after World War II became its conductor). He was chief conductor of the RAI Orchestra in Rome, 1946, and principal conductor at La Scala in 1954. Giulini gathered critical praise at the Edinburgh Festival in 1955 and for his appearances with the Chicago Symphony in that year. He was named associate conductor of the Chicago Symphony in 1971, conductor of the Vienna Symphony Orchestra in 1973, and conductor of the Los Angeles Philharmonic in 1978, remaining there until 1984.

Giulini recordings received Grammy awards in 1971 and 1977 (Mahler's First and Ninth symphonies, with the Chicago Symphony), and in 1980 (the Mozart *Requiem* with the Philharmonia Orchestra). Among his other distinguished recordings are the Tchaikovsky Sixth Symphony (Japanese EMI EAC 30296; 1959), the Brahms First Symphony (Japanese EMI EAC 30297; 1961), and the Dvorák Eighth Symphony (Japanese EMI EAC 30298; 1962), all with the Philharmonia Orchestra.

GLASS, LOUIS (6 AUG 1845–12 NOV 1924)

Record company executive, a native of Maryland; he went to California in 1868 as a telegraph operator. He became general manager of the Pacific Phonograph Co. and the West Coast Phonograph Co., as well as one of the directors of the Spokane Phonograph Co. He developed the coin-op cylinder player (U.S. patent #428,750; filed 18 Dec 1889; granted 27 May 1890), and installed the first of those devices in San Francisco. There were hundreds on location by 1890. Glass was also active in the telephone industry, serving as vice president and general manager of the Pacific States Telephone and Telegraph Co., and later organizer and president of the telephone system in the Philippine Islands. He died in San Francisco.

GLEASON, JACKIE

(26 FEB 1916–24 JUNE 1987)

Brooklyn native Jackie Gleason left an inestimable legacy in a wide range of entertainment fields, including standup comedy/master of ceremonies in the live theater circuit, radio (both as a disc jockey and actor), Broadway shows, stage, film, and television, the latter including specials, variety shows, sitcoms, and numerous guest appearances. Surprisingly, his contributions to the recording industry — most notably pioneering easy listening or mood music as well as the newly emerging album medium — are considerably less known to the contemporary public.

By the time Gleason had become a best-selling recording artist, he was already a show business

legend. He was already closely identified with music, having appeared in musicals such as *Follow the Girls* and *Along 5th Avenue* beginning in the late 1930s, as well as the peak years of TV's "vaudeo" format. His forays into the record studio were not merely an effort to capitalize on the high-profile Gleason name; rather, he was a talented middle-brow composer and band-leader interested in sound recordings as a powerful medium for communication.

Gleason's earliest hit recordings were the singles, "Melancholy Serenade" (Capitol 2361; 1953; #22), a self-penned million-seller, and "Terry's Theme from *Limelight*" (Capitol 2507; 1953; #30). He would go on to much greater success, though, with album releases. One of the early superstars of the genre, he placed 17 titles on the charts between 1955 and 1969, including the Top 10 hits *Music To Remember Her* (Capitol 570; 1955; #5), *Lonesome Echo* (Capitol 627; 1955; #1), *Romantic Jazz* (Capitol 568; 1955; #2), *Music for Lovers Only/Music to Make You Misty* (Capitol 475; 1956; #7), *Music to Change Her Mind* (Capitol 632; 1956; #8), and *Night Winds* (Capitol 717; 1956; #10).

Gleason's work was easily recognizable for its dreamy, reflective feel; his studio orchestras included world-class soloists such as trumpeters Bobby Hackett and Pee Wee Erwin. Although he was most successful leading his Society Dance Orchestra, he also produced records as a pianist with bass and drums accompaniment and recreating his famous comic characterizations. While an audience has always existed for the middle-of-the-road style of music, his efforts were commercially eclipsed in the 1960s by the distinctive "cascading strings" sounds of Mantovani and more upbeat arrangements of Percy Faith, Henry Mancini, and other Hollywood-based conductors.

FRANK HOFFMANN

GLENN, WILFRED (20 APR 1881– 26 JUNE 1970)

American bass, born on a ranch in the San Joaquin Valley, California. He did concert and church work, and became renowned both for the sonority of his voice and for its range (two and a half octaves, beginning at C below the bass clef). Glenn began recording, with choral groups, for Columbia around 1909. He appeared on Victor records from 1913, beginning with "Song of Steel" (#17182). His best-known disc was "Asleep in the Deep" and "Rocked in the Cradle of the Deep" (Victor 17309); there were nine other titles in the 1917 Victor catalog. Glenn organized the Shannon Four in 1917, and the Revelers in 1925. In the late 1920s he made records as Charles Aubrey for

Vocalion, with Al Bernard, then was less active. He died in Charlottesville, Virginia.

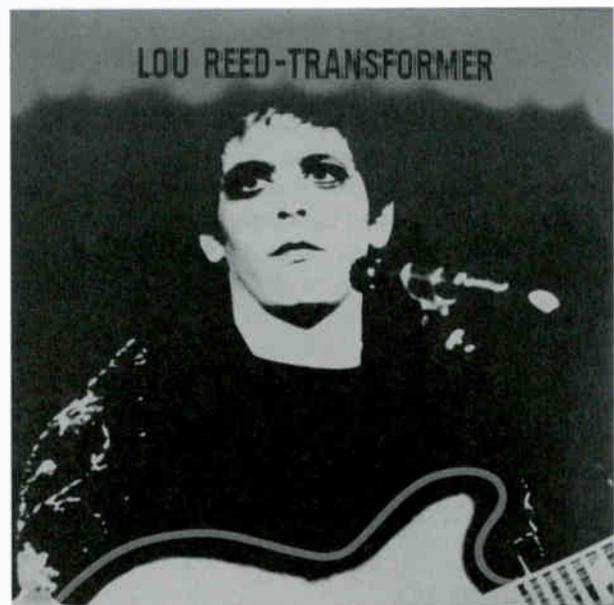
GLITTER ROCK

The genre, sometimes termed "glam," had its origins in the further exploration of the 1960s sexual revolution. In addition to its pronounced sexual ambiguity (most notably T. Rex front man Marc Bolan, Eno), artists expressed themselves through fashion (e.g., the futuristic decadence of Ziggy Stardust-era David Bowie), and the exaggerated theatrics of Alice Cooper, Queen, and other essentially mainstream acts.

Musically, glitter amounted to immaculately produced hard rock. Stylistic variants included pop rock — Gary Glitter's "Rock and Roll Part 2" (Bell 45237; 1972; #7), and Sweet's "Little Willy" (Bell 45251; 1973; #3), the *New York Dolls* (Mercury 675; 1973; #116), and Slade's "Mama Weer All Crazee Now" (Polydor 15053; 1972; #76), and progressive rock (e.g., Roxy Music's *Avalon*, Warner Bros. 23686; 1982; #53).

Glitter rock lost considerable momentum when its shock value was ultimately preempted by genres willing to push theatrical conventions and fashion statements further to the edge. By the latter half of the 1970s, most fans had defected to either the disco or heavy metal camps. Many glitter exemplars outlived the genre's heyday, typically reclassified as AOR acts. [Romanowski and George-Warren 1995.]

FRANK HOFFMANN



Lou Reed at the height of his "glam" look. Courtesy Frank Hoffmann

GLOBE (LABEL)

GLOBE (LABEL)

An American record, a subsidiary of Arto until 1922; then independent until ca. 1930, drawing on material from Grey Gull. The material was dance and popular vocal for the most part, designed for sale in chain stores. [Rust 1978.]

GLOBE RECORD CO.

A firm established by the Burt Co. on 1 Aug 1901 as a disc presser for Columbia's Climax label. The venture may have been backed by Edward Easton of the Columbia Phonograph Co. Columbia lost its early supplier of (Zonophone) disc records when the National Gramophone Corporation failed in September 1901. The first Climax records were without labels, and showed no connection with Columbia. Only the paper-labeled records that followed indicated a contractual arrangement with Columbia. Eldridge R. Johnson and Leon Douglass bought Globe on 15 Jan 1902. American Graphophone brought suit against Globe, under the Jones patent #688,739 of 1901, leading to a settlement in which Johnson (Victor) and Columbia shared their patents. Globe Record Co. was acquired by Columbia in this arrangement. However, no further issues of the Climax record were made after 1902; Columbia then began to use its own name for its disc label.

GLOBE RECORD CO., LTD.

A British firm that sold the "New Empire Record" (10-inch, flexible) in 1931. Lido was another of the company labels.

GLOBE RECORD DISTRIBUTING CO.

A New York firm of 1922–1923. In October 1922 the firm, identified then as the Globe Distributing Corp., advertised Globe Records at \$.65 each, describing them as "practically free from surface sounds." The records, of popular song and dance material, were also said to "play twice as long as any other." M.E. Schechter was president of the firm, which did not advertise after March 1923.

FRANK ANDREWS

GLORY (LABEL)

A King subsidiary of the 1950s, presenting gospel songs and other religious material.

GLUCK, ALMA

(11 MAY 1884–27 OCT 1938)

Romanian/American soprano, born in Bucharest as Reba Feinsohn. She was taken to the U.S. as a child,

and studied voice in New York. Her debut was in *Werther* on 16 Nov 1909. She sang with the Metropolitan Opera on 23 Dec 1909, in *Orfeo*, under Arturo Toscanini. A Victor artist, she had about 75 numbers in the 1917 catalog; among the most popular were duets with Enrico Caruso (from *Traviata*, 3031) and Louise Homer ("Barcarolle," 87202), and many other ensemble pieces. Her best seller was not operatic, but "Carry Me Back to Old Virginny," (6141), which was the first Victor Red Seal record to sell over a million copies; she also recorded Stephen Foster songs, and even "Aloha Oe" with the Orpheus Quartet (6143). Gluck married violinist Efrem Zimbalist in 1914. After the birth of her children, Marie (1915) and Efrem Jr. (1918), Gluck found it increasingly difficult to perform; she made some recordings between 1920 and 1924, but none were released. She gave her last performance on the radio in 1929. Her daughter Abigail, under the pen name Marcia Davenport, wrote a fictional biography of her mother entitled *Of Lena Geyer* (1936). Gluck died in New York. There are various reissues on CD available of Gluck's original 78-rpm recordings. A two-CD collection of Gluck's recordings from 1911 to 1918, including duets with Homer and Caruso, has been issued by the Marston label. Nimbus/Viva Voce (7904) and Pearl (9268) have both issued single CD retrospectives.

GOBBI, TITO (24 OCT 1913–5 MAR 1984)

Italian baritone, born in Bassano del Grappa. A man of diverse abilities, he was an athlete and alpinist, then studied law in Padua before taking up singing. His first operatic appearance was in 1935, near Perugia; he was then heard in Rome (1937) and La Scala (1942). Gobbi's American debut was in San Francisco in 1954, after which he joined the Chicago Lyric Opera. His Metropolitan Opera debut was in his most acclaimed role, Scarpia (13 Jan 1956). Among his hundred roles the others best appreciated were Rigoletto, Iago, Figaro, Falstaff, Macbeth, and Don Giovanni. He retired in 1979, and died in Rome five years later.

Gobbi appeared in numerous complete opera recordings, including the major Puccini and Verdi works, and *Barbiere di Siviglia*, *Tosca*, *Nabucco*, and *Rigoletto* are available on CD. [Steane 1979; <http://archivio.opera.it/English/Cantanti/D-gobbi.html> gives a discography of Gobbi's recordings on CD as of 1996.]

GODOWSKY, LEOPOLD

(13 FEB 1870–21 NOV 1938)

Lithuanian/American pianist, born near Vilnius. At age 14 he was a student in the Berlin Hochschule für Musik; then he moved to the U.S. and made his Boston debut in 1884, going on to perform in Canada and

Europe. Returning to the U.S., he became an American citizen, and taught in New York, Philadelphia, and Chicago, while making world concert tours. He retired following a stroke sustained during his final recording session (1930), and died in New York. Godowsky recorded for Brunswick and U.S. Columbia from 1913 to 1926, and for British Columbia from 1928 to 1930. Modern critics regard Godowsky's playing as uneven, with the best results in Chopin and Debussy. Appian released a CD of his major recordings in 1989 (7010). Godowsky's performances of Chopin are available on Hyperion (a two-CD set of *The Complete Studies of Chopin's Etudes*; 67411), and Polygram (*Great Pianists*, also a two-CD set, featuring Chopin's nocturnes, piano sonatas, and other works (456805).

GOLD RECORD

Late in the year 1941, the Glenn Miller Orchestra, fronted by feature vocalist and saxophonist Gordon "Tex" Beneke, performed the song "Chattanooga Choo Choo" in the movie *Sun Valley Serenade*. The movie faded away but the song exploded. In less than three months more than a million copies of the record were sold. In an effort to reward Miller — and call attention to its own success — RCA Victor took one of the master copies of "Chattanooga Choo Choo," and sprayed it with gold lacquer. On 10 Feb 1942 the music company surprised Miller during a live radio broadcast with the "gold record." It was the first gold record ever awarded to a recording artist.

The actual award recognized today as a Gold Record was not initiated for another decade or so when the Recording Industry Association of America (RIAA) borrowed the publicity stunt and trademarked the Gold Record. The first Gold Record single was awarded to Perry Como in 1958 for his recording of "Catch a Falling Star." The first Gold Record album was earned by Gordon McRae and the cast of *Oklahoma!* for its soundtrack release.

The RIAA has established the benchmark for a Gold Record as the sale of 500,000 units. Units are defined as sales through retail outlets, record clubs, rack jobbers, and all ancillary markets that legally distribute music. Sales of a million units is recognized by a Platinum Record and, if appropriate, a Multi-Platinum Record. In 1998 the RIAA initiated the Diamond Record awards that honor sales of 10 million copies of an album or single.

To be certified with a Gold Record the record label must request an independent sales audit for each title. An accounting firm employed by the RIAA then calculates the number of records or albums shipped for sale versus those distributed free for promotional purposes and then begins tracking sales and store returns for the life of the release. When a title's sales reach the

requisite minimum number of 500,000 sales, a Gold Record is awarded.

The actual Gold Record was originally an off-white linen plaque displayed in a wood frame. A mini-cover of the album or replica of the record was mounted next to the certification of dedication. In 1985 a hologram was added to prevent unauthorized duplication of the coveted Gold Record. After the hologram was introduced the traditional style of the awards was altered to allow record companies to customize its awards. For the Diamond Record, designer Wayne Yenawine crafted a 12-inch-high lead crystal award.

To date, 58 artists and 78 titles representing nearly one billion in album sales have been awarded a Diamond Record. The top-selling album of all time is *The Eagles' Greatest Hits 1971–1975* with 26 million copies sold to date. The only other albums to surpass 20 million in sales are *Thriller* by Michael Jackson, *The Wall* by Pink Floyd, *Led Zeppelin IV* by Led Zeppelin, and Billy Joel's collection of *Greatest Hits*.

The RIAA also tracks career sales, which enabled the organization to declare the top-selling artists of the 20th century. The Beatles rank as the most successful recording act of all time with sales of 106 million albums (in the United States only; other countries have their own measuring standards). The top-selling solo artist is Garth Brooks with sales of 89 million albums.

DOUG GELBERT

GOLDBAND (LABEL)

Louisiana-based label founded by musician/music store owner Eddie Shuler of Lake Charles. He began the label to issue his own band's records in 1944, and then recorded Cajun accordionist Ivy LeJune. He went on to record many leading Cajun/zydeco musicians, including Rockin' Sidney and Boozoo Chavis, as well



Eddie Shuler in the Studio of Goldband Records. Courtesy Goldband Records

GOLDEN, BILLY

as early recordings by (future) country stars Jimmy C. Newman and Freddie Fender, and the first recordings by 13-year-old Dolly Parton. The label's archives are housed at the University of North Carolina's Southern Folklife Collection. [Website: <http://docsouth.unc.edu/sfc/goldband.>]

GOLDEN, BILLY

(9 JUNE 1858–29 JAN 1926)

American vaudeville singer and comedian, born in Cincinnati. He started doing a blackface act in 1874, and in 1878 teamed with John Merritt. Golden's first records were Columbia cylinders of ca. 1893, beginning a 30-year recording career for many labels. He may have been the first artist to record for Berliner. His best-selling recording was "Turkey in the Straw," cited by Walsh as "an infectious masterpiece"; he inscribed it for many labels, beginning with Berliner #726x (9 Dec 1896), and sold millions of copies. Victor's 1927 catalog still carried it (#17256), the only survivor from the "40 Golden Titles" in the catalog of a decade earlier. Other important work was in duets with J. Hughes, such as "Clamy Green," and "Bears' Oil," which had enormous sales. Golden's last records were for Columbia in 1922. [Brooks 1979; Walsh 1944/6.]

GOLDEN (LABEL)

One of the earliest records issued from the West Coast, by the Golden Record Co., Los Angeles, from 1922.



Golden label, one of the first operating on the West Coast. Courtesy Kurt Nauck/Nauck's Vintage Records

Material was dance and popular music; pressing was done by the Starr Piano Co. Constance Balfour and a Mme. Aldrich were among the artists. [Rust 1978.]

GOLDIE (1965–)

Born Clifford Price (although this is disputed in some sources) in Wolverhampton, England, Goldie spent his childhood drifting between foster families and children's homes. Inspired by New York graffiti culture and England's northern soul dance scene, which merged hard funk and lush melodies, he became a covert to the style of hip-hop espoused by Afrika Bambaataa. He began experimenting with the recording medium in the early 1990s, releasing a series of hardcore techno dance tracks between 1993 and 1995.

His first album, *Timeless* (ffrr; 1995) quickly sold more than 100,000 copies, bringing the ambient jungle/drum and bass genre into the pop music mainstream. Now revered by British club followers and attracting the interest of Brian Eno, David Bowie, and other avant-garde artists, Goldie further refined his sensually symphonic approach in the double CD, *Saturnz Return* (ffrr; 1998). Widely criticized for its length (over 150 minutes), he issued a truncated version, *Ring of Saturn* (ffrr; 1998), later in the year.

As demand for his services continued to escalate, Goldie began working with an increasing number of musicians. A two-disc collection of his collaborations, *Incredible Sound of Drum 'n' Bass Mixed by Goldie* (Ovum Ruffhouse C2K 63924; 2001), was released in America by Columbia. In addition to administering his a record label and dance club, Metalheadz, he was working in the film medium — both as an actor and producer — at the outset of the 21st century.

FRANK HOFFMANN

GOLDMARK, PETER CARL

(2 DEC 1906–8 DEC 1977)

Engineer and inventor, born in Budapest. He was a grandnephew of the composer Carl Goldmark, and son of a chemist and inventor. His interests combined music and science; he played piano and cello, and set up a chemistry laboratory at home. He studied in Berlin and took a doctorate in physics in Vienna, beginning the study of television that occupied much of his life. He worked as an engineer in Britain, then in 1933 moved to the U.S., becoming associated with CBS in 1936. His greatest achievements with Columbia were the development of color television transmitters and receivers, and the creation of the vinyl long-playing microgroove record. Goldmark and his staff also developed improvements in record turntables, a lightweight

tonearm, and a sapphire needle. He was director of engineering research and development at CBS from 1944 to 1950 (interrupted for wartime research on radar), then vice president for engineering research and development (1950–1954), and president of the CBS Laboratories from 1954 until his retirement in 1971. He held about 160 patents of his own, in addition to proprietary developments at CBS. Goldmark was also a university faculty member at Yale and the University of Pennsylvania. He died in Harrison, New York.

GOLDNER, GEORGE (1918–15 APR 1970)

Born in New York City, Goldner ran a number of New York nightclubs catering to Latin music fans beginning in the late 1940s, which led him into the record business. His first label was founded in 1948. Called Tico, after the Latin hit “Tico Tico,” the label featured New York-based Latin jazz artists including Tito Puente, Joe Loco, and Machito. In 1953, seeing the growth of interest in R&B music at his clubs, Goldner founded Rama records. His first hit came with the doo-wop song, “Gee,” by the Crows (# 2 R&B, #14 pop, 1954; Rama 5). Goldner quickly took the name of this hit and gave it to his next label, Gee, which hit it big with a release by another local doo-wop group, Frankie Lymon and the Teenagers, with “Why Do Fools Fall in Love?” (#6 pop, #1 R&B, 1956; Gee 1002).

By this time, Goldner had sold a 50 percent interest in his labels to another New York club owner, Joe Klosky. Klosky was already in business with Morris Levy, and brought Goldner along in January 1957 to form Roulette Records. By April, Levy and Klosky had pushed Goldner out of the business. Following his ouster, Goldner formed End Records. Its first release was “He’s Gone” by the girl-group the Chantels (#71 pop, 1957; End 1001). Goldner began a related label, Gone, featuring the Dubs with “Don’t Ask Me to be Lonely” (originally issued on the Johnson label and purchased by Goldner, who continued to issue records by the group for the next two years). Meanwhile, he released “Tears on My Pillow” by Little Anthony and the Imperials (#4 pop, 1958; End 1027).

By the early 1960s, Goldner had sold the End and Gone labels to Levy at Roulette and briefly left the record business. But he returned in 1965 to run Mike Lieber and Jerry Stoller’s new label, Red Bird Records. Its first release, “Chapel of Love” (#1 pop, 1964; Red Bird 001), by the Dixie Cups, was a number one pop hit, but the label folded within a year. Goldner’s last label was Firebird Records formed in 1970; however, he died of a heart attack that April in New York, so the label never really got off the ground.

CARL BENSON

GOLDRING MANUFACTURING CO., LTD.

An audio maker originally located in Leytonstone, London, maker of quality four-speed transcription turntables and cartridges in the 1950s, e.g., the Goldring 500 cartridge. The company continues to make high-quality cartridges into the 21st century, including the 1000 series, Elite, and Eroica. Its factory is now located in Bury Saint Edmunds, Suffolk.

GOLDSTAR STUDIO

Located in Hollywood at the intersection of Santa Monica Boulevard and Vine Street, Goldstar Studio was established by Stan Ross and Dave Gold in 1950. Built around a customized four-input console to permit recording directly to acetate disk, sessions ran the gamut in the early 1950s, including demos and broadcast airchecks.

The facility became a music industry landmark when Phil Spector began producing his sessions there in 1962, resulting in hits such as the Crystals’s “He’s a Rebel” (Philles; 1962; #1), the Crystals’s “Da Doo Ron Ron” (Philles; 1963), the Ronettes’s “Be My Baby” (Philles; 1963; #1), and the Righteous Brothers’s “You’ve Lost that Lovin’ Feelin’” (Philles; 1965). Other notable projects were executed at Goldstar as well, most notably the best-selling albums by Herb Alpert and the Tijuana Brass, the Beach Boys, and film soundtrack work by Dimitri Tiomkin.

The studio was razed by fire in the early 1980s. However, Spector’s legendary “Wall Of Sound” recordings have rendered it an icon of the “Back To Mono” movement.

FRANK HOFFMANN

GOLDSTEIN, KENNETH S. (17 MAR 1927–11 NOV 1995)

Born in New York City, Kenneth Goldstein worked as a statistician for Fairchild Publications in the late 1940s as he developed an interest in Anglo-American folk music. In 1951 he began producing records for the Stinson company, which totaled 85 within five years, including Josh White, Sonny Terry and Brownie McGhee, Woody Guthrie, and the *Folksay* series. At the same time he began producing for Elektra Records, and for Riverside by mid-decade. For the latter he compiled the influential nine-disc *The English and Scottish Popular Ballads* (RLP 12–621/629), by Ewan MacColl and A.L. Lloyd, as well as Reverend Gary Davis and Pink Anderson,

GOLDWAX (LABEL)

Gospel, Blues, and Street Songs (RLP 148); these albums illustrated his eclectic interests and musical reach. He also recorded numerous contemporary performers, often in his home, where he also did much of his own editing. He started work on his Ph.D. in folklore at the University of Pennsylvania in 1958, where he wound up teaching (1963–1993), but he continued to produce records for the Prestige Bluesville series, as well as Folkways and Vanugard, before his retirement from record production in 1962, with a total of approximately 530 albums over a 10-year period for 13 record labels. Each Goldstein album also included detailed liner notes, with considerable detail about the songs and artists, demonstrating his role as both fan and scholar. Goldstein was one of the most influential folk record producers of the 1950s, in particular introducing songs and performers from the British Isles to an American audience, as well as capturing a plethora of traditional and contemporary musicians. [Goldstein 1993; Navarez 1996.]

RONALD D. COHEN

GOLDWAX (LABEL)

The Memphis-based Goldwax label was founded in 1964 by former hardware salesman Quinton Claunch and pharmacist Doc Russell. Tishomingo, Mississippi, native Claunch was born in 1922 and played in a country band on radio station WLAY, Muscle Shoals, Alabama. Following a move to Memphis in 1948, he continued to moonlight as a musician, playing guitar and composing for Sun Records. In 1957, he established the Hi label along with a number of associates before selling his interest in the company in 1959.

The initial Goldwax release, "Darlin'" (Goldwax; 1964), by the Lyrics — already featuring the distinctive yellow label with black printing, the "o" being a 45-rpm drawing — was a regional hit. Focusing on soul music with distribution by New York's Bell Records, the company achieved its greatest success with O.V. Wright and James Carr, both former members of the gospel trio, the Redemption Harmonizers. Wright recorded "That's How Strong My Love Is" (Goldwax; 1964), which achieved classic status via covers by Otis Redding, the Rolling Stones, the Hollies, and other leading 1960s acts.

Although the Houston-based Peacock label claimed to have Wright under contract as a member of the Sunset Travelers, Carr proved even more successful, scoring nine soul hits, most notably "You're Got My Mind Messed Up" (Goldwax 302; 1966; #63, #7 R&B), the Dan Penn/Chips Moman standard, "At the Dark End of the Street" (Goldwax 317; 1967; #77, #10 R&B), and "A Man Needs A Woman" (Goldwax 332;

1968; #63, #16 R&B). However, the highly regarded singer — whose *James Carr* (Goldwax 3001; 1967) and *A Man Needs A Woman* (Goldwax 3002; 1968), were the only albums known to have been issued by the company — was unable to realize his full potential, suffering from bouts of mental illness.

Goldwax also reached the soul charts with the Ovation's "It's Wonderful to Be in Love" (Goldwax 113; 1965; #61, #22 R&B), and "Me and My Imagination" (Goldwax 314; 1967; #40 R&B). The group would make a greater sales impact during the early 1970s with MGM.

The company would shut down operations in 1969 because the owners had trouble working together. In the mid-1980s, Memphis businessman Elliott Clark acquired the master tapes of the 1960s material and reformed Goldwax with Claunch as president. Claunch's skill in handling deteriorating tapes has much to do with the impressive sound quality of the reissued CDs. In the early 1990s, the label opened a Nashville office, and moved its headquarters to Atlanta later in the decade.

FRANK HOFFMANN

GOODALL, CHARLES STANLEY (31 MAY 1934–)

One of the industry's more accomplished recording engineers, Goodall went to work for Decca in 1949, becoming involved in a variety of engineering tasks. During the period between 1953 and 1957, he refined his knowledge of disc cutting, starting with 78-rpm acetates, moving on to 45-rpm discs, then to the LP. In 1957 he began working on experimental stereo cutting. He was one of three individuals on the staff who cut all of Decca's early stereo releases.

Between 1959 and 1965, he was promoted to senior cutting engineer, and became responsible for the final versions of all Decca stereo releases, including the first of the Vienna Solti *Ring* recordings. In 1966 he moved temporarily to London Records of Canada (in Montreal) to train their resident cutting engineer and help standardize U.K. and Canadian disc-cutting practices. In 1968, he returned to England, worked as a location engineer, and also began working as a balance engineer, arranging studio set-ups, microphone techniques, and mixer operation. In 1970, he was given the responsibility of working with the Academy of St. Martins in the Field, beginning a long and successful association with the orchestra, Neville Marriner, and the Argo label. After being promoted to senior balance engineer in 1975, he recorded numerous works for Decca and Argo, and in 1980, after Decca was taken over by Polygram, he began a three-year association with the Boston Pops Orchestra and John Williams.

Other long-term associations include the Radio Orchestra Berlin and the San Francisco Symphony Orchestra, plus similar long-term arrangements with solo artists such as Vladimir Ashkenazy, Dietrich Fischer-Dieskau, Birgit Fassbinder, and Jorge Bolet. Goodall also has worked with the Chicago Symphony, the Concertgebouw, and the Montreal Symphony. Individual performers include Murray Perahia, Joshua Bell, Joan Sutherland, Marilyn Horne, and Luciano Pavarotti. In 1985, he also co-engineered Decca's first all-digital recording, "Blue Skies," with Kiri Te Kanawa and Nelson Riddle. Goodall officially retired in 1994, although he freelanced for Decca for two more years on 10 different projects. During his career he has won numerous awards for his technical accomplishments, including three Gold Record awards, the Gramophone Magazine award, and many European awards. Recordings he has worked on have received four technical Grammy nominations; two of them won (1994 and 1996).

HOWARD FERSTLER

GOODMAN, BENNY (30 MAY 1909–13 JUNE 1986)

American clarinetist and big bandleader, born in Chicago as Benjamin David Goodman. He had some instruction at Hull House, and was playing professionally at age 12. In 1922 he was with the Austin High School Gang, a year later with Bix Beiderbecke. He joined the Ben Pollack band and went with him to New York, remaining with the group until 1929. Thereafter, he played in various bands, mostly Pollack's again, and Ben Selvin's, before forming his own band in 1934. Fortunate in having Fletcher Henderson as arranger, the band achieved great renown in a short time, especially at the month of concerts they gave in Los Angeles during summer 1935 (regarded by many critics as the beginning of the "swing era"), and on his radio program *Let's Dance* (1934–1935). Among the famous artists he engaged for the band over the years were Louis Belson, Bunny Berigan, Ruby Braff, Billy Butterfield, Sid Catlett, Charles Christian, Pee Wee Erwin, Ziggy Elman, Bud Freeman, Lionel Hampton, Harry James, Gene Krupa, Mel Powell, Jess Stacy, Dave Tough, and Cootie Williams. Eddie Sauter was another of his outstanding arrangers.

In 1935 Goodman, already the "King of Swing," formed his great trio with Teddy Wilson and Krupa; later, he created other chamber-size groups with brilliant partners: his quartet, quintet, and sextet. During the later 1930s Goodman brought jazz and swing to a new distinction by performing at Carnegie Hall (16 Jan 1938), and also became the first jazz instrumentalist to excel in

the classical repertoire (having studied with Franz Schoepp and Reginald Kell). Bartók's *Contrasts* was his commission, and he premiered it in Carnegie Hall (1939); he also played and recorded the Mozart Clarinet Quintet with the Budapest Quartet. At the same time Goodman was busy in radio and motion pictures. But he was not in harmony with the bebop era, and when the big bands began to falter after World War II his prominence was diminished, although he did make his first million-sales disc in 1947, "On a Slow Boat to China" (Capitol 2347). The band was dispersed in 1948, and he was thereafter an independent artist, playing for U.S. State Department world tours through the 1960s, and performing on television and in clubs. He died in New York. The motion picture, *The Benny Goodman Story* appeared in 1956.

Goodman's earliest recording session, for Victor in Chicago on 14 Sept 1926, brought no issues. "Deed I Do" (9 Dec 1926), was the first record released with Goodman on it, and his first solo was a week later: "He's the Last Word" (Victor 20425; 17 Dec 1926), with Ben Pollack's band. His series of great hit records began with "After You've Gone," a trio performance with Krupa and Wilson (Victor 25115; 1935). Among other outstanding discs were "King Porter Stomp" (Victor 25090; 1935), "Lady Be Good" (Victor 25333; 1936); "Moonglow" (Victor 25398; 1936), by the quartet, which added Lionel Hampton to the trio; "Bach Goes to Town" (Victor 26130; 1938). "Why Don't You Do Right" with Peggy Lee's vocal (V-Disc 233; 1942), and "Sheik of Araby" (V-Disc 366A; 1944) by the quintet. Martha Tilton was the band's vocalist in splendid songs like "This Can't Be Love" (Victor 26099; 1938), and "And the Angels Sing" (Victor 26170; 1939). Goodman left Victor for Columbia in 1939, and then in 1944 went to Capitol, where he recorded through 1955 before rejoining Columbia. In 1950, Columbia issued two LPs drawn from a live concert held at Carnegie Hall in 1938, and it became an immediate bestseller (it was later inducted into the Grammy Hall of Fame; reissued in a "complete" form by Columbia/Legacy [65143] on a two-CD set in 1999). Renewed interest in Goodman reached its height with the 1955 biopic starring Steve Allen as Goodman. The Goodman band continued to record and tour in the U.S. and Europe, although it was less active after the mid-1960s.

Goodman's work is available on CD in a many different forms over the years. A single CD retrospective, *Sing, Sing, Sing* (Bluebird 5630), gives a good overview of his Victor recordings from 1935 to 1939; *The Complete Small Group Recordings* (RCA 68764), a three-CD set issued in 1997, captures all of the official takes, and 20 alternates, for Goodman's famed trios and quartets. His wartime V disc recordings have

GOODMAN, PAUL

been reissued on a four-CD set by Collectors' Choice Music (3592). His Capitol recordings are anthologized on a Blue Note CD (21145). His Columbia albums from the mid-1950s through mid-1960s have mostly been reissued in their original formats, and there are various "hits" collections drawing on this material. Yale University, recipient of Goodman's master tapes of unreleased concert and studio recordings through his bequest, began in 1989 to issue CDs in a series named *The Yale Library* on the MusicMasters label. [Connor 1988.]

GOODMAN, PAUL (16 FEB 1927–)

One of America's most accomplished recording engineers, Goodman graduated from high school in June of 1945, worked at the Tung-sol electric works from the summer of 1945 until enlisting in the army in September 1946. He was assigned to the American Forces Network (AFN) in Hoechst, Germany, where he worked as a recording and broadcast technician, and began to learn his trade. After leaving the army in 1948, he attended Newark College of Engineering for two years, and then went on to work at various radio stations in the New York area, as well as at the United Nations, where he helped staff the communications section during the General Assembly meetings. During this time, he also had a chance to study at the RCA Institute in New York City. While at the Institute, his growing talents were recognized and he was hired by RCA Records in 1956 as a mastering technician. Within two years he was moved into the "live area" as an editing, rerecording, and live engineer, and also went on to edit many of the opera recordings RCA had recorded in Rome and England. As a staff RCA engineer he also recorded material for many other recording companies, including Columbia/Sony, Bridge, Muse, Atlantic, Musical Heritage Society, New World, Nonesuch, Deutsche Grammophon, and Angel, and also did some work for PBS. He retired from RCA in 1992.

Goodman has recorded most of the major ensembles in the U.S., including the Boston Symphony, the New York Philharmonic, the Philadelphia Orchestra, the Chicago Symphony Orchestra, the Dallas Symphony Orchestra, and the Saint Louis Symphony Orchestra. He has also recorded numerous Broadway shows, including *42nd Street*, *The King and I*, *Porgy and Bess*, *Into the Woods*, *Jerome Robbins Broadway*, *Fifty Million Frenchman*, *La Cage Aux Folles*, and *Anything Goes*, among many others. The artists and smaller ensembles he has recorded include Artur Schnabel, Emanuel Ax, Yo-Yo Ma, Sonny Stitt, Vladimir Horowitz, Carla Bley, John Coltrane, André Previn, Roland Kirk, Sonny Rollins, the Canadian Brass, the Cleveland String Quartet, and the Tokyo

String Quartet, among many others. He has been nominated for the engineering Grammy award an impressive 22 times and won three of those nominations: for Mahler's *Symphony Number Seven* (RCA, 1982 winner), Prokofiev's *Symphony Number Five* (RCA, 1984 winner), and the highly regarded *Horowitz: the Studio Recordings* (DGG, 1986 winner). Retired now from recording, he has been a member of the National Academy of Recorded Arts and Science (NARAS), both at the local level as well as a delegate to the national conventions.

HOWARD FERSTLER

GOODSON (LABEL)

A British record issued from 1928 to 1931, one of the earliest flexible, unbreakable discs. They came from the Goodson Record Co., Ltd., of London. An unusual feature was the lack of a paper label; title and performer data were printed on the playing surface. Content was mostly jazz and dance music, drawn from masters of Grey Gull, Emerson, QRS, and others. [Rust 1978.]

GOODY, SAM (25 FEB 1904–7 AUG 1991)

Born Samuel Gutowitz in New York City, Goody established one of the first great chains of record stores specializing in offering a deep inventory of classical, pop, and hard-to-find recordings. He opened his first retail store in the mid-1930s in New York, specializing in toys and novelties. A customer asked his assistance in locating some old 78-rpm recordings, and Goody was introduced to the world of record collectors. He began specializing in locating out-of-print and rare recordings. After World War II he became one of the first merchants to recognize the potential of the new LP record. He offered customers who spent more than \$25 on recordings a free phonograph, building an enormous, loyal customer base out of his flagship store, located on 49th Street in New York City. By the mid-1950s, this one store accounted for 7 percent of all LP sales throughout the country. Goody built his store into a chain of shops specializing in offering a wide variety of recordings to customers (as opposed to others who focused only on the latest pop releases). In 1978, he sold out to Primerica Corporation, who merged it with their Musicland chain. Changing its emphasis to smaller stores (many located in malls) focusing only on hit material, Goody grew to 320 outlets nationwide by 1991, but through the 1990s suffered from financial difficulties. Musicland/Sam Goody was purchased by the retail electronic giant Best Buy Inc. in 2000. In 2002 there were more than

800 Sam Goody Stores in the Musicland group, which also operated Suncoast Motion Picture Co. (400 shops), and Media Play (90 shops).

CARL BENSON

GOOSENS, LEON
(12 JUNE 1897–12 FEB 1988)

British oboist, born in Liverpool; brother of conductor Eugene Goosens. He played with the Queen's Hall Orchestra 1914–1924, and others in London. He joined the London Philharmonic and remained from 1932 to 1939. Goosens became the first oboist to gain an international reputation. He recorded for Edison Bell, London, in the early 1920s, and soon covered the entire significant repertoire of the instrument. In 1933 he made an important recording of the Mozart Oboe/String Quartet with the Lener Quartet (World SH-318). He died in Tunbridge Wells, England.

GORDY, BERRY, JR. (28 NOV 1929–)

American record industry executive, born in Detroit. He worked as a boxer, soldier, songwriter, and on the Ford assembly line; then established the Motown record label in Detroit in 1959; Tamla was the first label of the firm, followed by Motown. He recruited such artists as Smokey Robinson and the Miracles, the Supremes, Diana Ross, Marvin Gaye, and Stevie Wonder, who developed the new Motown style. Gordy hired a stable of studio musicians and songwriters who gave Motown acts their distinctive sound on record; he also operated his own studio, nicknamed "Hitsville U.S.A." (it is now a museum in Detroit). Michael Jackson was a star of the Motown label in the 1970s. But in the 1980s many of the early Motown artists went to other labels and replacements were not found. In 1988 the company was sold to MCA and a Boston investment company; its catalog is now controlled by the Universal Music Group.

GOTH ROCK

A postpunk style evolving out of the London club scene of the early 1980s, goth favored minor-key melodies and stark, depressing song lyrics often dealing with social disintegration and death. The cult-like scene — comprised of musicians, journalists, and fans — favored black clothing and makeup to complement the music's darker elements.

Goth's poster band, the Cure, featured foppish front man Robert Smith, whose circular guitar riffs provided an intensely brooding matrix for Smith's wry, self-absorbed lyrics (perhaps best exemplified by *Standing*

on a Beach, Elektra 60477, 1986), which attracted considerable criticism for the inclusion of the track, "Killing an Arab"). The Cocteau Twins, built around Elizabeth's Fraser's coloratura vocalizing, created darkly atmospheric soundscapes from drum machines and treated guitars and keyboards. Their *Heaven or Las Vegas* (4 A.D. 93669; 1990) represented a high watermark for the genre. Other notable goth acts included Nick Cave and the Bad Seeds, Joy Division (who morphed into techno juggernauts New Order when singer Ian Curtis committed suicide in May 1980), the arty ensemble Bauhaus, Siouxsie and the Banshees (whose limited songwriting skills were offset by an unerring talent for reinterpreting other artists' material), Lush, the mildly psychedelic Sisters of Mercy, and hardcore exemplars. [Romanowski and George-Warren 1995.]

FRANK HOFFMANN

GOTHIC RECORDS (LABEL)

Begun in 1978 by George Dickey in New York City, Gothic continues to specialize in organ music recorded in a variety of different locales all over the world, performed by a number of fine artists, including Frederick Swann and Joan Lippincott. As such, the often state-of-the-art transcriptions released by the company eventually included a huge number of organ performances on instruments that would not ordinarily have received such wide exposure. In September of 2001, Loft Recordings purchased the company. Loft has been in business since 1997, and like Gothic, it specializes in high quality organ and choral recordings. Loft is headquartered in Seattle, Washington, and continues to develop the Gothic label and retain its identity. [Website: www.gothicrecords.com.]

HOWARD FERSTLER

GOTTEHRER, RICHARD (12 JUNE 1940–)

Born in New York City, Gottehrer was an influential pop music executive and producer from the mid-1960s through the early 1980s. He began working as a demo engineer in New York, partnering with Jerry Goldstein to produce teen-pop hits "My Boyfriend's Back" by the Angels, and "Hang on Sloopy" by the McCoys, among others. He then partnered with Seymour Stein to form Sire Records, producing the Climax Blues Band for the label. In 1975, he formed a brief partnership with producer/executive Marty Thau, leading to work with Blondie on their initial albums, as well as with downtown New York star Robert Gordon. In the early 1980s he achieved his biggest success overseeing the Go-Gos initial recordings. Later productions include work with Joan Armatrading and Richard Barone.

GOULD, GLENN
(25 SEP 1932–4 OCT 1982)

Canadian pianist, born in Toronto. At age 10 he entered the Royal Conservatory in Toronto, graduating at age 14. A specialist in J.S. Bach and other contrapuntal composers, he also admired the late Beethoven and the atonalists, but eschewed the Romantic school. Gould was known as a perfectionist, for whom every note and nuance had to be exactly placed. From that position he found public performance increasingly unsatisfactory, and after a highly successful stage career he determined in 1964 to play only for recordings. He did not hesitate to edit his recorded performances; indeed, he believed that this device could bring his work to the highest level of which he was capable. Among the remarkable discs that resulted from his isolated partnership with the recording engineers were the complete Bach works (*Goldberg Variations* won the 1982 Grammy; Gould's two recordings of the complete *Variations*, recorded in 1955 and 1981, have been reissued on CD in 2002 by Sony Classical 87703), the three Hindemith sonatas (Grammy winner in 1973), and the complete Schoenberg piano music. Only a handful of Gould's original albums have been reissued on CD, although Columbia has reissued various compilations of Gould's best performances. Gould died in Toronto.

GOULET, ROBERT (26 NOV 1933–)

American baritone, born in Lawrence, Massachusetts. His family moved to Canada in 1947, where he went to high school and then to the Royal Conservatory of Music, Toronto. He had several roles on Canadian radio and television. In 1960 he tried out successfully for the role of Lancelot in *Camelot*, and was acclaimed for his performance at the New York opening. Goulet became a national favorite on television and began a major recording career. The original cast *Camelot* album (Columbia KOL 5620; 1960), was on the charts for 99 weeks. At the 1962 Grammy ceremonies, Goulet was designated new artist of the year. From 1962 to 1967, he had 14 chart albums, of which the most popular were *Sincerely Yours* (Columbia CL 19131; 1962), *Two of Us* (Columbia CL1826; 1962), *My Love Forgive Me* (Columbia CL 2296; 1964), and *Without You* (Columbia CL 2200; 1964). Since the early 1970s, Goulet has spent much of his time on the road performing in stock company productions of Broadway musicals. He lives in Las Vegas, where he continues to perform his nightclub act.

GOURAUD, GEORGE E[DWARD].
COLONEL (c. 1842–1912)

American military officer, later a recording industry executive. He was the agent sent by Edison to the U.K.

in 1888, responsible for promoting the "improved phonograph." He brought a model to London in June 1888 and quickly got the attention of the press, then offered a demonstration for journalists at his home on 15 August 1888.

At this and other public demonstrations, prominent persons recorded their voices for the ages; among them were Robert Browning, William Gladstone, Henry Irving, Cardinal Manning, Florence Nightingale, Arthur Sullivan, and Alfred Tennyson. Publicity was highly favorable, but the mechanics of recording still held innumerable hazards, and actual sales of the phonograph were modest. He also sent out traveling agents to the provinces.

GRADUOLA

An Aeolian Co. disc player, or also an attachment for one, which permitted "tone control" via a wire cable, a system resembling modern remote control. It did not control tone in the modern sense of balancing bass and treble, but operated a valve that affected loudness. F.J. Empson, an Australian, was the inventor of the device, which he tried to market in London in 1912. Aeolian acquired it and sent it to New York, where eight years passed before the initial Graduola advertising in 1920.

GRAFTON HIGH GRADE RECORD
(LABEL)

A British record, issued as a subsidiary of Scala from ca. September 1923 to ca. December 1927. About 300 discs appeared, mostly of dance and popular music. Matrices used were Vocalion, Emerson, Federal, and Pathé. [Rust 1978.]

FRANK ANDREWS

GRAINGER, PERCY ALDRIDGE
(8 JULY 1882–20 FEB 1961)

Australian pianist, composer, and folk music specialist, born in Melbourne. He was concertizing by age 10, and in 1894 was sent to Germany for study. In 1901 he toured Britain, South Africa, and Australia. Early on, Grainger developed an interest in traditional English ballad singing, and in 1906 began recording traditional singers on cylinder in the field. In 1908, he brought some of these singers, most notably a wonderful 75-year-old balladeer named Joseph Taylor, to the studios of Gramophone Records, where several cylinders were made, among the earliest commercial recordings of traditional balladry. (Grainger's cylinders were reissued on LP in 1972 by Leader Records, and a selection

again reissued by Folktrax Records, both British folk labels.) Grainger settled in the U.S. in 1914, teaching in New York and Chicago, and performing in many cities. Grainger met Edvard Grieg, and became known for his definitive interpretation of that composer's concerto. He recorded a part of the first movement as early as 1908 for G&T; then made a Duo-Art piano roll; and rendered it best in a 1945 performance with the Hollywood Bowl Symphony under Stokowski (released by the International Piano Archives, an LP that included the 1908 fragment). But his primary fame rests with his own clever compositions as played on disc by himself or in orchestral arrangements: "Molly on the Shore," "Country Gardens," and "One More Day, My John," all on Decca A586; "Handel in the Strand," and "Shepherd's Hey." An LP (Gem 143) reissue presented Grainger playing most of his solo works. British Decca's first classical release in 1929 included one of his compositions, "Jutish Medley."

Grainger's interest in folk music had a great influence on the melodic and rhythmic aspects of his compositions, and it also led him to make early field recordings of aboriginal songs in Australia. He died in White Plains, New York.

GRAMMY AWARD

The name of a series of awards given to recording artists since 1958, by the (U.S.) National Academy of Recording Arts and Sciences (NARAS). Awards — in the form of miniature gramophones — are made in about 75 categories, for both popular and classical performances. Categories have varied over the years, with various musical genres getting their own awards, including classical, pop, rock, heavy metal, rap, R&B, gospel, Latin, polka, folk, and children's and spoken word recordings. There are also awards for best new artist, best song, and best album of the year, and best album packaging and liner notes, historical album, producer, and best engineered recording.

Winners were chosen at first by all voting members of NARAS. Since membership is open to recording musicians, the possibility of members voting for their own records was always present. A problem developed in the 1980s when the Atlanta Symphony Orchestra — an ensemble not generally accorded world-class status — began to win a large share of the classical Grammys. The orchestra took five of the 11 classical awards in 1989, for instance. Nothing illegal occurred, but there was much concern in the classical community and steps were taken to discourage block voting. In the current voting process, NARAS members, plus the record companies, offer candidates, which are then screened by a panel of about 100 experts. The expert panel sends an eligible list to NARAS members, for balloting in four general

categories and in no more than nine of 17 other fields. Five nominees are selected in each category, for another round of voting by secret ballot.

Frequent winners over the years have included (in rough chronological order of their first awards) Ella Fitzgerald, Leonard Bernstein, Georg Solti, Henry Mancini, the Boston Symphony Orchestra, Vladimir Horowitz, Erich Leinsdorf, Barbra Streisand, Robert Shaw, the Beatles, Frank Sinatra, Duke Ellington, Bill Cosby, Glen Campbell, Pierre Boulez, Bill Evans, the Chicago Symphony Orchestra, the Juilliard Quartet, Leontyne Price, Elvis Presley, Colin Davis, the Philadelphia Orchestra, Roberta Flack, Chet Atkins, the New York Philharmonic Orchestra, the Cleveland Orchestra, Itzhak Perlman, Chick Corea, Willie Nelson, and Daniel Barenboim.

In 1991 Quincy Jones took six awards, and surpassed Mancini as the winner of the largest number of prizes (29, including a legend award in 1991) in the popular field: Mancini had held the record with 20 awards (in 1995, he was given a lifetime achievement award). Georg Solti is the conductor with the greatest number of prizes (33, including a lifetime achievement award in 1996), followed by Bernstein (17). Leontyne Price has 14 classical vocal awards. Vladimir Horowitz won 27 Grammys, including a lifetime achievement award in 1990. Other winners in their fields include Chet Atkins with 15 country awards; Aretha Franklin with 17 pop vocal awards, including a lifetime achievement award in 1994, Ray Charles with 13 pop vocal awards, and Michael Jackson, country singer Vince Gill, and Ella Fitzgerald with 14 awards. Bob Dylan has nine awards, although none of his records were cited until his album of traditional folk covers, *World Gone Wrong*, in 1994; he was awarded a lifetime achievement award in 1991.

Curiously, some of the most popular artists have received little recognition from NARAS. No Rolling Stones record won a Grammy until *Voodoo Lounge* won a best rock album award in 1994, and the group was given a lifetime achievement award in 1985. Only two Beatles records won awards during the group's original career, *A Hard Day's Night*, and *Sgt. Pepper's Lonely Hearts Club Band*. John Coltrane won once (although he was given a posthumous lifetime achievement award in 1992). Elvis Presley was recognized only for three gospel records, although he was given a lifetime achievement award in 1971. Nirvana won only one Grammy award, for their *MTV Unplugged* album. Madonna didn't win a Grammy until 1991, and has since garnered only five awards; Bruce Springsteen's first Grammy came for "Dancin' in the Dark" in 1984, and he has only a total of eight awards to date. Lester Young did not win a Grammy, nor did Maria Callas.

In 1997, NARAS formed the Latin Academy of Recorded Arts and Sciences, and three years later the

GRAMOPHONE (I)

first Latin Grammy awards were given. [*Variety* 1985 lists all the nominees and winners from 1958 to 1983; *World Almanac* lists winners in major categories every year. Website: Grammy.com.]

GRAMOPHONE (I)

The name given by Emil Berliner to his 1887 talking machine, which was the first to use discs as the recording medium. In the 19th century the term remained exclusive to disc machines, indeed to the laterally cut disc machine; a cylinder player was known as a phonograph. This terminological distinction faded in the U.S. (Edison referred to his Diamond Disc Phonograph, Columbia to its Disc Graphophone), and the word gramophone was not much used after the early 1900s. In Britain it has remained in use, although phonograph has become its synonym.

The first patent on a disc gramophone was actually held by Edison, and he made experimental disc records in 1878. In 1879 Ducretet marketed a tinfoil disc player in France.

See also Disc

GRAMOPHONE (II)

One of the principal journals in the recording field, first issued April 1923 in London, published monthly. Compton Mackenzie was the first editor; James Jolly is the current editor. The periodical is distinguished for its perceptive criticism of new recordings. In 1999, it became part of Haymarket Magazines, Ltd. GramoFile is a free website offering CD reviews. [Website: www.gramophone.co.uk.]

GRAMOPHONE CO.

A British firm, established April 1898 in London. The founders were William Barry Owen, on behalf of Emil Berliner, and Trevor Lloyd Williams; the firm had exclusive rights to distribute Berliner merchandise in Europe. At first the product of the company was limited to spring-motor disc machines and seven-inch discs imported from the U.S. In July 1898 Fred Gaisberg came from Berliner's Philadelphia studio to initiate local recording in Britain. Pressing was done by Joseph Berliner's Telphonfabrik in Germany. By November 16 it was possible to issue a stock list of English recordings as well as one of American pressings. In November 1898 a system of matrix numbering was established.

The stock list or record catalog of 22 Feb 1899 included all material available, English and American issues again separated. (The Berliner entry in this

encyclopedia discusses the artists and works recorded in the U.S. Material recorded in Europe is discussed in the entry on Fred Gaisberg.) By December 1899 the Gramophone Co. had advanced to a 100-page catalog, with photographs of 41 artists. Recordings made in Russia, the Middle East, and the Orient were included. On 23 August 1899 the firm reorganized as the Gramophone Co., Ltd., and settled out of court some patent litigation with Edison Bell. Beginning with the January 1900 catalog supplement, the famous "His Master's Voice" logo was used, beginning a replacement of the recording angel symbol that had been devised by Theodore Birnbaum and used since 1898. The angel remained in use, with the Nipper illustration, until 1909, and then was relegated to certain celebrity discs (on the B-side). Gramophone Co. offices were operating in France, Italy, Russia, Spain, Austria, and Hungary by the turn of the century.

In a curious misreading of the future market, which may be credited to Owen, the firm — despite its quick successes — decided to diversify, and reorganized again as the Gramophone & Typewriter Co., Ltd. (G&T) on 12 December 1900. They took up production of the "Lambert spin wheel" typewriter, but gave it up in 1904. Owen took responsibility for the failure of the typewriter and resigned in 1905. On 18 Nov 1907 the firm's original name, sans "Typewriter," was restored.

At the end of 1901 10-inch records were introduced, with the recording angel trademark, employing — for the first time — paper labels, these being black with gold printing. In January 1902 the practice began of producing two monthly catalogs, one for 7-inch Berliner discs and the other for its 10-inch "concert" discs. As Berliner's American interests passed to Eldridge Johnson, and the new Victor Talking Machine Co. emerged, masters from Victor began to be used by the Gramophone Co. These 1902 records were known as Victor Monarchs in America.

In June 1903 the 12-inch record was announced, but seven-inch and 10-inch discs were still produced. The company was exceedingly prosperous, with new offices at 31 City Road, London, and branch and factories in India, Persia, and various European locales. A rival firm, International Zonophone, was acquired in 1903. The first combined, indexed catalog appeared in November 1904.

Primarily because of Fred Gaisberg's initiatives, great opera singers were joining the Gramophone ranks: Enrico Caruso in 1901, Francisco Tamagno in 1903, Nellie Melba in 1904, and Adelina Patti in 1905. However, the bulk of the catalog remained in the popular domain, with band music and every imaginable instrumental soloist. There were 10,000 records to choose from, according to an advertisement of 1905.

A major agreement was signed on 25 June 1907 with Victor, formalizing their trading position and dividing the world market between them. Expansion required a new factory, in Hayes; the cornerstone was laid 13 May 1907 by Melba herself, and pressing began a year later. Double-sided 10-inch and 12-inch discs were offered in 1911. The April 1913 catalog ran to 236 pages. More great names were appearing: Chaliapin, Paderewski, McCormack, etc.

During World War II the Hayes factory was converted to military manufacture, and the German branch of Gramophone, Deutsche Grammophon, was severed from the parent firm. DGG remained independent after the war, but continued to use the HMV trademark. Records were still made in limited quantities; one field explored successfully was original cast recordings of London shows. And in a dramatic attempt to record action at the front, Will Gaisberg was gassed, and died some time later.

In June 1920 American Victor acquired a controlling interest in the Gramophone Co., without affecting the flow of business. A record shop was opened, with great fanfare, on 20 July 1921, with Edward Elgar officiating. The 1924 catalog reached 523 pages, including seven-inch discs for children, packaged in albums. A supplement in 1925 offered, without saying so, the first electrical discs. Emphasis moved to orchestral recordings in the 1920s, first on acoustics, then on electrical recordings. The microphone made it feasible to record on location, and this was done at Covent Garden. But the need for a proper studio was felt as well, and led to the construction of the Abbey Road complex, beginning in 1929, with the opening on 12 Nov 1931. In the same year Gramophone acquired Marconiphone, Ltd., and went into the radio business. For the year ended 30 June 1928 there was a substantial profit of £1,104,098.

With the arrival of the economic Depression after 1929, the American record industry nearly collapsed, and the British firms were in dire condition. Columbia, long the Gramophone Co. archrival, agreed to join forces, and on 20 Mar 1931 the two merged to create EMI, Ltd. (Electrical and Musical Industries). To some extent both labels retained independence of action and trade. The story of EMI is treated in a separate entry in this encyclopedia.

While the above account has stressed the production of discs, the firm was simultaneously engaged in making record players. Many of the models were the equivalent of American Victor machines. In the tables, Gramophone Co. record players specifically discussed and/or illustrated in a number of standard sources are identified. [Andrews 1987 has a detailed account of the record catalogs; Dennis 1946 has dating information; Hanna 1990; *Hillandale News*, August

1983, gives a matrix dating chart for 1905–1920; Rust 1978; Rust 1980; Taylor 1983 has further dating information.]

Gramophone Co. Record Players: By Year

Nomenclature is not always clear between models and types. They are given first in chronological order by date of introduction. All are table models unless otherwise noted.

1898/#2/For seven-inch discs; winding handle in horizontal plane; exposed motor; price £2. 2sh; Clark-Johnson soundbox; soon withdrawn in favor of #5. Illustrations in Chew 1981, p. 46; Jewell 1977, p. 63; Marty 1979, p. 40.

1898/#5/For 7-inch discs; "Trademark" model, first with Nipper logo; winding handle in horizontal plane; enclosed motor; price £5. 10sh; Clark-Johnson soundbox; numbered 3 in France; known as Model B among the U.S. products of Eldridge Johnson; in Canada the Berliner Standard Gram-o-phon, Type A; later evolved into the Junior Monarch. Illustrations in Chew 1981, p. 46; Jewell 1977, p. 63; Marty 1979, p. 41.

1900/#3, #4, #6, #7, Deluxe/Minor modifications of the previous model.

1901/Monarch/For seven-inch and 10-inch discs (all Monarchs played both sizes); most models priced from £8 to £16, but 1904 Deluxe was £25.

1902/Junior Monarch/Winding handle in horizontal plane.

1903/Monarch #7/Winding handle at side. Illustrations in Chew 1981, p. 48; *HN* #148 (1986), cover; Marty 1979, p. 43

1904/Monarch with "sound arm" (first version of tone arm), available for first time except for some expensive models offered in September 1903 with the sound arm. Illustration in Chew 1981, p. 48.

1904/Monarch with tapered tone arm; available in a Deluxe model with elaborate cabinet for £25. Illustrations in Chew 1981, p. 48; *TMR* #45, p. 987; Marty 1979, p. 49.

1905/Monarch #13/With tapered tone arm (in all models hereafter) and flower horn. Illustrations in Chew 1981, p. 48; Marty 1979, p. 44; *TMR* #72 (1987), cover.

1905/Senior Monarch/Exhibition soundbox; price £11.

Illustration: *TMR* #70 (1985), cover.

1905/Victor; later Victor Monarch.

1906/Auxeto-Gramophone/Cabinet model, with volume amplified by air stream (see Auxetophone). Illustrations in *TMR* #12 (1971), p. 119 and back cover.

1907/Gramophone Grand (=Victor Victrola)/A console model, the first with a concealed horn; lid over the turntable; front doors to control volume; seven styles

sold by 1909, including Sheraton, Chippendale, and Queen Anne; price as high as 50 guineas. Illustrations in Chew 1981, p. 49; Jewell 1977, p. 59; *TMR* #62 (1980), cover and p. 1661.

1908/Intermediate Monarch/External morning glory horn, no lid over the turntable price £4.10sh. A 1910 or 1911 example is illustrated on inside front cover and (with interior shown) on inside back cover of *HN* #151 (1986); another illustration (advertisement) in *TMR* #70 (1985), p. 2002.

1909/Pigmy Grand/A portable, the first with concealed horn, but not boxed for easy transport; copied by the Dulcephone of 1909. Illustrations in Chew 1981, p. 49; *TMR* #9, back cover (advertisement); *TMR* #41, pp. 770–771.

1909/Library Bijou Grand/Table model on its own stand, with lid over the turntable; later renamed as #10. Illustration in Jewell 1977, p. 60.

1910/Model #1/Hornless model, without lid; it was produced to 1924 as a replacement for the 1909 Pigmy Grand; portable, but not boxed for easy transport.

1910–1913/Model #7/With external brass horn. Illustration in Jewell 1977, p. 60.

1910/Model #8/Table Grand, with lid and internal horn; front doors to control volume. Illustrations in Chew 1981, p. 49; Jewell 1977, p. 61.

1910–1912/Model #12/With lid and external horn; export name: CZ; Exhibition soundbox. Illustration in Jewell 1977, p. 61

1913–1917/Model #3/No lid, internal horn; Exhibition soundbox. Illustration in Jewell 1977, p. 60.

1919/School Model/Cabinet model with external horn; horn could be detached and stored beneath the mechanism, allowing lid to close over turntable. Price £25. Illustration (advertisement) in *TMR* 60/61 (1979), p. 1655.

1920–1924/Interior horn, no lid. Illustration in Jewell 1977, p. 60.

1922–1924/Model #265/A wide body console with lid, and front doors to control volume. Illustration in Jewell 1977, p. 62.

1922–1924/Model #125/Interior horn, lid, front doors to control volume. Illustration in Jewell 1977, p. 62.

1923/Model #180/Cabinet Grand/Cabinet model, interior horn, lid. Illustration in Jewell 1977, p. 59.

1924?/Lumiere/A table gramophone-radio combination, incorporating a crystal set; detachable horn allowed lid to close. Illustration in Jewell 1977, p. 60.

1925–1931/Model #101/A portable with internal horn and #4 soundbox; played 10-inch or 12-inch records, and carried six discs in the lid. It closed up completely and had a carrying handle. Price £7. Early versions had winding handle in front. After 1930 an automatic stop was provided. Illustration (adver-

tisement) and discussion in *HN* #172 (1990), pp. 328–330.

1925/Model #109/Internal horn, #4 soundbox, lid. Illustration in Jewell 1977, p. 62.

1926?/Model #501/A table model radio/gramophone, with electric pickup and automatic stop. Price 29 guineas. Illustration (advertisement) in *HN* #160 (1988), back cover.

1926–1928/Model #461/A compact table model with lid, with #4 soundbox. Illustration in Jewell 1977, p. 63.

1927/#202 “Upright Grand”/Console, lid, front doors, #5A soundbox; used the Western Electric matched impedance system. Illustration in Jewell 1977, p. 63.

ca. 1927/#157/Console, with front doors and lid; “smallest of the re-entrant models”; with #5A soundbox. Illustration in Jewell 1977, p. 62.

1927/#163/Large console, with lid and front doors, and #5A soundbox; a re-entrant model. Illustration in Jewell 1977, p. 62.

1929–1931/#130/Similar to #125 (of 1922–1924); without front doors; #5A soundbox. Illustration in Jewell 1977, p. 62.

1930/Model #12/“Automatic gramophone with valve amplification”; an all-electric console, mains driven by alternating current, with DC adaptor available. Included #7B electric soundbox, and model #4 loudspeaker. Plug-in jack for radio, and changeover switch for phonograph/radio operation. Record changer handled 10 discs, with 10-inch and 12-inch sizes intermixed.

1930/Model #15/Similar to #12, preceding, but changer could handle 20 discs. A “distant control pedestal” provided some remote operation. Price £215.

1930/Model #520/Console radio/phonograph; price £75.

1930/Model #551/Walnut cabinet console; price £105.

Gramophone Co. Record Players: By Number and/or Name

The same machines are now listed by number (model or type) and/or name; the date follows as a reference to the chronological array.

1	1910
2	1898
3	1900
3	1913–1917
4	1900
5	1898
6	1900
7	1900
7	1910–1913
8	1910
12	1930
12	1910–1912

15	1930	
101	1925–1931	
109	1925	
125	1922–1924	
130	1929–1931	
157	ca. 1927	
163	1927	
180	1923	
202	1927	
265	1922–1924	
461	1926–1928	
501	1926?	
520	1930	
551	1930	
Auxeto-Gramophone		1906
Gramophone Grand		1907
Intermediate Monarch		1908
Junior Monarch		1902
Library Bijou Grand		1909
Lumiere		1924?
Monarch		1901
Monarch (sound arm)		1904
Monarch (tapered tone arm)		1904
Monarch 07		1903
Monarch 13		1905
Pigmy Grand		1909
School Model		1919
Senior Monarch		1905
Upright Grand		1927
Victor		1905
Victor Monarch		1905
Victor Victrola		1907

GRAMOPHONE QUARTET

A British male group, active around 1906; also known as the Minster Singers, and probably they were also the Meister Singers. Members were Ernest Pike, Wilfred Virgo, Stanley Kirkby, and Peter Dawson.

GRAMOPHONE RECORD

A disc recording, in present-day terminology synonymous with phonograph record; but the latter term originally applied only to cylinder recordings. British usage has favored retention of the word gramophone for record players and gramophone records for the discs, while American usage has moved to phonograph in both instances.

GRAMOPHONE RECORDS LTD.

A British firm of brief duration, established 16 July 1928, and closed 23 Nov of the same year. Its assets were acquired by British Homophone.

GRAMOPHONE SHOP

A New York record store opened in 1928 by W.H. Tyler and J.F. Brogan, specializing in the sale of European import discs that were unavailable in the U.S. The stock was of classical music. In 1936 the firm issued a major discographical work, *The Gramophone Shop Encyclopedia of Recorded Music*, ed. by R.D. Darrell.

GRAMOPHONE SOCIETIES

Gramophone societies (most of them now “Recorded Music Societies”) are groups of people who join together to listen to recorded music concerts presented by one of their own members or by a visitor invited for the purpose. It is felt that listening in a sympathetic group is more enjoyable than listening alone. And while a church hall or schoolroom may be less comfortable than one’s home, the acoustics are frequently better. In addition, one can discuss the program during the interval or at the end of the evening, and one does not need to own either playing equipment or recordings to become a member.

The earliest society traced was formed by members of the Prudential Insurance Co. in Holborn, London — an organization that, unlike the society, still flourishes. Members met in a public house in Chancery Lane, bringing both their own machines and some records. Competitions were held for the “best” records, but contemporary reports give no indication of the criteria used.

At the beginning of World War I there were about a dozen such “phonograph societies” or “phonograph and gramophone societies” up and down the country. Import of phonograph records (cylinders) from the Edison factory in America was banned during the war, since those items were classed as nonvital; thus the phonographic side of the societies ceased and did not revive until the end of the war. Some societies lent machines and gave discs to military hospitals. Hundreds of people were able to hear certain society concerts outdoors, thanks to the compressed air reproducer [see Auxetophone]; but interest in those events was mainly mechanical rather than musical (aside from operatic selections, music was generally of inferior quality and limited to excerpts of four minutes or less).

With the introduction of electric recording in the mid-1920s the situation was transformed. More orchestral and chamber music recordings were made, and societies departed from an emphasis on equipment to give more attention to the actual music. This new perspective may have led to the increase in membership among women.

After two unsuccessful attempts to link the various societies, W.W. Johnson (a teacher and regular contributor to *The Gramophone*) arranged for the inaugural meeting in 1936 of what would become the National

GRAND (LABEL)

Federation of Gramophone Societies. The meeting, at EMI's London studios, was attended by 37 persons representing 14 societies. World War II proved advantageous to the society movement. Since radio broadcasting was restricted to one single national channel, music lovers — including many in the armed forces — turned to the societies. The movement peaked with some 350 organizations active throughout Britain. Public libraries were frequently chosen as meeting places.

With an increasing number of adverse factors after the war, the society movement might well have foundered, but in fact it keeps afloat today with nearly 300 affiliated groups. NFGS officers and committees (unpaid volunteers) publish a semiannual magazine with news of their activities. Old societies manage to survive, and new ones are still being formed from time to time. Outside of Britain, there have been occasional societies established in New Zealand and the United States, but generally with short life spans.

E.T. BRYANT

GRAND (LABEL)

A Swedish record of 1935–1939 made by Swedish Odeon, pressed by Carl Lindström, distributed in the Grand department store chain. The material was dance music and swing, some of it original, some from British Rex and Parlophone masters. Artists were presented under pseudonyms. [Englund 1970.]

GRAND FUNK RAILROAD/ GRAND FUNK

A populist blend of heavy metal and updated blues boogie, Grand Funk Railroad provided a model for rock band success in the 1970s. Although their records were disdained by critics and rarely heard on radio, the band toured almost constantly, building a large and appreciative audience. Their in-concert appeal played a major role in the transition of rock venues from smaller clubs and auditoriums to arenas and sports stadiums.

The Flint, Michigan-based Grand Funk Railroad came together in late 1968 when lead vocalist/guitarist/songwriter Mark Farner and drummer/vocalist Don Brewer — who had played with one-hit wonder, Terry Knight and the Pack — joined with former ? and the Mysterians bassist Mel Schacher. With Knight given complete control as manager, the band's performance in front of 125,000 people at the Atlanta Pop Festival in July 1969 led to a contract with Capitol Records.

Although the debut album, *On Time* (Capitol 307; 1969; #27), eventually achieved gold status, the next five releases — *Grand Funk* (Capitol 406; 1970; #11), *Closer to Home* (Capitol 471; 1970; #6), *Live Album*

(Capitol 633; 1970; #5), *Survival* (Capitol 764; 1971; #6), and *E Pluribus Funk* (Capitol 853; 1971; #5; featuring a circular, silver cover imitating a U.S. coin) — went platinum, thereby validating Grand Funk Railroad's stripped-down sound, built around incessant guitar power-chords. Legal difficulties centering around the 1972 decision to fire Knight temporarily disrupted the band's success, but the band rebounded with its most pop-oriented releases, beginning with *Phoenix* (Capitol 11099; 1972; #7), augmented by the addition of organist Craig Frost. Two Todd Rundgren-produced LPs, *We're an American Band* (Capitol 11207; 1973; #2; achieved double-platinum status) — which featured the chart-topping title track (Capitol 3660; 1973) — and *Shinin' On* (Capitol 11278; 1974; #5) — with the hit singles "Loco-Motion" (Capitol 3840; 1974; #1), and "Shinin' On" (Capitol 3917; 1974; #11). *All the Girls in the World Beware!!!* (Capitol 11356; 1974; #10) yielded "Some Kind of Wonderful" (Capitol 4002; 1975; #3) and "Bad Time" (Capitol 4046; 1975; #4).

With internal differences coming to the fore, the band issued a lackluster live set, *Caught in the Act* (Capitol 11445; 1975; #21), and two more studio albums, *Born to Die* (Capitol 11482; 1976; #47), and the Frank Zappa-produced *Good Singin', Good Playin'* (Capitol 2216; 1976; #52). Grand Funk then disbanded, with Brewer and Schacher forming Flint, and Farner pursuing a solo career.

Farner and Brewer reformed Grand Funk Railroad in 1981, recruiting Dennis Bellinger to play bass. The ensuing album releases, *Grand Funk Lives* (Full Moon 3625; 1981; #148), and *What's Funk* (Full Moon 923750; 1983), sold poorly, and the band dissolved again. With classic heavy metal making a comeback, the original threesome joined forces in 1997 for a world tour that was documented by the live LP, *Bosnia* (Capitol 21935, 1997). In the wake of renewed interest in the band, Capitol released a boxed-set anthology, *Thirty Years of Funk: 1969–1999* (Capitol 99523; 1999). Shortly thereafter, however, Farner announced plans to return to a solo career.

FRANK HOFFMANN

GRANDMASTER FLASH (1 JAN 1958–)

Grandmaster Flash, born Joseph Saddler in Barbados, West Indies, played a major role in establishing the conventions of hip-hop recordings. Named for his lightning speed in manipulating record players, he pioneered the technique of "cutting" between discs on two separate turntables, in the process creating a continuous flow of beats punctuated with repetitive rhythmic "breaks."

Flash developed his skills playing records at local block parties in the Bronx during the 1970s. He was

signed by the Enjoy label shortly after creating the Furious Five, a group of rappers — initially, Grandmaster Melle Mel, Kid Creole, Cowboy, Duke Bootee, and Kurtis Blow; augmented with the addition of Scorpio on electronics in 1980 — to complement his deejay pyrotechnics. Following several underground R&B hits, he became an industry-wide phenomenon with the release of the 12-inch single, “The Adventures of Grandmaster Flash on the Wheels of Steel” (Sugar Hill 557; 1981; #55 R&B), a funky combination of sampling (most notably Chic’s “Good Times” and Queen’s “Another One Bites the Dust”), scratching, breaks, and energetic rapping. The Sylvia Robinson/Duke Bootee-penned “The Message” (Sugar Hill 584; 1982; #4 R&B, #62 US, #8 UK; issued in both the seven- and 12-inch configurations), remains one of the seminal rap recordings of all time, anticipating the gangsta subgenre with hard-hitting social commentary regarding ghetto life.

Unfortunately, Flash’s career went downhill from there due to group infighting — Melle Mel, Scorpio, and Cowboy left in late 1983 to form a new version of the Furious Five — and cocaine addiction. Despite a legal victory over Melle Mel to use the group name, Flash’s recordings in the mid-1980s — most notably “Sign of the Times” (Elektra 69677; 1985; #55 R&B), “Girls Love the Way He Spins” (Elektra 69643; 1985; #54 R&B), “Style (Peter Gunn Theme)” (Elektra 69552; 1986; #54 R&B), and “U Know What Time It Is” (Elektra 69490; 1987; #57 R&B) — represented a less-revelatory brand of electro hip-hop that failed to cross over to the pop charts. With his approach rendered increasingly dated by the rise of such hard-edged rappers as Public Enemy, Eric B, and KRS-One, Flash — despite a reunion with Melle Mel for a charity concert in 1987 — faded into obscurity.

FRANK HOFFMANN

GRAND OLE OPRY

An weekly American radio and television program (televised since the late 1950s), established in 1925 (as “WSM Barn Dance” and given its present name in 1927); the show with the longest continuous broadcast history in the U.S. It was founded by announcer George D. Hay, known as “The Solemn Old Judge.” It is the principal national arena for country music performers, located (since 1974) in a 4,000-seat theater outside Nashville, Tennessee. In the early years it featured instrumentalists, but vocalists became prominent after World War II with the arrival of star singers like Roy Acuff, Eddy Arnold, and Ernest Tubb.

The first artist to appear on the program, on November 28, 1925, was Uncle Jimmy Thompson, a

fiddler. Uncle Dave Macon, who appeared from 1925 until his death in 1952, was the first to gain national attention through the program. The Opry introduced many stars of country music; among the longest appearing on the program were harmonica player DeFord Bailey (1926–1941); Roy Acuff (1938 through his death in 1992); Bill Monroe (1939 until his death in 1996); country comedian Minnie Pearl (1940–1991); and current members Little Jimmy Dickens (made a member in 1948); Porter Wagoner (1957); Skeeter Davis (1959); Loretta Lynn (1962); and Dolly Parton (1969). [Wolfe 1999.]

GRAND RAPIDS PHONOGRAPH CO.

A firm located in Grand Rapids, Michigan, maker of “L’Artiste,” a disc player advertised heavily in 1920.

GRANZ, NORMAN

(6 AUG 1918–22 NOV 2001)

Promoter, manager, founder of Verve Records, Norman Granz owes his many successes to a combination of great taste and savvy business practices. Originator of the *Jazz at the Philharmonic* concert series (the first concert was held in Los Angeles in 1944) and tours, Granz introduced American jazz to millions of people through these live concerts and his recordings of them around the world. From the late 1940s, Granz licensed distribution rights to the concert recordings to Mercury Records, but retained ownership of the master tapes. When the arrangement with Mercury expired in 1953, Granz released the music under his Clef label, and a few years later consolidated Clef and other ventures into Verve Records. During the 1950s Granz began his association with singer Ella Fitzgerald, whom he managed while she was under contract to Decca, and later when the jazz legend was on the Verve roster. Granz’s last *Jazz at the Philharmonic* tour came in 1957.

In 1959, Granz moved to Switzerland, and a year later sold Verve to MGM. In 1974, now based in California, Granz formed Pablo Records, named for his idol Pablo Picasso, rereleasing his classic recordings of Art Tatum originally made for Verve along with new recordings by Fitzgerald, Oscar Peterson, and other artists long associated with him. In 1986, Pablo’s back catalog was purchased by Fantasy Records, and Granz returned to Switzerland to retire. A famously difficult person, Granz refused to appear at the 50th anniversary celebration concert held at Carnegie Hall in honor of his work with the *Jazz at the Philharmonic* series in 1994. He also turned down a lifetime achievement award from the National Academy of Recording Arts and Sciences (NARAS) in 1994, offering the

GRANT, AMY

rationale, "I think you guys are a little late" (*Los Angeles Times*, 24 Nov 2001).

BRAD HILL

GRANT, AMY (25 NOV 1960–)

Amy Grant enjoyed unparalleled pop crossover success for a Christian contemporary artist in the early 1990s. On the strength of engaging song material, first-rate vocal techniques, and wholesome good looks, remains a fixture on the pop and adult contemporary charts.

Born in Augusta, Georgia, and raised in Nashville, Tennessee, Grant signed with the Christian label, Word, at the age of 15. She was groomed for the pop market after achieving stardom within the Christian genre, a move facilitated by Word's distribution deal with A&M Records in the mid-1980s. *Unguarded* (A&M 5060; 1985; #35) proved to be her breakthrough album, going platinum despite drawing criticism from some quarters of the Christian music community. Her major hits include the albums *Straight Ahead* (A&M 5058; 1985; #133 pop, #1 inspirational), *Amy Grant – The Collection* (A&M 3900; 1986; #66 pop, #1 inspirational; covers her 1979–1986 inspirational hits), *Lead Me On* (A&M 5199; 1988; #71 pop, #1 inspirational), *Heart In Motion* (A&M 5321; 1991; #10 pop, #1 inspirational), *Home for Christmas* (A&M 31454; 1992; #2), and *Behind The Eyes* (A&M 0760; 1997; #8) as well as the singles "The Next Time I Fall" (Full Moon 28597; 1986; #1 pop, #1 AC; duet with Peter Cetera), "Baby Baby" (A&M 1549; 1991; #1 pop, #1 AC), "Every Heartbeat" (A&M 1557; 1991; #2), and "That's That Love Is For" (A&M 1566; 1991; #7 pop, #1 AC).

FRANK HOFFMANN

GRAPHIC EQUALIZER

A device that divides the audio spectrum into segments, usually from 12 to 36 parts, and adjusts the amount of energy that passes through each of them. The results are equalization patterns, used to establish the original recording characteristics.

GRAPHOPHONE

A device for recording and reproducing sounds, patented in the U.S. on 4 May 1886 (#341,214) by Chichester A. Bell and Charles Sumner Tainter, resulting from their research in the Volta Laboratory. It was a wax cylinder machine, and, like Edison's phonograph, was primarily intended to accept and replay business dictation. Production was handled by the American Graphophone

Co., and marketing by the Columbia Phonograph Co. General. Illustrations of the first Graphophone are in Chew 1981, p. 10, and Jewell 1977, p. 11.

See also Columbia; Columbia Record Players

GRAPPELLI, STÉPHANE (26 JAN 1908– 30 NOV 1997)

French violinist, born in Paris; surname also spelled Grappelly and Grappely. He played classical music until around 1927, then switched to jazz. In 1934 he organized the Quintette du Hot Club de France, and won great acclaim for his work in the ensemble, which featured Django Reinhardt. He settled in Britain from 1940 to 1948, then returned to Paris and made world tours through the 1960s. Among his fine records were "St. Louis Blues" (Decca F-5824; 1935), and "Tiger Rag" (Decca F7787; 1941), the former with the "Quintet of the Hot Club of France" (including Reinhardt), the latter with a group that included George Shearing at the piano. Grappelli toured and recorded extensively in the decades before his death, often working with guitarist Diz Disley in a "re-creation" of the original Reinhardt group. He also worked with younger jazz musicians, including Larry Coryell and Gary Burton, and made a series of successful albums with classical violinist Yehudi Menuhin.

GRATEFUL DEAD, THE

American rock 'n' roll group active from 1965 to 1995. Original members included Jerry Garcia, guitar and vocals; Bill Kreutzmann, drums; Phil Lesh, bass; Bob Weir, guitar and vocals; and Ron "Pigpen" McKernan, keyboards and vocals. Playing clubs in the San Francisco area, the group came into contact with Ken Kesey and the Merry Pranksters and played at many of the Acid Tests. In 1967, the band recorded its first album, *The Grateful Dead* (Warner Bros. WS1689). In the same year the band added a second drummer, Mickey Hart. In 1968, the band added a second keyboardist, the academy-trained Tom Constanten, and released its second album, *Anthem of the Sun* (Warner Bros. WS1749). The band's early live sound was captured in 1969 on *Live/Dead* (Warner Bros. 2WS1830). In 1973, the band established its own labels, Grateful Dead Records and Round Records.

With the help of concert promoter Bill Graham, the Grateful Dead became one of the most popular concert bands in American history. Mixing rock, country, bluegrass, and experimental jazz, the Dead built a huge fan base without the benefit of radio support. Various lineup changes occurred throughout the band's 30-year

history: Constanten left in 1970; McKernan died in 1973; Keith Godchaux, keyboards, joined with his wife Donna, vocals, in 1971 and they both left the band in 1979. Brent Mydland joined as keyboard player in 1979 but died of a drug overdose in 1990. After a touring interlude featuring the assistance of Bruce Hornsby, former Tubes member Vince Welnick was recruited by the band.

The Grateful Dead's popularity reached its peak in the late 1980s when their penultimate studio album, *In the Dark* (Arista AL-8452), broke into the Top 10. The band ended in 1995 at the death of Jerry Garcia; other core members have intermittently reformed as The Other Ones to record and tour.

The entire Grateful Dead catalog is available on CD. Both Arista and the Grateful Dead Archives continually release live recordings (drawing from the band's collectively owned tape library in Marin County).

JOHN ROCCO

GRAUER, BILL, JR. (1923–16 DEC 1963)

New York City native Bill Grauer, Jr., was president and a founder of one of the most respected post-World War II jazz labels, Riverside Records. During its heyday in the early 1960s, the label specialized in contemporary jazz recordings featuring the likes of Nat Adderley, Bill Evans, Abbey Lincoln, Thelonious Monk, and Wes Montgomery.

Grauer was editor and publisher of the *Record Changer*, a periodical geared to jazz record collectors, from the late 1940s to the late 1950s. Along with fellow collector Orrin Keepnews, Grauer founded Riverside in 1953 to reissue older jazz recordings from 78-rpm recordings. A year later, they issued their first new recording by Randy Weston. The firm enjoyed great success with artists like Monk (purchasing his contract from fellow small-label Prestige Records in 1955; Monk left Riverside for the larger Columbia label in 1961), Evans (who recorded leading his trio for the first time in 1956 for the label, and remained with it through 1963), and particularly pop-jazz guitarist Wes Montgomery (who joined the label in 1959 and remained with it through its closing). However, the label folded a year after Grauer's death in 1963; Keepnews founded Milestone in 1966 to continue issuing contemporary jazz. Both catalogs were purchased by Fantasy records in 1972, who reissued many of the label's recordings on Milestone and its OJC (Original Jazz Classics) line.

Both Grauer and Keepnews were also highly esteemed jazz scholars, and coauthored the book *A Pictorial History of Jazz* (New York: Crown, 1955).

Website: <http://www16.brinkster.com/fitzgera/labels/river100.htm> (lists the complete Riverside catalog by number).

FRANK HOFFMANN

GRAY, GLEN

SEE *CASA LOMA ORCHESTRA*

GRAYSON, JAMES (1897–1980)

English recording industry executive who relocated to the U.S. in the 1940s. With Michael Naida and Henry Gage, he established Westminster Records in 1949, one of the first LP labels. Most of the masters were made in Vienna, and pressing by Columbia in America. A distinguished catalog of more than 1,000 classical items, including many that contributed to the Baroque revival, was assembled by the 1960s. Grayson was responsible for most of the A&R work for the label.

GREAT NORTHERN MANUFACTURING CO.

A Chicago firm established on 24 Apr 1907, succeeding the East Liverpool China Co. (founded 11 Oct 1901). Great Northern introduced a line of record players with 3/4-inch spindles and discs with corresponding center holes under the name of Harmony. The earliest Harmony model to be widely distributed was Model D No. 4, from 1906 to 1907; it had a long morning glory horn, with no tone arm. Another popular model was No. 12, with an internal horn. Matrices came from Columbia and from Star. In 1911 the United Talking Machine Co. was created as a division. By 1911 the Harmony products were emanating from a new firm, the Harmony Talking Machine Co. Patent litigation led to a merger, in 1913, with the Standard Talking Machine Co.

GREATER NEW YORK QUARTETTE

A male singing group who recorded for Columbia in 1898. Members in November 1887 were Roger Harding, Stephen Porter, Len Spencer, and a Mr. Depew. Later members included Albert Campbell and a Mr. Hargrave.

GREEN, AL (13 APR 1946–)

Al Green has excelled in two widely divergent genres during his lengthy career: soul/R&B and gospel.

Although the former has resulted in greater commercial success and public renown, he has gone on to earn the higher honors in the latter field.

Influenced by Sam Cooke (then a member of the Soul Stirrers), Green — at age nine — joined a gospel group, the Green Brothers, with siblings Robert, Walter, and William, that earned a measure of attention over the next half-dozen years. While in a Grand Rapids, Michigan, high school, he formed the pop-oriented Al Green and the Creations; after several years, the band was reconstituted as Al Green and the Soul Mates. His recording debut, "Back Up Train" (Hot Line 15000; 1967), reached number 41 on the *Billboard Hot 100*, but a lack of quality follow-up material resulted in a return to the chitlin' circuit grind of the South and Midwest.

Green's singing at a Midland, Texas, club in 1969 impressed Memphis-based Hi Records vice president, bandleader, and chief producer Willie Mitchell, who signed him to a recording contract. "I Can't Get Next to You" (Hi 2182; 1970; #60 pop, #1 R&B), a cover of the 1969 Temptations chart-topper, had all the elements of his signature sound: softly caressing vocals, subdued rhythm section, and an ethereal veneer of horns and strings filling background spaces. He followed with eight million-sellers in a little more than three years: "Tired of Being Alone" (Hi 2194; 1971; #11), "Let's Stay Together" (Hi 2202; 1971; #1), "Look What You Done for Me" (Hi 2211; 1972; #4), "I'm Still in Love with You" (Hi 2216; 1972; #3), "You Ought to Be with Me" (Hi 2227; 1972; #3), "Call Me" (Hi 2235; 1973; #10), "Here I Am" (Hi 2247; 1973; #10), and "Sha-La-La" (Hi 2274; 1974; #7). Much like the singles, his albums — most notably *Al Green Gets Next to You* (Hi 32062; 1971; #58), *Let's Stay Together* (Hi 32070; 1972; #8), *I'm Still in Love with You* (Hi 32074; 1972; #4), *Call Me* (Hi 32077; 1973; #10), *Livin' For You* (Hi 32082; 1973; #24), *Al Green Explores Your Mind* (Hi 32087; 1974; #15), *Al Green/Greatest Hits* (Hi 32089; 1975; #17), and *Al Green Is Love* (Hi 32092; 1975; #28) — possessed sufficient polish to appeal to both pop and R&B listeners. His work was also acclaimed by the major trade publications; he was designated the rock 'n' pop star of 1972 by *Rolling Stone*, while *Billboard*, *Cash Box*, and *Record World* all named him the best pop and R&B vocalist for the year.

During the latter half of the 1970s, Green turned increasingly to his work as pastor of the Full Gospel Tabernacle in Memphis. In 1979, he declared his intent to focus exclusively on gospel material. His 1980s Myrrh/Motown releases included a combination of traditional hymns and self-penned religious songs, all imbued with a strong dose of Memphis soul.

Green returned to pop in the late 1980s, recording a duet with Annie Lennox for the *Scrooged*

soundtrack (A&M 3921; 1988; #93), "Put a Little Love in Your Heart." He devoted an entire album, *Don't Look Back* (RCA 16310), to the exploration of his Memphis roots in 1993. Further validation of his early work came with his 1995 induction into the Rock and Roll Hall of Fame.

At the outset of the 21st century, Green seemed as popular as ever. Not only were many of his classic soul recordings available in CD editions, but he was touring regularly (performing a mix of gospel and pop material), and was part of the cast for the highly rated TV series, *Ally McBeal*. In Fall 2000, HarperCollins published his autobiography, *Take Me to the River*.

FRANK HOFFMANN

GREEN, THOMAS H. (1876–1924)

Recording industry executive; twice elected vice president of the National Association of Music Jobbers (in 1919 and 1922).

GREENBERG, NOAH

(9 APR 1919–9 JAN 1966)

American conductor, born in New York. He directed choral groups in New York, and in 1952 established the New York Pro Musica Antiqua to perform medieval and Renaissance music on authentic instruments. Greenberg's group brought the early vocal idioms (later including Baroque works) to a wide audience. Among his outstanding recordings were the *Play of Daniel* (MCA 2504), and the *Play of Herod* (MCA 2-10008). He died in New York.

GREENE, GENE

(9 JUNE 1878–5 APR 1930)

American singer, vaudeville comedian, and recording artist. His first record was also his biggest hit: "Cancel that Wedding March" and "King of the Bungaloes" (Columbia A994; 1911), which was released by several other labels. He worked for Pathé in Britain in 1912–14 following a successful tour of the U.K., and made Victors, Emersons, and Columbias. Greene died in Chicago. [Walsh 1957/6–7.]

GREENE, JACK (7 JAN 1930–)

American country singer, guitarist, drummer, and bandleader, born in Maryville, Tennessee. In the early 1940s he was already playing regularly on local radio. While in his late teens he was in Atlanta, in a group named the Cherokee Trio, then his career was

interrupted by military service. He continued performing after World War II, joining Ernest Tubb in 1962 as drummer and guitarist, and also doing vocals. Greene appeared on Grand Ole Opry and reached stardom in the late 1960s with a series of hit discs. Of 25 singles on the charts the most popular were "All the Time" (Decca 32123; 1967), 21 weeks; "There Goes My Everything" (Decca 32023; 1966), 20 weeks; and "What Locks the Door" (Decca 32190; 1967), 20 weeks. Although less prominent after the early 1970s, Greene still put three singles on the charts in 1980.

GREENHILL, J.E.

British inventor and "lecturer on scientific matters." He devised the first satisfactory spring motor for the cylinder phonograph, and put it into production in 1893. The machine was made by William Fitch, of Clerkenwell, and sold by J. Lewis Young. Greenhill Mechanical Phonograph Motor Co. was the name of his firm, located in London. The motor is illustrated in Frow 1978, p. 164.

GREENLEAF, CHRISTOPHER (17 AUG 1949–)

An independent recording engineer working in North America, Europe, and East Asia, primarily in the fields of early, organ, and chamber music, Greenleaf earned a B.A. degree from Indiana University in 1972. His recordings for the Gotham Early Music Foundation, in New York City, the Frederick Collection (of 19th-century grand pianos), the Boston Early Music Festival, and prominent international performers have aired over National Public Radio (NPR), and Public Radio International (PRI), as well as on a number of overseas networks. In addition, he has engineered material for Hyperion, Wildboar, EMI, Stradivarius, CRI, Albany, Gothic, Titanic, Centaur, Gasparo, NPR, and Lyrichord, as well as other labels.

As an annotator, repertoire consultant, and recording engineer, Greenleaf has worked with individuals and ensembles to realize album projects noted for their unified esthetic and high standards of production. In addition to his recording work, his translations from German, French, and Flemish-Dutch have appeared in concert programs and albums from Tokyo to Vienna, and encompass writings from the 16th century on. When not engineering recordings, he works as an acoustic consultant in the designing or sonic improvement of halls and churches, as well as for private clients. An important part of Greenleaf's work also involves presenting recording symposia for performers of all ages at conservatories and music schools. Prior to its demise, he also wrote full-

time for *Audio* magazine, and had been a regular contributor to *Stereo Review*, *High Fidelity*, and *Popular Mechanics*, before becoming a full-time recording engineer, translator, and acoustic consultant.

HOWARD FERSTLER

GREEN LINNET (LABEL)

A recording label devoted to Celtic music founded in 1976 by Wendy Newton and folksinger Patrick Sky. The label released original recordings of Irish and Scottish artists made in the U.S. as well as items licensed from U.K. labels, including Mulligan and Topic Records. Artists have included the Bothy Band, Kevin Burke, Patrick Street, Liz Carroll, and Fairport Convention. In 1992, it launched the Xenophile label for world music acts, and five years later Celtophile for budget-priced Celtic releases for sale through mass merchandisers such as Best Buy and Sam's Clubs. [www.greenlinnet.com.]

CARL BENSON

GREENWICH, ELLIE (1940–)

Although best known as the composer of many early 1960s classic rock songs, the multitalented Ellie Greenwich also excelled as a singer, studio arranger and producer, and music business entrepreneur. Her songs — recorded by stars such as Lesley Gore, the Dixie Cups, the Shangri-Las, Jay and the Americans, the Exciters, and Phil Spector's Philles roster — were unsurpassed in reflecting the teen experience of that era.

Born within the suburban confines of Long Island, Greenwich sang at school functions and first tried her hand at songwriting while majoring in education at Hofstra University in the late 1950s. Her only recording — released by RCA in 1958 — was a failure commercially. After graduating in 1961, she briefly tried teaching English at nearby General Douglas MacArthur High School. Realizing she was more interested in popular music than literature, she began working for the songwriting/production team of Jerry Lieber and Mike Stoller. Greenwich also sought an outlet for her singing, making demonstration tapes of other writers' songs — in the early 1960s she was referred to as the "Demo Queen of New York" — and supplying all of the voices in the studio for a vocal group, the Raindrops, which also included her then-husband and songwriting collaborator, Jeff Barry. The act's biggest hits — "What a Guy" (Jubilee 5444; 1963; #41), and "He's the Kind of Boy You Can't Forget" (Jubilee 5455; 1963; #17) — featuring tight production values and nonsensical vocal flourishes, represented prime examples of the doo-wop tradition.

GREER, SONNY

Some of Greenwich's finest compositions (cowritten with Berry) were supplied to Spector, including the Ronettes's "Be My Baby" (Philles 116; 1963; #2), and "Baby, I Love You" (Philles 118; 1963; #24), the Crystals's "Da Doo Ron Ron" (Philles 112; 1963; #3), and "Then He Kissed Me" (Philles 115; 1963; #6), and Darlene Love's "(Today I Met) The Boy I'm Going To Marry" (Philles 111; 1963; #39). She also worked closely with the Red Bird label, owned by Leiber, Stoller, and George Goldner, providing such hits as the Dixie Cups's "Chapel of Love" (Red Bird 001; 1964; #1), and "People Say" (Red Bird 006; 1964; #12), the Jelly Beans's "I Wanna Love Him So Bad" (Red Bird 10003; 1964; #9), and the Shangri-Las's "Leader of the Pack" (Red Bird 008; 1964; #5).

Taking a cue from the Red Bird operation, she and her husband turned increasingly to publishing and production work in the mid-1960s, most notably with Neil Diamond. Among the singles ensuing from the collaboration were "Solitary Man" (Bang 519; 1966; #55), "Cherry, Cherry" (Bang 528; 1966; #6), "I Got the Feelin'" (Bang 536; 1966; #16), "I Thank the Lord for the Night Time" (Bang 547; 1967; #13), "Kentucky Woman" (Bang 551; 1967; #22), and "Shilo" (Bang 575; 1970; #24).

Various personal problems, including the breakup of her marriage and substance abuse — and changing popular music fashions led to a drop-off in productivity by the late 1960s. She revived her career, however, by focusing on radio and television commercials through her firm, Pineywood Productions. In the early 1970s, Greenwich wrote ad material for Ford, Cheerios, Prince Albert Tobacco, and other companies. She also contributed vocals to jingles for the likes of Beechnut, Clairol, Coca-Cola, Noxzema, and Helena Rubenstein.

At the height of the rock 'n' roll revival, Greenwich recorded an album of her classic hits, *Let It Be Written, Let It Be Sung* (Verve 5091; 1973). Deemed by critics to be even better than her 1968 release, *Ellie Greenwich Composes, Produces, and Sings* (United Artists 6648), she spent much of the 1970s and early 1980s performing live. This success led to support for a Broadway musical based on her songs; *Leader of the Pack* opened in early 1985 to mixed reviews and modest box-office success. Reissues of recordings of her compositions, though, have continued to pay high dividends.

FRANK HOFFMANN

GREER, SONNY

(13 DEC 1903–23 MAR 1982)

American jazz drummer, born as William Alexander Greer in Long Branch, New Jersey. He played with various groups, including his own Memphis Men, but for

most of his career he was with Duke Ellington (1920s to 1951). "Beggar's Blues" (Columbia 1868-D; 1929), was an early success of the Memphis Men. Greer also did some vocals for Ellington (e.g., in "I'm So in Love with You," Clarion 5391; 1930), and he played the chimes (e.g., in "Ring dem Bells," Okeh 41468; 1930).

GREGORIAN CHANT

The plainsong of the Roman Catholic Church, dating from the Middle Ages. It consists of unaccompanied monophonic melodies set to the Latin text of the liturgy. The first recording of the chant took place in the Vatican, after a solemn high mass celebrated by Pope Pius X on 11 Apr 1904. Don Antonio Rella directed the recording, which encompassed all the music that had been sung at the mass; and other chants were recorded under different conductors. G&T issued eight 12-inch discs and four 10-inch discs containing this material. An LP reissue appeared in 1982 (Discant Recordings 1–2). The 1917 Victor catalog carried seven Gregorian items by the Sistine Chapel Choir, plus four by other groups, but attached a warning label to them: "It cannot be denied that these Gregorian Chant records are somewhat monotonous, except to those especially interested." Interesting or not, there was a fair amount of chant recording during the 78-rpm era, most importantly by the Monks Choir of St. Pierre de Solesmes Abbey, where the most authentic interpretations were made (e.g., HMV W1115–26, and extensive selection). The chant was represented in the major historical anthologies as well.

Chant recordings are available on numerous CDs, mostly selling in modest numbers to classical music aficionados. However, when the Benedictine Monks of the Monasterio de Santo Domingo de Silos issued their CD, *Chant* (Angel 55138), in 1994, it became a surprise hit. The recording appealed to New Age listeners and others interested in the soothing sounds of medieval part singing. Clever packaging also helped sell the release. By 1995, the CD had sold more than 5 million copies, and a follow-up, *Chant II*, was released, followed by several other CDs, although none enjoyed the fluke popularity of the first release.

REV. CARL BENSON

GREINER, RICHARD A. (1931–)

Now retired as emeritus professor from the University of Wisconsin, after a career spanning 36 years, Greiner earned a reputation as not only one of the more stellar engineering minds in the field of audio, but was equally well regarded as an all-round researcher, engineer, and scientist.

After earning undergraduate and masters degrees in physics (1954 and 1955), with a concentration in molecular spectroscopy, nuclear spectroscopy, and solid state physics, he went on to receive a Ph.D. in electrical engineering from the University of Wisconsin in 1957. His doctoral work involved photoconductivity and electrical conductivity in solids, which were directly related to the behavior of semiconductor devices. In 1961, he published a textbook, *Semiconductor Devices and Applications* (McGraw Hill), which dealt with the physics of discrete transistor operation and applications of a variety of solid state devices to analog and digital circuits.

From 1979 through 1992, he headed a university research program in acoustics, electro-acoustics, instrumentation, digital signal processing and adaptive digital control. The core of this research, which resulted in 95 graduate students receiving degrees, was supported by industrial grants. His lifelong interest in high-fidelity sound reproduction and audio engineering resulted in numerous articles about power amplifiers and loudspeaker system design. These efforts lead to his election as a fellow of the Audio Engineering Society in 1984.

Since retirement in 1992, Dr. Greiner has continued to consult in acoustics, noise and vibration control for industrial applications. In addition to his AES membership, he is a member of Eta Kappa Nu, Sigma Xi, Phi Kappa Phi, Tau Beta Pi, Kappa Eta Kappa, and the Institute of Electrical and Electronics Engineers.

HOWARD FERSTLER

GRIESINGER, DAVID (27 MAR 1944—)

Born in Cleveland, Ohio, and fascinated with music, acoustics, and recording from early childhood, Griesinger attended University School, in Shaker Heights, Ohio, and graduated in 1962. He went on to study at Harvard, getting his B.A. in 1966, earning a Ph.D. in solid-state physics in 1976, and going on to do additional lecture work in physics at the university in 1977 and 1978. In addition to his scientific studies, he also honed his musical skills by being in the Harvard Glee Club (1963–1966), the Harvard University Choir (1966–1976), and the Boston Camerata (1975–1980). Although his advanced degree was in physics, Griesinger eventually went back to his first love: music, sound recording, and acoustics.

Those interests led him to study the way human neurology decodes the sound field around us into streams that contain information about the direction, distance, and content of sound sources, as well as information about the size, shape, and quality of the playback space. This has led to a number of papers by

him in the field of acoustics and sound perception, to a modest career as a professional sound recording engineer, and to several commercial products, with one of them being the first successful device for generating artificial reverberation with digital techniques: the Model 224 digital reverberator from Lexicon Corporation. Since that time, he has continued to develop reverberation products for the company.

Griesinger has also produced a number of papers on recording techniques, and produced a number of commercially released stereo recordings, as well as a series of highly regarded, consumer-oriented surround products from Lexicon, starting with the CP series of surround processors, and leading to the very highly refined DC and MC series with the Logic 7 decoding system. His interest in the perception of musical acoustics also led to the development of the LARES reverberation enhancement system, which is capable of substantially improving the musical acoustics of concert halls and opera houses. The system has been installed worldwide, and is currently being used in the Copenhagen Opera, the Amsterdam Opera, the Berlin Staatsoper, and the Adelaide Festival Theater, among many others.

HOWARD FERSTLER

GRENADIER GUARDS BAND

British military band, extensively recorded by Columbia from 1919 to 1930s. The first issue was made up of selections from *Tales of Hoffman*, conducted by Captain G. Miller (WA2946–47). Most of the records were directed by Miller, but a number were led by Lieutenant A. Williams. In 1926 the band accompanied 4,000 child violinists in a record made at the Crystal Palace, London. An LP reissue of material recorded under Miller between 1926 and 1932 appeared in 1985, from the International Military Music Society.

GREY GULL (LABEL)

An American issue produced by Grey Gull Records, Boston, from 1919 to 1930. Matrices of Grey Gull were used by many other labels, including Madison, Radiex, Sunrise, Supreme, and Van Dyke in the U.S., and Dominion, Goodson, Metropole, and Piccadilly in Britain. The material was jazz and dance music. A lateral-cut record was marketed, and for a year there was also a vertical-cut "Two-in-One" 10-inch record that played 5 1/2 minutes per side. When the longer play disc was discontinued, Grey Gull applied the idea to their standard record, advertising that they had twice the playing time of others because they lasted twice as long (*TMW* Feb 1921).

GRIGSBY-GRUNOW INC.



Grey Gull label. Courtesy David A. Jasen

Grey Gull also produced confusion with its numbering and use of pseudonyms, rendering a proper documentation of output extremely difficult. Vincent Lopez was the only well established big band on Grey Gull, but Clarence Williams's band offered a fine rendition of "Baby, Won't You Please Come Home?" (#1724). Frank Banta, Charlie Butterfield, and Tommy Dorsey are heard on some sides. But most of the dance recording was done by house bands. The Stellar Quartette made a number of records in the 4000 series of standard numbers; Steve Porter, Billy Jones, Charles Harrison, Henry Burr, Arthur Hall, Al Bernard, Ernest Hare, Arthur Fields, and Frank Luther were among the singers and comedians in the 4000 series. [Barr 1982; Olson 1986 (label list of 4000 series); Rust 1978; Rust 1980; and labels lists in *Record Research*, various issues from 1967 on.]

GRIGSBY-GRUNOW INC.

American radio manufacturer, organized in November 1921 as the Grigsby-Grunow-Hinds Co.; named changed in April 1928. The Majestic Radio was the main product until 1932, when the company bought the Columbia Phonograph Co. from Warner Brothers. However, the firm went out of business in 1933, and Columbia assets passed to the American Record Co.

GRINDERINO, SIGNOR

"Supposedly an anonymous street organ grinder, pulled off the sidewalk to make a record" (Brooks). "Harrigan

Medley" (Victor 5478; 1908) was the result and it remained in the catalog until 1923. [Brooks 1990.]

GROOVE

The track inscribed in a cylinder or disc by the cutting stylus. Originally, grooves were incised vertically into the recording medium; this "hill-and-dale" process was patented by Bell and Tainter for both cylinders and discs. Emil Berliner patented a lateral-cut groove for discs in 1896. In either method, there is just one continuous groove on a cylinder or disc, although common parlance may describe multiple "grooves." The grooves on 78-rpm records were said to be "coarse grooves" or "standard grooves." There were from 90 to 120 grooves per inch of disc surface.

See also Disc; Groove Speed

GROOVE SPEED

The rate of movement of the disc groove beneath the stylus. It varies with the position of the groove track on the disc surface, even though the turntable maintains a constant rate of revolutions per minute. On a 10-inch disc, for example, groove speed is about twice as fast on the outermost turn of the spiral as it is on the innermost point.

See also Disc; Groove

GROSSMAN, AL[BERT B.] (1926–25 JAN 1986)

Born in Chicago, Grossman began his music career managing the town's Gate of Horn nightclub. During the late 1950s, the club began attracting folk performers, and Grossman turned to management. In 1961, he assembled the popular folk trio Peter, Paul, and Mary, gaining them a lucrative deal with Warner Bros. Records. A year later, he became the manager for budding performer/songwriter Bob Dylan, and would remain Dylan's manager for seven years, placing Dylan's songs with Peter, Paul, and Mary and other popular groups; he made a memorable appearance in the Dylan documentary film *Don't Look Back* (1965). In the mid-1960s, Grossman signed Dylan's backup group, the Band, and also Janis Joplin, among others. In 1968, he formed Bearsville Records, named for his the area of Woodstock, New York, where he built a recording studio. The label was distributed by Warner Bros. His early signings included Paul Butterfield, Todd Rundgren, and Jesse Winchester. The label continued to sign acts through the early 1980s, although the studio was by far more successful than the record company. Grossman died of a heart attack while

visiting London, England, in 1986. The Bearsville studio continues to operate under the ownership of his widow, Sally Grossman.

CARL BENSON

GROUP DELAY

In audio systems, the rate of change of phase shift with respect to frequency. The rate of change is a measure of the slope of the phase shift versus linear frequency. If this plot is a straight line, meaning that the delay causes a phase shift that is proportional to frequency, it is said to have a constant phase shift, or a linear-phase characteristic. Therefore, the device exhibiting this characteristic is said to be phase linear. In acoustics, a system that approaches this standard is commonly referred to as a minimum-phase system. Group delay is considered by some to be important with loudspeaker performance, although it is debatable if it is audible in typical listening rooms unless it is pretty extreme.

HOWARD FERSTLER

GRP RECORDS

SEE GRUSIN, DAVE

GRUNDIG, MAX (7 MAY 1909–8 DEC 1990)

German electronics industry executive, born in Nuremberg. After training in electronics during World War II, he became successful in radio marketing after World War II with models known as Heinzelmans and Goblins, introduced in 1946. A self-contained, portable “carrying case” model radio was introduced three years later. By this time, Grundig was the largest manufacturer of radios in Europe. In 1951, the firm introduced the Reporter 300, its first tape recorder. In 1958, the firm introduced the first combined stereo phonograph and tape recorder. Philips acquired a majority of the stock in the firm in 1984, and operated it for the next 16 years. In 2000, Dr. Anton Kathrein, owner of Kathrein Werke AG, acquired controlling interest in the firm. The company continues to manufacture audio, video, and consumer electronic equipment. [Website: www.grundig.com.]

GRUNGE

A late 1980s offshoot of the alternative rock movement, grunge was a product of the teen-angst-dominated Seattle, Washington, area club scene — a scene that

spawned a long list of commercially successful bands, including Alice in Chains, Green River, Mad Season, Soundgarden, Sunny Day Real Estate, and Tad. The genre infused the then marginal independent rock scene with strong heavy metal overtones, most notably thick power guitar chording, grinding rhythms, shrill, keening vocals, and lyrics reflecting social alienation and a general dissatisfaction with the status quo.

The Seattle-based independent record company, Sub Pop, played a key role in expanding grunge beyond its regional origins. Green River offshoot Mudhoney was the label's first national breakthrough act; their jagged power-pop singles and EPs from the late 1980s — dominated by a driving rhythm section and distorted guitar lines — paved the way for the later acceptance of Nirvana. Nirvana would propel the style into the pop mainstream, thanks in large part to the critical raves and multi-platinum sales of the album, *Nevermind* (Sub Pop/DGC, 1991), featured the Generation X anthem, “Smells Like Teen Spirit” (1991). While Nirvana broke up abruptly following front man Kurt Cobain's suicide in April 1994, hybrid combinations of established Washington-state rock musicians — most notably Pearl Jam, featuring former members of Green River and Mother Love Bone, and Foo Fighters, formed by Nirvana drummer Dave Grohl with the rhythm section of Sunny Day Real Estate — would continue to dominate both the alternative and pop charts in the aftermath by mining the restrained/metal blitzkrieg and shifting dynamics formula set forth in *Nevermind*. Grunge remains a vital part of alternative rock's vocabulary, as well as the template for the hardcore and grindcore developments of the 1990s.

FRANK HOFFMANN

GRUNT RECORDS

Grunt Records was a custom label owned by RCA Victor Records that was begun in 1971 as an outlet for recordings associated with Jefferson Airplane, its initial release being the band's *Bark* album. Grunt released albums by Airplane offshoots such as Hot Tuna and Papa John Creach, and when the band metamorphosed into Jefferson Starship and Starship, these releases also were on Grunt through 1987's Starship release *No Protection*, after which the label was retired.

WILLIAM RUHLMANN

GRUSIN, DAVE (26 JUNE 1934–)

Composer and pianist. Those who know of Dave Grusin's work only through his jazz-fusion recordings are unaware of his long history as a straight-ahead jazz player and recording artist. Grusin's first high-profile gig

GUARDBAND

after college (University of Colorado) was as assistant music director and pianist for Andy Williams from 1959 to 1966. Grusin recorded with Benny Goodman in 1960, and played sessions with Milt Hinton, Frank Foster, Sarah Vaughan, Carmen McRae, Gerry Mulligan, and Quincy Jones. He founded GRP records with partner Larry Rosen in 1976; the label merged with MCA in 1990, and is now part of Verve Records. The label emphasized its high-quality recordings, and was among the first to switch to an all-digital studio. In addition to his performing, Grusin has scored several movies, including *The Heart Is a Lonely Hunter* (1968), *Heaven Can Wait* (1978), *On Golden Pond* (1981), *Tootsie* (1982), and *The Fabulous Baker Boys* (1989), as well as TV shows, most notably *St. Elsewhere*. He has been nominated eight times for an Oscar for his film scores, winning in 1998 for *The Milagro Bean Field War*. He is the recipient of nine Grammys for his arranging and composing work.

BRAD HILL

GUARDBAND

The space between tracks on a magnetic tape.

GUARDSMAN (LABEL)

A British label, issued by Invicta from 1914 to the late 1920s. It was originally styled Guardsman Record; in 1919 it became simply Guardsman. Lugton and Co. were the London agents. There were 700 titles in the July 1915 catalog, a large number of them patriotic numbers. Much of the later material was taken from American Vocalion masters. The label was exported to Canada in 1915 and to the U.S. a year later. Guardsman records of the greatest interest appeared in 1922–1925, in the 7000 “race” series. Of the 38 sides in that series, 13 are by Fletcher Henderson’s orchestra, identified as the Original Black Band, and four by the Mound City Blue Blowers. Louis Armstrong is heard with Henderson. Rosa Henderson and the Carolina Jug Band were included in the series, and Coleman Hawkins’s first important solo record, “Dicty Blues,” was presented (originally Vocalion 14654; 1923). [Rust 1978.]

GUESS WHO

Formed by vocalist/guitarist Chad Allan in Winnipeg as Al and the Silvertones in 1959, they would become the first Canadian rock band to achieve long-term success in the United States. With core members Randy Bachman on guitar, Bob Ashley on piano, Jim Kale on bass, and Gary Peterson on drums, the group went through a

number of name changes in the early 1960s — most notably Chad Allan and the Reflections and Chad Allan and the Expressions — before the Quality label decided to credit their rave-up American hit, “Shakin’ All Over” (Scepter 1295; 1965; #23) to the Guess Who?

Although the Guess Who (sans question mark) enjoyed little commercial success over the next several years, they developed a more polished and diversified sound following the acquisition of vocalist/keyboardist Burton Cummings as a replacement for Ashley in mid-1965. The band became a fixture on the American pop scene following the release of *Wheatfield Soul* (RCA 4171; 1969; #45), which featured “These Eyes” (RCA 74-0102; 1969; #6), and “Laughing”/“Undun” (RCA 74-0195; 1969; #10). The propulsive singles “No Time” (RCA 74-0300; 1970; #5), and “American Woman” (RCA 74-0325; 1970; #1), represented the group’s commercial and creative peak.

The Guess Who continued to place singles and albums on the charts until 1975, despite the departure of Bachman, whose conversion to the Mormon faith clashed with the band’s rock ‘n’ roll lifestyle. Bachman went on to form Brave Belt and, later, the extremely popular Bachman-Turner Overdrive. The Guess Who disbanded in late 1975 with Cummings achieving a measure of solo success at the onset of the 1980s. The group has toured on a fairly regular basis since reforming in 1978, occasionally releasing records (Cummings and Bachman even returned briefly to the fold in the mid-1980s).

FRANK HOFFMANN

GUEST, LIONEL (1880–1935)

British engineer, coinventor (with H.O. Merriman) of the moving coil recording head for electric disc recording, U.K. patent #141,790 (1920).

GUINIPHONE

A portable record player produced in 1929 in Britain, said to be the smallest such machine ever made. Dimensions were 10 inches by 10 inches by three inches when closed; it had a folding paper cone for a horn, and could play 10-inch discs. Possibly the manufacturer was Guinea Gramophone Co., an English firm that was established in February 1929. But the name may come from the selling price, one guinea.

GUN MICROPHONE

A microphone with a long narrow tube along the axis, thus resembling a rifle, leading also to the name “rifle microphone.”

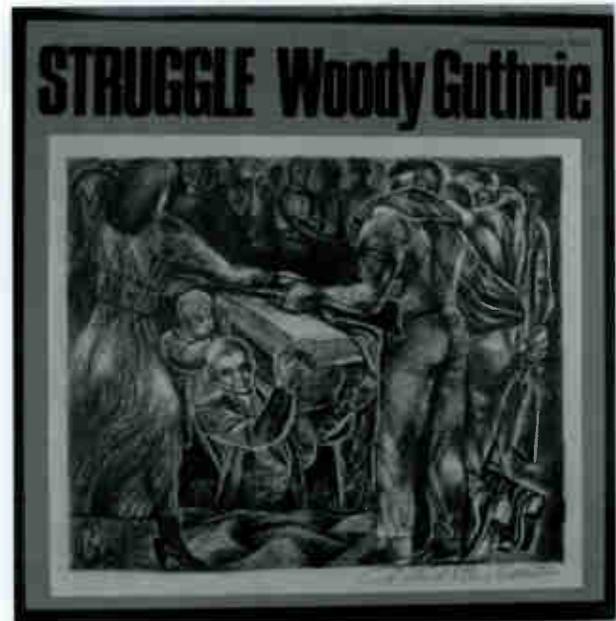
GUTHRIE, ARLO (10 JULY 1947–)

American folk and popular singer, son of Woody Guthrie, born in Brooklyn. He played in New York coffee houses 1965–1966, gained attention at the Newport Folk Festival of 1967 with his song “Alice’s Restaurant,” and recorded it successfully (Reprise 6267; 1967); a motion picture of the same name featured Guthrie in 1969. He adopted a counterculture lifestyle, and appeared at Woodstock in 1969. He had a chart song in 1970: “Valley to Pray (Reprise 0951), and a great hit in 1972: “City of New Orleans” (Reprise 1103). “Comin’ into Los Angeles” (in the album *Best of Arlo Guthrie*, WB 3117; 1977), was his most recent success.

**GUTHRIE, WOODY
(14 JULY 1912–3 OCT 1967)**

American folk and popular singer, born in Okemah, Oklahoma, as Woodrow Wilson Guthrie. He was self-taught on the guitar, and became a street singer and saloon performer in the Depression. Singing socially oriented songs, he appeared at labor meetings and became associated with the class struggle. In 1937 he found success on the radio in Los Angeles, and in 1940 he began singing with Pete Seeger. After World War II he achieved great fame, and attained legendary status in the 1950s and 1960s. Of more than 1,000 songs written or arranged by Guthrie, the most popular was “This Land is Your Land.” His career was cut short by Huntington’s chorea, an inherited illness after 1957; he died in New York. His son, Arlo Guthrie, is also a notable performer.

Guthrie recorded for RCA a famous album of 78s, called *The Dust Bowl Ballads*, in 1940, originally issued on two six-disc sets. This was reissued in the 1950s by Folkways Records at Guthrie’s request when RCA declined to reproduce it on LP; finally, during the folk revival in 1964, RCA issued its own LP version. In 2000, RCA issued the entire sessions, with one outtake, on CD (Buddha 99724). Guthrie often recorded for Moses Asch’s studio during the 1940s and early 1950s, showing up unannounced sometimes late at night after playing a concert, and experimenting freely while Asch



Woody Guthrie's *Struggle* album, commissioned by Folkways Records owner Moses Asch. Courtesy Frank Hoffmann

recorded the proceedings. He was often accompanied by his friend and fellow musician, Cisco Houston. This material was issued on LP by Asch on his Folkways label through the 1970s in various forms, and then when the Smithsonian Institution took over the Folkways Archives, a four-CD set of Asch’s recordings was produced (40112; also sold individually). Asch also commissioned an album of songs on the plight of the radicals Sacco and Vanzetti by Guthrie (recorded 1946–1947; issued on LP in 1960 as Folkways 5485 and on CD by Smithsonian/Folkways in 1995 as 40060). At Alan Lomax’s instigation, Guthrie also recorded extensive reminiscences and performances for the Library of Congress, reissued in a boxed LP set during the 1960s by Elektra Records and more recently on three CDs by Rounder Records (1041/42/43). Guthrie was awarded a Grammy lifetime achievement award in 1999.

REV. CARL BENSON



H

HASS EFFECT

SEE PRECEDENCE EFFECT

HACKETT, CHARLES (4 NOV 1889–1 JAN 1942)

American tenor, born in Worcester, Massachusetts. He studied in Boston and Florence, and made his debut in Genoa; then appeared at La Scala, and toured South America and Europe. Hackett sang at the Metropolitan Opera on 31 Jan 1919 in *Barbiere di Siviglia*, and remained with the company through 1922, returning in 1934–1940. In 1923–1933 he was with the Chicago Opera. He died in New York.

Hackett was heard on Edison Blue Amberols, singing “Let Me Like a Soldier Fall” from Wallace’s *Maritana* (#1724), “Then You’ll Remember Me” from *Bohemian Girl* (#1801), and “Lost, Proscribed” from *Martha* with baritone Thomas Chalmers (#28155). The *Bohemian Girl* aria appeared on Edison Diamond Disc #80079 in 1913. Hackett also made Diamond Discs of “For All Eternity” (#50039; 1913), and “Sweet Genevieve” (with chorus, #80007; 1913).

His Columbia (U.S.) recordings of 1919–1930 exhibit his repertoire of Italian/French lyric roles. “Ecco ridente” (#49604; 1919), is a fine rendition, as is “Il mio tesoro” (#98047). He was known also for popular songs, such as “Mother Machree” (#80097), and Irving Berlin’s “All Alone” (#140366). He made duets from *Rigoletto* and *Traviata* with Maria Barrientos, and was part of the Columbia recordings of the *Rigoletto* quartet and the *Lucia* sextet. Four of

his numbers remained in the Columbia catalogs to the end of the 78-rpm era. He was also on the Columbia label in Britain (Columbia Graphophone Co., Ltd.) from 1924 to 1926. Sometime in 1929, Hackett sang five operatic arias for Vitaphone films. A CD of his complete recordings is available from Marston. [Holdridge 1975.]

HADDY, ARTHUR CHARLES (16 MAY 1906–18 DEC 1989)

British audio engineer, born in Newbury, Berkshire. He was an apprentice for a radio firm, then worked for Western Electric in the late 1920s. He joined Crystalate Gramophone Record Manufacturing Co., Ltd., and remained with the company until 1937, developing improvements in studio equipment. His moving-iron cutting stylus made it possible to raise the upper limit on the recordable spectrum, from 8,000 Hz to 12,000 Hz. Haddy worked with Decca Record Co., Ltd., when the firm acquired Crystalate in 1937, and supervised research on various wartime devices. The most important of these for the history of sound recording was his work on the detection of sonic differences between German and British submarine propellers. Since the differences lay in the upper frequency range, Haddy managed to raise the response of his cutter head to 15,000 Hz. After the war, his innovation was applied to Decca’s Full Frequency Range Recording (ffrr) system, marking the beginning of high fidelity recording. Later he conducted major research in stereo, and in videodisc technology. In 1970 he received the Audio Engineering Society’s

HAFLER, DAVID

Emile Berliner award "for pioneering development of wide-range recording and playback heads and for his significant part in the international adoption of the 45/45 stereo disc recording."

HAFLER, DAVID (7 FEB 1919–25 MAY 2003)

Interested in music and music reproduction since childhood, Hafler built his first audio system in 1938, and then went on to earn a degree in mathematics from the University of Pennsylvania in 1940. Although his first postgraduate job involved work as a statistician, World War II put him into the U.S. Coast Guard from 1942 until 1945. During that time, he served as a communications officer, specializing in loran, sonar, and radio equipment. The experience further enhanced his interest in electronics, and after the war he joined with Herb Keroes to found Acro Products in 1949, specializing in the production of high-quality transformers for use in audio amplifier systems. Hafler also supplied schematic diagrams that allowed an individual to build an amplifier around his transformer. After six successful years of producing transformers, Hafler joined with Edward Laurent in 1955 to cofound the Dynaco Corporation, an enterprise that built completed amplifier units and also sold them in kit form at reduced cost. One salient characteristic of his designs was their (for that time) high power output, thereby helping to facilitate the success of the new, low-efficiency, acoustic-suspension speakers beginning to show up in the marketplace. The company went on to build and market preamplifiers and tuners, and also imported tone arms and cartridges, as well as a tape deck, all sold under the Dynaco name.

Hafler sold the company to Tyco in 1969, although he stayed on as a consultant for an additional three years. During that time, Dynaco started to import speaker systems built by Scanspeak, selling them under the Dynaco name (the model A-25 being the most notable). Hafler also came up with the Hafler Circuit, a passive, four-speaker ambiance-extraction device that was based on the research of Peter Scheiber, and sold by Dynaco as the "Quadaptor."

After leaving Dynaco in 1971, Hafler bought a half interest in Ortofon, which itself became part of Harman International in 1977. While at Ortofon, he was awarded a fellowship in the Audio Engineering Society in 1972. In 1978, he started the David Hafler Company, which replicated what had been done with Dynaco by provided high-quality amplifiers and preamplifiers at reasonable prices, in both kit form and assembled. In 1984, Hafler's company merged with the Acoustat speaker company, and the Hafler Company itself was sold to the Rockford Corporation in 1988, with Hafler himself afterwards retiring. An avid chess enthusiast

and a member of the U.S. Chess Federation, Hafler has one of the world's outstanding collections of chess sets.

See also **Ambiance Extraction; Dynaco Corporation; Hafler Circuit**

HOWARD FERSTLER

HAFLER CIRCUIT

A simple surround-sound ambiance-simulation technique developed by David Hafler in the 1960s, and made available from his company, Dynaco, in a device called the Quadaptor. It basically used a left-minus-right extraction process with two-channel source material. Unlike some more complex and effective extraction technologies such as Dolby Surround, the Hafler circuit did not require additional amplification for the surround, "ambiance" channel.

See also **Ambiance Extraction; Dolby Surround Sound**

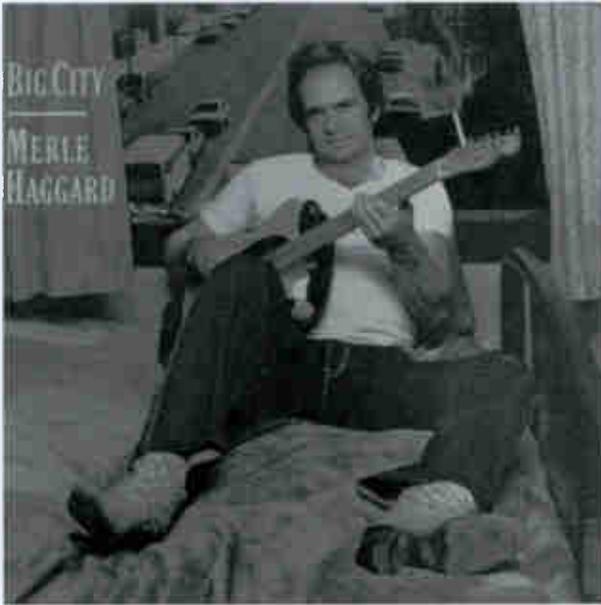
HOWARD FERSTLER

HAGER, FRED (1874–3 MAR 1958)

American violinist, the first to make a commercial recording of the instrument, born in Susquehanna County, Pennsylvania. He was a band and orchestra conductor for most of the pioneer labels, and recording director for Rex, Okeh, and Keen-O-Phone. In 1898 he made a number of violin solos for Edison cylinders: "Annie Laurie" (#6700), the Gounod "Ave Maria" (#6701), "Ragtime Medley" (#6706), and "Träumerei" (#6707), the earliest recordings of the violin. Hager directed the Columbia Orchestra from the late 1890s through about 1902–1903. It made more than 200 cylinder records between 1896 and 1900, beginning with "Honeymoon March" (15000). Its repertoire covered marches, waltzes, polkas, ballads, and novelty numbers. The first disc record made by Columbia was also conducted by him, "In a Clock Store." Charles Adam Prince took over the conductor's role for the studio ensemble after 1902. Hager died in Dunedin, Florida. [Creighton 1974, but readers should note that while the list of recordings given there is correct, Hager's birth and death dates are wrong and his name is mistakenly said to be a pseudonym.]

HAGGARD, MERLE (6 APR 1937–)

Roots country singer who was one of the main architects of the Bakersfield Sound, a stripped-down, driving country style that was popular in southern California in the late 1950s through the mid-1960s. Handled by producer Ken Nelson, Haggard was one of Capitol



Merle Haggard, c. early '70s. Courtesy Frank Hoffmann

Records's best-selling country artists of the 1960s and early 1970s. Haggard is best remembered for a series of semiautobiographical ballads from the mid-1960s — i.e., “I’m a Lonesome Fugitive” (Capitol 5803; 1966; #1; originally “The Fugitive”), “Branded Man” (Capitol 5931; 1967; #1), “Sing Me Back Home” (Capitol 2017; 1967; #1), and the 1969 conservative anthem, “Okie from Muskogee” (Capitol 2626; 1969; #1). Aware of his country roots, Haggard was among the first country performers to record concept albums in honor of his key influences, including Texas Swing master Bob Wills and songster Jimmie Rodgers. Since the mid-1970s, his career has been spotty; marred by health and personal problems, he has rarely achieved the same level of success on record, with the exception of 1983’s “Poncho and Lefty,” a duet with Willie Nelson. He left Capitol Records in 1977, moving to MCA and then to Curb in 1990, and finally signing in the late 1990s with the small independent Anisi/Epitaph, better known for recordings of punk rock acts. Although still a popular act on the road, his recordings have not fared well on the country charts. The winner of many awards, Haggard was elected to both the Songwriters Hall of Fame in 1977 and the Country Music Hall of Fame in 1994.

CARL BENSON

HAITINK, BERNARD (4 MAR 1929–)

Dutch conductor, born in Amsterdam. Originally a violinist, he played in the Radio Philharmonic Orchestra, Hilversum, then became its conductor in 1957. In 1961 he was named coprinicipal conductor (with Eugen

Jochum) of the Concertgebouw Orchestra. He was its chief conductor in 1964–1988. From 1967 he also conducted the London Philharmonic Orchestra and the Glyndebourne Festival. Haitink is especially renowned for his interpretations of Mahler and Bruckner (he has recorded all their symphonies), and the classical school.

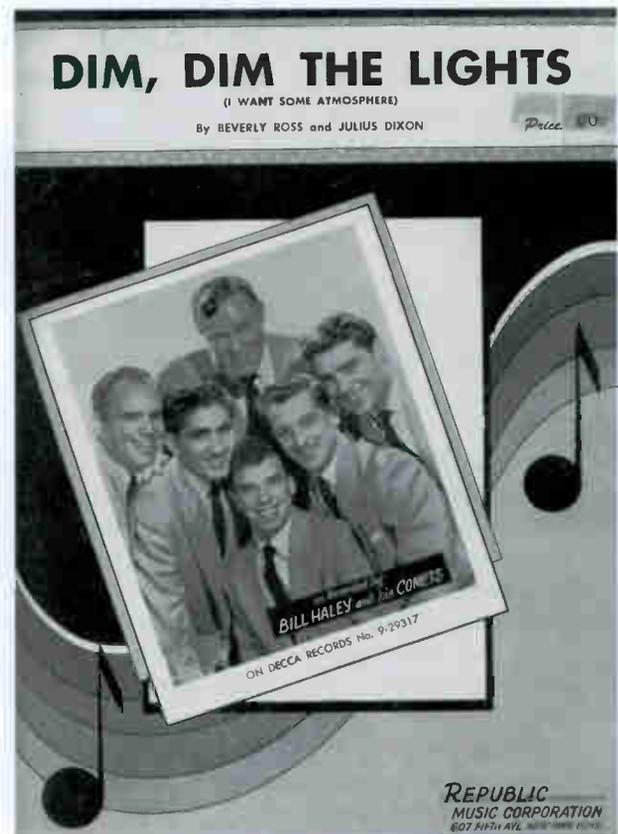
HALE, E.F.G.

British recording industry executive, known as “Alphabet Hale.” He was for eight years a sales manager and traveler with the London branch of the Columbia Phonograph Co., General. Then for three years (from February 1910), Hale was with the Andres Brothers, London agents for the German Homophone and Homochord labels. He managed the Dacapo Record Co., Ltd. (for the Dacapo GmbH of Germany), from 2 Oct 1912, succeeding William Andrew Barraud.

FRANK ANDREWS

HALEY, BILL (6 JULY 1925–9 FEB 1981)

American popular singer and guitarist, also a disc jockey, born William John Clifton Haley, Jr., in Highland



Bill Haley sheet music cover, c. mid-'50s. Courtesy David A. Jasen

HALF-SPEED MASTERING

Park, Michigan. He began performing as a country singer and guitarist with various groups, then turned to the emerging rock 'n' roll style. He had a group called the Saddlemen, which he renamed the Comets in 1952, and achieved great acclaim with them. Several records in the new rock idiom helped to establish that genre in the mainstream of popular sound: "Crazy, Man, Crazy" (Essex 321; 1953), "Shake, Rattle, and Roll" (Decca 29204; 1954), and the feature song of the film *Blackboard Jungle*, "Rock around the Clock" (Decca 29124; 1955).

Haley's chart run ended in a late 1950s, a time when a bevy of teen idols accentuated his relatively advanced age. Nevertheless, Haley continued to make money touring in Europe and Mexico as well as selling some 20 million albums. He became a disc jockey in the 1960s, and died in Harlingen, Texas.

REV. FRANK HOFFMANN

HALF-SPEED MASTERING

In analog recording systems, a technique of cutting a master disc at half the speed of recording time (twice the playback time), thereby reducing distortion levels. The process also offers better dynamic range and improved frequency response. Digital systems gain no benefits from techniques of this kind, and indeed, it is possible to dub digital material at speeds that are faster than standard with no loss in signal quality.

See also **Audiophile Recording**

REV. HOWARD FERSTLER

HALL ACOUSTICS

SEE *ROOM ACOUSTICS*

HALL AND OATES

A popular blue-eyed soul duo, vocalist Daryl Hall (b. Philadelphia, Pennsylvania, 11 Oct 1948), and vocalist/guitarist John Oates (b. New York City, 7 Apr 1949), were one of the most popular acts of the 1970s and 1980s, surpassing the Everly Brothers in number one chart hits. They met in 1967 at a "battle of the bands" in Philadelphia when both were students at Temple University. Hall formed a group called Gulliver that made one album for Elektra Records in 1969; Oates subsequently joined the band, but it then fell apart. Oates temporarily went to Europe in search of work, while Hall continued to work in Philadelphia studios as a backup singer. They reunited on Oates's return to Philadelphia, recording for Atlantic Records

from 1972 to 1975, but failed to produce any hits. Signing with RCA, they hit it big with the number four "Sara Smile" (1976; RCA 10530), leading Atlantic to rerelease their version of "She's Gone," which went to number seven that year (Atlantic 3322). In February 1977 they scored their first number one with "Rich Girl" (RCA 20860). After a few less-successful follow-ups, the duo hit it big in 1981 with "Kiss on My List," which remained at number one for three of its 17 weeks on the charts (RCA 12142); it was followed that year by three more major hits. "You Make My Dreams" (#5; RCA 12217), "Private Eyes (#1; RCA 12357), and "I Can't Go for That (No Can Do)" (#1; RCA 12357).

The duo continued to score major hits through the mid-1980s, notably 1982's "Maneater" (#1; RCA 13354), "Out of Touch" (#1 1984; RCA 13916), and 1985's "Method of Modern Love" (#5; RCA 13970). They cut a live album with their lifelong idols, Temptations' David Ruffin and Eddie Kendrick, producing a Top 20 hit with a Temptations medley in autumn 1985 (RCA 14178), and then took three years off as a duo. Hall scored his only major solo hit during this time with "Dreamtime" (#5 1986; RCA 14387). Their last major hit came on new label Arista in 1988 with "Everything Your Heart Desires" (#3, Arista 9684). The duo recorded sporadically since, including two albums in the 1990s, with little chart success.

CARL BENSON

HALL, ARTHUR

(12 MAY 1888—MARCH 1951)

American concert tenor and vaudeville performer, born Adolph J. Hahl in New York. He recorded for many labels, achieving his highest popularity in 1923–1927. His first Edison Blue Amberol was "Where the Black-Eyed Susans Grow" (#3192); his most popular number was "Here's Love and Success to You." Hall sang with the Manhattan Quartet, which made records in German from ca. 1912 to ca. 1929. He also made a record for the Black Swan label — supposedly a label for Black artists — under the name Howard Lewis: "Yes, We Have No Bananas." (The identical take was released also on the Olympic label, which paralleled many Black Swan issues.) Among the other labels Hall worked for were Banner, Bell, Clarion, Columbia, Domino (as Cliff Stewart), Emerson, Everybodys, Gennett, Globe, Grey Gull, HyTone, Madison, Pathé, Perfect, Playtime, Radiex, and Supreme. Hall and tenor Jack Ryan made a successful series of duets in 1925–1926, beginning with "Hawaiian Nightingale"/"I'm Someone Who's No One to You" (Edison Diamond Disc 51473). In 1925

Hall was a member of the Edison group named the Singing Four, which gave way in 1926 to the National Male Quartet. His final Edison Diamond disc was "Sweet Elaine" (#52235; 1928). [Walsh 1972/12.]

HALL, DAVID (10 AUG 1951–)

Hall earned a degree in mechanical engineering from Case Institute of Technology in 1974, and is considered by some to be the father of super-quality subwoofers for home-audio use. A versatile and innovative engineer, he has designed a number of machines used in the development of balloon angioplasty, and also patented the design of a hand-held test tachometer. His notable accomplishment in the field of high-fidelity sound reproduction was the design of a subwoofer system that made use of servo-feedback circuitry to keep bass distortion at extraordinarily low levels. This revolution helped to usher in the era of subwoofer/satellite systems, possibly the most significant advance in speaker-system technology since the acoustic-suspension woofer allowed good speaker systems to be built to reasonably small size. In 1983, Hall founded Velodyne Acoustics, which, under his leadership, continues to specialize in the design, construction, and distribution of both state-of-the-art and affordable subwoofer systems for home-audio use. Hall is a member of the Audio Engineering Society, Acoustical Society of America, and the IEEE, and holds seven patents on product designs.

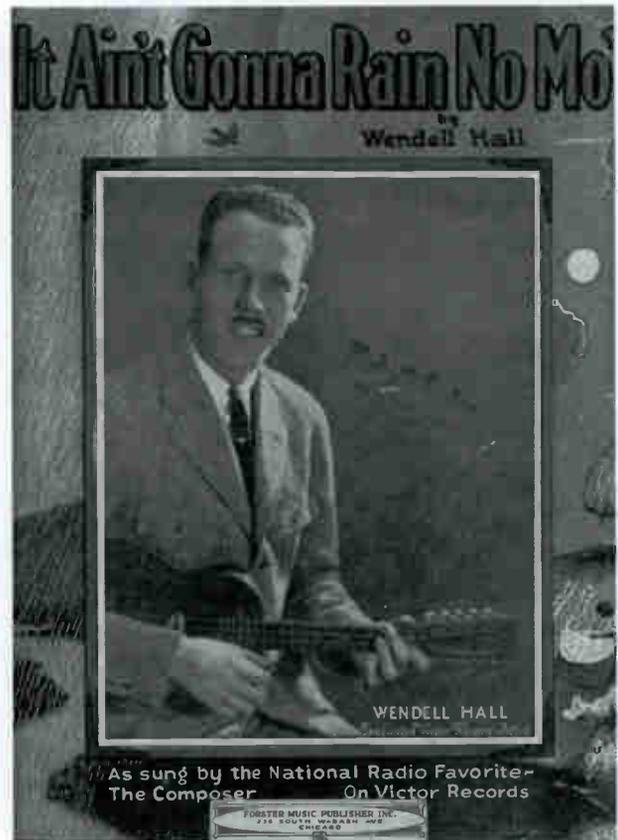
HOWARD FERSTLER

HALL, FREDERICK DURIVE (1857–1923)

American recording industry executive and inventor, born in New Orleans. He set up the B&H Fibre Manufacturing Co. in 1907 to make and distribute his bamboo fiber needle; the company name changed sometime before 1923 to the Hall Manufacturing Co.

HALL, WENDELL (23 AUG 1896–2 APR 1969)

American singer, composer, ukulele player, and vaudeville performer, born in St. George, Kansas. He became a stage player after World War I, identified as "The Red Headed Music Maker," and won acclaim in 1923 singing his own composition "It Ain't Gonna Rain No Mo'" (Gennett 5271 and other labels) — this sold more than a half-million in its Victor manifestation alone (#19171, #19886). It was through Hall that the ukulele became known and popular in America. He



Sheet music cover for Hall's best-known song, "It Ain't Gonna Rain No Mo'." Courtesy David A. Jasen.

directed radio programs in the 1930s, and made many records for Brunswick and other labels through 1933. Later, he became an advertising executive.

HALLEY, WILLIAM J. (17 JAN 1893–15 NOV 1961)

American comedian and popular singer, born William Joseph Hanley in Hoboken, New Jersey. He specialized in blackface routines in the manner of Al Jolson, and made records of such numbers from 1913 to 1915. The first was "At Uncle Tom's Cabin Door" (Victor 17316; 1913). He worked also for Columbia in 1914–1915, and for other labels. Halley went on to become a member of the New Jersey state assembly, and later was a district court judge. [Walsh 1975/7–8–9.]

HAMMOND, JOHN HENRY, JR. (15 DEC 1910–10 JULY 1987)

American music critic and recording industry executive, born in New York City. He attended Yale

HAMPTON, LIONEL

University, left in 1931 and worked as a disc jockey and radio producer of live jazz programs. In 1933 he became recording director for Columbia Phonograph Co., and spent most of his career with the firm. Known as a talent finder, Hammond discovered such stars as Count Basie, Charlie Christian, Bob Dylan, Aretha Franklin, Billie Holiday, Bruce Springsteen, and Mary Lou Williams. His early recordings included discs by Fletcher Henderson, Coleman Hawkins, Joe Venuti, Chick Webb, Red Norvo, Mildred Bailey, and Jack Teagarden. He befriended the young Benny Goodman, and influenced him to form a swing band in 1933. It was he who recorded the landmark Benny Goodman jazz concert at Carnegie Hall in January 1938.

Hammond became recording director for Majestic Records in 1946, vice president of Mercury Records (1948–1952), and returned to Columbia as an A&R man. He was a critic for *Down Beat* (1934–1941), *Saturday Review*, and various newspapers. He was a strong supporter of equal rights for Black musicians (he was white), and was a significant factor in the eventual success of that civil rights battle; he served as vice president of the National Association for the Advancement of Colored People. His presentation of the Benny Goodman trio in Carnegie Hall was apparently the first occasion in which a racially integrated musical ensemble had appeared in a major American concert hall. Hammond died in New York City. His son, John Paul Hammond, has enjoyed a long career as a blues guitarist. [Hammond 1977.]

HAMPTON, LIONEL (20 APR 1908–31 AUG 2002)

American jazz vibraphonist, drummer, pianist, singer, and big band leader; born in Louisville, Kentucky. He began as a drummer in Chicago clubs, then went to Los Angeles; he drew national attention playing vibraphone — the first jazzman to give identity to the instrument — with Benny Goodman's quartet in 1936–1940. He had his own bands, and toured Europe. His Jazz Inner Circle sextet was founded in 1965.

Hampton's first solos on record were with Goodman in 1936: "Dinah" (Victor 25398), "Exactly Like You" (Victor 25406), and "Vibraphone Blues" (Victor 25521); he did vocals on the last two. Hampton's band of 1937, featuring at various times Ziggy Elman, Jess Stacy, Cozy Cole, Jonah Jones, Johnny Hodges, Sonny Greer, Benny Carter, Milt Hinton, Nat "King" Cole, Helen Forrest, and Gene Krupa, recorded for Victor, beginning with "My Last Affair" with Hampton's vocal (#25527), and "Jivin' the Vibes" in which he played his favored instrument (#25535). He stayed with Victor through the 1930s, displaying his own virtuosity and that of his colleagues. "When Lights Are Low" (Victor

26371; 1939), was a notable record in the long list of Hampton hits. He played drums in "Jack the Bellboy" and a piano duet with Nat "King" Cole on the other side of the disc (Victor 26652; 1940). In the LP era Hampton made numerous albums for Columbia, among which the finest may be his set with Krupa and Teddy Wilson (Columbia CX-10027; 1955). Hampton continued to be active into his 90s, performing and recording, although a stroke he suffered in his late 80s slowed him down considerably; he passed away following a heart attack in his New York City home in 2002.

HANCOCK, HERBIE (12 APR 1940–)

Herbie Hancock is one of the seminal jazz figures of the second half of the 20th century. But while his technical proficiency as a keyboard player and composing skills are of the highest order, he is best known as a jazz innovator, experimenting with synthesizers and electronic music in general. Furthermore, he has helped broaden the fusion movement, incorporating a wide range of pop, rock, funk, and classical music elements within a jazz framework.

Born in Chicago, Hancock studied both classical and jazz music while attending Grinnell College (Iowa) before joining Donald Byrd's band as pianist in 1960. His debut solo LP, *Takin' Off* (Blue Note 4109; 1962), demonstrated his already well-developed songwriting talents; one of his pieces, "Watermelon Man" (Blue Note 1862; 1962), would be covered by many other musicians. Other successful releases included *Inventions and Dimensions* (Blue Note 4147; 1963), *Empyrean Isles* (Blue Note 4175; 1964), and *Maiden Voyage* (Blue Note 4195; 1965).

Hancock became a member of Miles Davis's group in 1963; during his five-year stay, Davis encouraged him to play an electric piano. The results of this experiment — *Miles in the Sky* (Columbia 9628; 1968), *Filles de Kilimanjaro* (Columbia 9750; 1969), and the elegiac masterpiece, *In a Silent Way* (Columbia 9875; 1969) — defined the jazz-rock movement of the 1970s. During this period, Hancock also contributed session work to other artists' recordings, made television commercials, and scored his first film, Michelangelo Antonioni's *Blow Up* (MGM 4447; 1966).

Hancock continued to refine his electronic arrangements in the years immediately after leaving Davis; one release, *Mwandishi* (Warner Bros. 1898; 1971), was designated one of the best albums of the year by *Time* magazine. With *Head Hunters* (Columbia 32731; 1973; #13), he employed synthesizers for the first time; its platinum sales inaugurated a wholesale trend within the jazz scene. As a host of jazz-inflected techno-funk LPs flooded the marketplace, Hancock took

on new challenges; utilizing a Vocoder voice synthesizer in his first recorded vocals for *Sunlight* (Columbia 34907; 1978; #58), and incorporating disco-oriented rhythms in *Feets Don't Fail Me Now* (Columbia 35764; 1979; #38).

The 1980s found Hancock divided between genre-bending experiments — most notably *Future Shock* (Columbia 38814; 1983), which included the Grammy winning (best R&B instrumental performance). “Rockit” (Columbia 04200; 1983; #71) — more traditional jazz fare featuring the V.S.O.P. quintet, the Herbie Hancock quartet, and collaborations with Chick Corea and Oscar Peterson. Further honors included a 1983 best R&B instrumental performance Grammy for *Sound System* (Columbia 39478; #71), a 1987 best instrumental performance Grammy for “Call Sheet Blues,” and an Oscar for best original score on the movie *'Round Midnight* (Columbia 40464; 1986; soundtrack).

Hancock's 1990 recordings were uneven at best. *Dis Is Da Drum* (Mercury 528185; 1995), represented a failed attempt at harnessing hip-hop within a fusion context, while his attempt to provide timeless settings for the music of the Beatles, Peter Gabriel, Prince, and others in *The New Standard* (Verve 527715; 1996) comes across as both sterile and pompous. His best recordings from this period have been the countless reissues and retrospectives put out by Blue Note, Columbia, Warner Bros., and various smaller labels.

FRANK HOFFMANN

HANDY W. C.

(16 NOV 1873–28 MAR 1958)

The self-proclaimed “Father of the Blues,” William Christopher Handy was born in Muscle Shoals, Alabama, and trained as a cornetist. Through the 1890s, he toured as a bandleader with minstrel shows, and then led his own band through the first decade of the 20th century. In 1909, while living in Memphis, Tennessee, he was hired by a local politician Edward Crump to write a campaign song for his upcoming mayoralty bid. After that election, Handy renamed it “The Memphis Blues” and published it himself; it became a major hit when it was recorded in 1914. A year later, Handy had another hit with his “St. Louis Blues,” one of the most popular blues compositions of all time.

Handy made his recording debut in 1917 for Columbia Records leading his local Memphis band. A year later, Handy opened a New York City office for his growing publishing concern (a partnership with Henry Pace). Pace left in 1920 to form Black Swan

Records, and Handy renamed the publishing firm Handy Bros. Handy's recording career continued sporadically, with sessions in 1919 for the small Lyratone label and several sessions in 1923 for Okeh, but his band sounded dated compared to the more jazz-flavored bands now recording. Also in the 1920s, Handy's vision was failing and eventually he gave up bandleading; others would score major hits with his songs, and Handy himself became a revered figure in African-American musical circles for his success as both composer and businessman.

CARL BENSON

HANNIBAL (LABEL)

Founded by producer Joe Boyd in 1980, the label was originally formed to feature acts that he had previously produced for Island and Warner Brothers, including the McGarrigle Sisters and Richard and Linda Thompson. Boyd was a better producer than businessman, and the label continued on a shaky financial basis through the 1980s. He also formed a subsidiary, Carthage Records, to rerelease the albums that he had produced in the late 1960s and 1970s that had gone out of print. During the mid-1980s, performer Geoff Muldaur was hired to run the label, and it operated virtually out of his home in New Jersey. Hannibal was purchased by Rykodisc in 1991, and has been maintained as an imprint. Boyd continues to produce for the label.

CARL BENSON

HANSON, OSCAR B.

Hanson ranks among the greatest of the first generation of broadcast engineers. His radio career began in 1912 when he attended the Marconi School in New York, now continuing as the RCA Institute. Completing his course in “wireless,” he obtained his operator's license and went to sea. From 1917 to 1920 he worked in the testing department of the Marconi Company, becoming chief testing engineer. When radio broadcasting came into being Hanson became associated with WAAM, a pioneer station in Newark, New Jersey. In 1922 he accepted a position as assistant to the plant engineer at WEAJ, then owned and operated by the American Telephone and Telegraph Company. With the formation of the National Broadcasting Company in 1926, he went with the new company and directed technical operations and engineering activities for the rest of his career. No other individual had a greater influence on the look and feel of NBC's broadcast facilities during the network's first decade and a half. Hanson's design masterpiece

HAPPINESS BOYS

was the Radio City studio complex in New York, opened in the fall of 1933. He also designed the network's Hollywood facilities. He was honored by the Audio Engineering Society with its Potts award in 1956.

HOWARD FERSTLER

HAPPINESS BOYS

The name taken by the duo of Ernest Hare and Billy Jones, one of the most popular radio and recording teams of the 1920s; and "the most accomplished pair of singing comedians ever to be heard on radio" (Walsh). They began recording for Brunswick in 1921, with "All She'd Say Was 'Umh Hum'" (#2063), and went on to make at least 4,000 duet records in addition to hundreds of solos by each man. Many of their records were made with pseudonyms, such as Thomas and West (Banner label); Billy West and Bob Thomas (Harmony label); David Harrow and Thomas Edwards, or Joseph Elliott and Samuel Spencer (National Music Lovers label); Billy Clarke and Bob Thomas (Rex label); Black and White (Champion label); Gale and Fisher (Cameo label). Their finest numbers were "Barney Google" and "Old King Tut,"



The Happiness Boys, Ernest Hare and Billy Jones. Courtesy David A. Jasen

both made for several labels in 1923, together on Columbia A3876 and on Edison Diamond Disc 51155. They made 50 Diamond Discs between 1921 and 1929. "Twisting the Dials" (Victor 35953; 1928) was "one of the funniest records ever issued" (Walsh). On 16 July 1930 they made their final disc, Victor 22491: "The Happiness Boys Going Abroad"/"The Happiness Boys in London." They continued on radio in the 1930s. An LP capturing several of their routines was RCA LVA-1008. [Rust 1989; Walsh 1959/3-8.]

HARDING, ROGER (1858-1901)

Irish/American tenor who came to the U.S. at an early age and settled in New York City. He sang in light opera and in minstrel shows, and acted as stage manager for some of them. For a short time he advertised his services as a distributor and manufacturer of phonograph cylinders, but he sold this business to Excelsior Phonograph Co. in 1897. Later, he had his own music publishing firm, and wrote a number of songs as well.

Harding began to record for Columbia and Edison in 1896 and remained active in the studios until his death. He worked for Victor also, and made some records for Excelsior. The material was Irish, ballads, and popular songs of the day. He was a member of the Spencer Trio and the Greater New York Quartette, plus a group named the Imperial Minstrels. One solo that was successful was "Ah, My Estelle" on the Excelsior label (1898). [Martel 1988.]

HARE, ERNEST

(16 MAR 1883-9 MAR 1939)

American singing comedian, born in Norfolk, Virginia. He was an understudy to Al Jolson, and "was able to sing all kinds of music from comedy and romantic ballads to sacred songs" (Rust). Hare recorded 31 solo Edison Diamond Discs from 1919 to 1929, but his principal work after 1920 was in the Happiness Boys duet with Billy Jones. Hare died in Jamaica, New York. [Rust 1989.]

HARLAN, BYRON G.

(29 AUG 1861-11 SEP 1936)

American tenor and comedian, born in Paris, Kansas. He was a versatile performer, described in the Victor 1917 catalog as "one of the cleverest and most amusing of comedians, whether his impersonation be that of a typical Yankee, a darky wench, or an end man in a minstrel show." Harlan had 12 titles listed in that catalog, and he also worked for Columbia and

Edison. His career began with traveling troupes, then as a ballad singer for Edison (appearing also under the name of Cyrus Pipins). In 1902 he began a fruitful partnership with Arthur Collins, recording "First Rehearsal for the Huskin' Bee" (Victor 1723); the two made a successful coon skit, "The Stuttering Coon," in 1904 (Victor 2755). The duo made 42 Edison Diamond Discs, beginning with "Moonlight in Jungleland" (#50001; 1912).

Harlan was a member of the Eight Famous Victor Artists group until 1917. His best-selling solo records were "School Days," which remained 20 years in the Victor catalogs; "Two Little Baby Shoes," and "Where the Sunset Turns the Ocean's Blue to Gold" — the last on Edison cylinder and Columbia disc. After Cal Stewart's death in 1919, Harlan recorded some Uncle Josh monologs. He died in Orange, New Jersey. [Walsh 1943/2-3; corrections in March 1943 issue.]

HARMAN, SIDNEY (5 AUG 1918-)

A major leader in the home-audio equipment business. Harman worked for a public address equipment manufacturer back in the 1940s and decided to bring some equipment home to see if it could be utilized for home-audio use. The results were impressive, both to Harman and his friends, and in 1952 he and engineer Bernard Kardon founded the Harman Kardon company, and were among a handful of individuals who basically started the consumer-oriented hi-fi industry, going so far as to produce the first hi-fi audio receiver in 1954. Harman bought out Kardon in 1956, and in the early 1970s he began experimenting at his Tennessee factory with a new management technique called the Bolivar Project, which was a precursor to the TQM policies of the 1990s. The Bolivar Project involved cooperative labor-management schedules and goals, and the publicity from the project resulted in Harman being appointed deputy secretary of the U.S. Department of Commerce between 1977 and 1979, during the Carter administration.

Before Harman came to Washington he sold his company to Beatrice Foods to avoid a conflict of interest. However, in 1980, after leaving government service he formed Harman International Industries by repurchasing several of the enterprises he had sold to Beatrice, including JBL, Harman Kardon, Infinity, and Epicure. Over a period of time, Harman International acquired additional companies, including UREL, Soundcraft, Allen and Heath, Studer, DOD, Lexicon, AKG, BSS, Orban, dbx, Quedest, and Turbosound.

Over the years, Harman, whose thesis, "Business and Education — New Experiments, New Hope," earned him a Ph.D. in social psychology, has made a priority of educational support and funding. He is a

founder of the Program on Technology, Public Policy, and Human Development at the John F. Kennedy School of Government, Harvard University, and is a member of the advisory committee of the Science, Technology, and Public Policy Program at the same institution. In addition, he is the chairman of the executive committee of BENS (Business Executives for National Security), chairman of the program committee of the Board of The Aspen Institute for Humanistic Studies, a trustee of the Carter Center, and a member of the board of the National Alliance of Business, a member of the Leadership Institute of the University of Southern California, served for three years served as president of Friends World College, the worldwide experimental Quaker college, and been a trustee of the Martin Luther King Center for Social Change, the Los Angeles Philharmonic Association, and the National Symphony Orchestra. He is also a member of the Council on Foreign Relations, the Council on Competitiveness, and is a member of the board of advisors at the Carter Center of Emory University. Dr. Harman has written extensively on productivity, quality of working life, and economic policy in *Newsweek* magazine, the *Washington Post*, and *The Christian Science Monitor*. He is the coauthor, with Daniel Yankelovich, of *Starting with the People*, published by Houghton Mifflin in 1988.

HOWARD FERSTLER

HARMAN INTERNATIONAL INDUSTRIES

Formed in 1980 by consolidating several mainstream companies, including Harman Kardon, itself founded in 1952 by the new corporation's executive chairmen, Sidney Harman and Bernard Kardon. The Fortune 500 corporation currently employs more than 10,000 workers and has developed into a \$2 billion industry powerhouse through both internal growth and strategic acquisitions.

The consumer systems group manufactures loudspeakers and electronics for entertainment systems in homes, vehicles, and for computers. Products include JBL, Infinity, Harman Kardon, Lexicon, Becker, Mark Levinson, Proceed, Revel, and AudioAccess. A large part of the business is in the supply of automotive-oriented, branded premium audio, navigation, and "infotainment" systems through OEM supply agreements with vehicle manufacturers worldwide. Several major computer manufacturers receive audio systems under OEM agreements.

The professional group offers complete systems solutions to professional installations, tour sound,

HARMOGRAPH (LABEL)

cinemas, recording and film studios, and other users around the world under such well known and respected names as JBL Professional, Soundcraft, Crown, DOD, Digitech, dbx, AKG, BSS, and Studer. Over the years, the combination of size and technical strength has resulted in numerous benchmark products. The corporation maintains world-class product design and manufacturing facilities at multiple locations in the United States and throughout the world. [Website: www.harman.com.]

HOWARD FERSTLER

HARMOGRAPH (LABEL)

An American record issued from 1922 to 1925 by the Harmograph Talking Machine Co. of St. Louis. The firm, and the Harmograph Record Co., were subsidiaries of the Shapleigh Hardware Co., St. Louis. Matrices came from Cameo, then from Paramount, and finally from Pathé. Two examples, vocal blues, came from Plaza. Important jazz and blues material appeared on Harmograph, including numbers by Alberta Hunter, Ethel Waters, and Ma Rainey (all pseudonymously), and Fletcher Henderson, Jelly Roll Morton, and King Oliver under their own names. [Kendziora 1961/10; Rust 1978.]

HARMONIA MUNDI (LABEL)

A French classical label established ca. 1959. The label both produces original recordings and distributes for a variety of other classical labels. It has home offices in France, and other major offices in Britain, Germany, the U.S., and Spain. The label emphasizes high sound quality and production values. As of 2002, it featured a mix of performers focusing primarily on early and Baroque music and contemporary classical compositions. Many of its artists have "crossed over" to more popular success, including groups like the Anonymous Four and Fretwork. The label also has sought to promote classical music to broader audiences through albums like Paul Hillier's *Home to Thanksgiving* (HMX 2907264, 2002), an anthology drawn from his recordings for the label specifically devoted to material appropriate for giving "thanks and praise." [Website: www.harmoniamondi.com.]

HARMONIC

Any frequency in the audio spectrum that is an integral multiple of a fundamental tone. A pure tone is one that contains nothing but the fundamental (such

as the pitch of a tuning fork); it is said to have one harmonic, which is equal to the fundamental. Aside from pure tones, all musical sounds are composite tones, consisting of fundamentals and harmonics of higher frequency that they generate. Harmonics above the fundamental are called overtones; thus the first overtone is the second harmonic. The physical cause of the overtones is that vibrating bodies such as strings or pipes of air vibrate simultaneously as a whole and in sections of 1/2, 1/4, 1/3, etc., of their lengths.

Overtones have much smaller amplitudes than their fundamentals (1/5 to 1/50 of the volume) so they do not confuse the pitch frequency of the fundamental. Their effect is to define the timbre of the musical sound. The extent to which a recording or reproduction system can capture overtones is a measure of its success in achieving realistic depiction of vocal and instrumental quality.

HARMONIC DISTORTION

SEE *DISTORTION*

HARMONIZERS QUARTET

A male group that recorded in the 1920s for Brunswick and Edison. It consisted of Charles Hart, Billy Jones, Steve Porter, and Harry Donaghy. The Harmonizers were also known as the Amphion Quartet, the Country Harmonizers, the Great White Way, and the Premier Quartet.

HARMONOLA CO.

A Philadelphia firm, established in 1916. It relocated to Chicago in 1919, or had a branch there. The Harmonola record player was its main product, offered in various models. Price and Teeple brought litigation against Harmonola in 1919 for use of the name Harmonola.

HARMONY

A disc player made by Hawthorne and Sheble, sold by the Standard Talking Machine Co. of Chicago ca. 1908. It is illustrated in *APM* 6-1 (1980), p. 4.

HARMONY (LABEL) (I)

A record issued by the Great Northern Manufacturing Co. of Chicago, ca. 1907–1913.



Harmony label out of Chicago. c. 1918. Courtesy Kurt Nauck/Nauck's Vintage Records

HARMONY (LABEL) (II)

A product of the Harmony Talking Machine Co., Chicago, having a large spindle hole like the discs of the Standard Talking Machine Co. In March 1918 a 10-inch disc was advertised by a firm that advertised itself as successor to Harmony, the Consolidated Talking Machine Co.

HARMONY (LABEL) (III)

A low-cost (\$.50) line of records offered by Columbia from 1925 to 1931. Major popular and jazz artists were included but disguised by pseudonyms. There was also sacred, band, and novelty material. In 1949 Columbia revived the label for a series of reissues of earlier Harmony material. In 1957 the name was again reactivated as a low-cost LP subsidiary of Columbia Records.

HARMONY (LABEL) (IV)

A low-cost LP sold in the 1950s and 1960s by Harmony Records, New York. Pop material was offered.

HARMONY FOUR

A mixed quartet that recorded for Edison in 1917. Members were Gladys Rice, John Young, George Wilton Ballard, and Thomas Chalmers.

HARNONCOURT, NIKOLAUS

(6 DEC 1929–)

German conductor and cellist, founder in 1952 of the Vienna Concentus Musicus, a group dedicated to authentic performances of Baroque music. An extensive list of Bach, Handel, Monteverdi, and Telemann works is available on Teldec CDs. A 25th anniversary set of 21 volumes was issued by Teldec in 1989. Harnoncourt has also directed and recorded with the Royal Concertgebouw Orchestra, Dresden Staatskapelle, Vienna Symphony Orchestra, Vienna Philharmonic Orchestra, and other major ensembles.

HARPVOLA TALKING MACHINE CO.

An American firm located in Harrisburg, Pennsylvania, in 1916. It marketed the Harpvola disc player.

HARRIS, EMMYLOU (2 APR 1947–)

One of the few country artists able to pull in rock listeners, Emmylou Harris has maintained a successful recording career over four decades by maintaining a steadfast allegiance to roots styles in the face of rampant technological change and media image manipulation. In addition to possessing one of the most appealing voices in popular music, her popularity has owed much to the use of first-rate backup musicians and the discriminating selection of song material from a wide range of sources, including Bill Monroe ("Scotland"), Hank Williams ("Jambalaya"), Chuck Berry ("You Never Can Tell"), Bob Dylan ("I'll Be Your Baby Tonight"), the Beatles ("Here, There, and Everywhere," "For No One"), Creedence Clearwater Revival ("Bad Moon Rising," "Lodi"), Paul Simon ("The Boxer"), and Leonard Cohen ("Ballad of a Running Horse").

A native of Birmingham, Alabama. Harris's first recording, the acoustic folk-styled album, *Gliding Bird* (Jubilee 0031; 1969), failed to attract much attention. She went on to duet with ex-Byrds and Flying Burrito Brothers vocalist Gram Parsons on two highly acclaimed country rock LPs, *G.P.* (Reprise; 1972), and *Grievous Angel* (Reprise; 1973). Following Parsons's fatal drug overdose, Harris secured a solo recording contract from Reprise; support was provided by Parsons's former backing musicians, the Hot Band, comprised of guitarist James Burton, rhythm guitarist Rodney Crowell, steel guitarist Hank De Vito, pianist Glen Hardin, bassist Emory Gordy, and drummer John Ware. Her early albums — *Pieces of the Sky* (Reprise 2213; 1975; #45), *Elite Hotel* (Reprise 2236; 1976; #25 US, #17 UK), and *Luxury Liner* (Reprise 3115; 1977; #21 US,

HARRIS, GWIN

#17 UK) — were divided between her own material and covers of leading pop music songwriters. By the late 1970s, Harris had begun to experiment a bit with her formula: *Quarter Moon in a Ten Cent Town* (Reprise 3141; 1978; #29 US, #40 UK), was close to straight Nashville country, *Blue Kentucky Girl* (Reprise 3318; 1979; #43), incorporated a more pervasive bluegrass approach, and *The Ballad of Sally Rose* (Reprise 25205; 1985), attempted to merge the concept album with traditional country.

Harris seemed to be treading water artistically by the late 1980s. She hired a new backing band, the roots-oriented Nash Ramblers, and recorded intermittently in a trio with Dolly Parton and Linda Ronstadt. Now approaching something akin to institutional status, she appears immune to the cyclical vicissitudes of commercial success.

FRANK HOFFMANN

HARRIS, GWIN (18 DEC 1895–JUNE 1984)

Electrical engineer, an associate of Thomas Edison in 1919–1931. He supervised disc record production, experimented with electrical recording, and became product engineer in the radio division. Later, he worked for Western Electric. He died in Lubbock, Texas.

HARRIS, MARION (c. 1896–23 APR 1944)

American vaudeville comedienne, born in Henderson, Kentucky, discovered by Vernon Castle, later known as a blues singer. She appeared in New York shows, and began recording in 1916 for Victor. "I Ain't Got Nobody Much" (#18133; 1916) became a popular classic. Her first blues number was "Paradise Blues," in 1917. The best-selling Harris record was "Running Wild"/"You've Got to See Mama Every Night" (Brunswick 2410; 1923). Her popularity faded in the mid-1920s, but she made a comeback in 1930–1932, and appeared in Britain, making well-received records there for English Columbia, notably "Is I in Love?" (#DB822). She also worked for English Decca. Then she again disappeared from public view after making an appearance in London in 1936. She died in New York. Her complete Victor recordings have been reissued on CD by Archeophone (5001). [Walsh 1963/8–9.]

HARRIS EVERLASTING RECORD

SEE CLEVELAND PHONOGRAPH RECORD CO.

HARRISON, CHARLES WILLIAM (11 SEP 1878–2 FEB 1965)

American lyric tenor, born in Jersey City, New Jersey. A prolific recording artist, he once claimed to have made more records than any other singer in the period 1912–1925, sometimes using pseudonyms such as Billy Burton, Charles Hilton, and Hugo Donivetti. Harrison also sang on radio after 1925. Harrison's repertoire included popular ballads and operatic numbers. His first record was for Columbia: "Cujus animam" from Rossini's *Stabat Mater* (#A5275; 1911), then he went to Edison from 1912 to 1915, beginning with cylinder #1003, "Cujus animam" again; and on to Victor for most of his solo work. One of his best sellers was a version of the John McCormack favorite, "I Hear You Calling Me" (Victor 17321; 1913). For Edison Diamond Discs in 1928 Harrison recorded two of his finest interpretations: "Love's First Kiss" (#18918), and "Sonny Boy" (#18917). He also made some opera records; for example, "Miserere" from *Trovatore*, with Agnes Kimball (#82516). He appeared with Kimball and Mary Jordan, Royal Fish, Frederick J. Wheeler, and Donald Chalmers in an Edison "talking picture" version of the *Lucia* Sextet. Harrison was one of the tone test artists.

Harrison sang with the American Singers, the Old Company Singers, Columbia Stellar Quartet, the Metropolitan Entertainers, and with the Revelers. He taught at the Newark Conservatory of Music from 1947. His wife was singer Beulah Gaylord Young. [Ferrara 1991; Walsh 1951/10, corrections in March 1952.]

HARRISON, GEORGE (25 FEB 1943–21 NOV 2001)

Lead guitarist for the Beatles and later a solo artist on his own, Harrison's recorded work ranges from experimental music to mainstream pop. Harrison founded Apple Records with the other Beatles in 1967 and played an active role in developing its experimental division, Zapple. While still with the group, he released *Wonderwall Music* (1968; Zapple 3350), the soundtrack for a film that combined Indian and rock influences, and *Electronic Sound* (1969; Zapple 3358) created on an early Moog synthesizer with the assistance of Bernie Krause (one-half of the pop duo of Beaver and Krause and an earlier synthesizer player). But it was Harrison's initial solo album, *All Things Must Pass* (1971, Apple 369) produced with Phil Spector, that established him as a contender in the pop scene. Originally a three-album set (with the third album of "jams" being somewhat superfluous), it represented Harrison's greatest achievement as producer, songwriter, and performer. It was followed in 1972 by



L to r: Manager Allen Klein, producer Phil Spector, and George Harrison previewing the tapes of *All Things Must Pass*, 1971, in New York City. © Bettmann/Corbis

another three-record set, *The Concert for Bangladesh* (Apple 3385), a document of the live benefit concert that Harrison arranged at Madison Square Garden, which was a model for many future benefit events. Both *All Things Must Pass* and the *Concert* sets were beautifully packaged as boxed sets with elaborate accompanying material, setting new standards for rock music.

Harrison's later career did not live up to this potential, however. He continued to record through the early 1980s, but then pretty much withdrew from activity until reemerging in the "super group" the Traveling Willburys (with Bob Dylan, Tom Petty, Roy Orbison, and Jeff Lynne) in 1987, along with a new solo album that returned him to the charts. Harrison suffered from throat cancer through the 1990s, and also was the victim of a bizarre attack at his home in 1999. He was overseeing the remastering of *All Things Must Pass* for CD release in 2000 when he was diagnosed with inoperable brain cancer. He succumbed to the disease in 2001. A posthumous release, *Brainwashed* (Capitol 41969), was issued in fall 2002 consisting of unfin-

ished material by Harrison that was completed by his son and producer/friend Jeff Lynne.

Besides his work as a performer, Harrison established a film production company in the mid-1970s called Handmade Films, which became a major independent producer, particularly of the films made by Monty Python. However, the company collapsed in the mid-1980s. Harrison also had his own vanity label, Dark Horse, in the mid-1970s, which was distributed in the U.S. by A&M.

CARL BENSON

HART, CHARLES (16 MAY 1884– DEC 1965)

American tenor, born in Chicago. He lived an impoverished boyhood with his German immigrant parents; attended Chicago Musical College and studied singing. He wandered west and worked as a cowboy, then returned to Chicago and took bit parts in the Studebaker Theater and in other companies. Hart

HARTRIDGE, DONALD

joined a traveling opera company, then became a member of the Shannon Four in 1917, and was one of the Crescent Trio (1924). He began to record, using various pseudonyms, for Victor, Edison, Vocalion, Columbia, Okeh, HMV (Canada), and others. He sang in churches, and then with the Chicago Opera Co. in 1923. He went to Berlin for radio and recording work (for Electrola) in 1925. On returning to New York he joined the original production of *Student Prince* which had opened in 1924. From 1929 to 1934 he lived in Germany, then returned to America, taking roles with the San Carlo Opera and in many operettas and musicals.

Hart began to record for Victor in 1917, with "Forever Is a Long, Long Time" (#18283). He made important duet records with Elliott Shaw, beginning with "My Belgian Rose" (1918). His most popular records were "I'm Forever Blowing Bubbles," "Till We Meet Again," and "Let the Rest of the World Go By" — all duets with Elizabeth Spencer. Edison was the only label to carry any of Hart's opera/oratorio repertoire; for example, English versions of "Celeste Aida"/"O paradiso" (Diamond Disc 80774; 1924). [Walsh 1958/12, 1959/1.]

HARTRIDGE, DONALD (31 MAR 1938–)

Educated at Tiffin Boys' School, in Kingston, between 1949 and 1955, Hartridge spent two years in the Royal Air Force before joining the British Broadcasting Corporation in 1959. There, he was trained as a sound operator, worked at cutting vinyl disks for immediate broadcast, and edited tapes in more than 40 languages. In 1962, he was retrained as a studio manager and transferred to BBC Northern Ireland, where he learned the craft of balance engineering, and worked extensively with the Northern Ireland Light Orchestra. In 1972, he accepted a post as senior sound supervisor with the then BBC Northern Symphony Orchestra (later renamed the BBC Philharmonic), and between 1972 and 1996 he engineered many thousands of hours of recorded and live music from across the spectrum, including full orchestra, chamber groups, choirs, quartets, and even incidental music for television. He also designed and built a mobile trolley to allow for swift and reliable recording rigs during extensive touring commitments with the Philharmonic across Europe and America, and also in Brazil, Hong Kong, Morocco, Oman, and Prague.

During the period between 1990 and 1996, Hartridge recorded more than 40 compact discs (CDs) with the BBC Philharmonic, working in close cooperation with Chandos records, and recorded additional CDs for numerous other companies including Nonesuch, Errato, Olympia, Naxos, and Collins. He

also recorded cover disks for the BBC Music Magazine, several early Halle recordings, and several operas, including the first recording of Wagner's *Rienzi*, with Ted Downes.

Hartridge has been associated with several discs that won awards, including two Diapasons d'Or from the French, as well as a *Gramophone* magazine engineering award. Since 1996, he has been working as a freelance engineer, following the downsizing of BBC resources.

HOWARD FERSTLER

HARTY, HAMILTON, SIR (4 DEC 1879–19 FEB 1941)

British conductor, composer, and organist, born in County Down, Ireland. He was playing the organ professionally at age 14; he went to London in 1901, and began composing and conducting. He directed the Hallé Orchestra in Manchester from 1920 to 1933, and then the London Symphony Orchestra, which he took on world tours. Harty's arrangements of *Water Music* and *Royal Fireworks Music* by Handel were important in popularizing Baroque instrumental works; he recorded both compositions for Columbia. He was first heard on records as an accompanist for his wife, Agnes Nicholls. Harty died in Brighton.

HARVEST (LABEL)

A division of EMI founded in 1969 to feature progressive and underground rock acts. Its biggest success came in the 1970s with Pink Floyd and Deep Purple. It was initially run by EMI executive Malcolm Jones, who emphasized lavish packaging with psychedelic art rock. During the mid-1970s, the label also signed the Electric Light Orchestra and Soft Machine. The label was inactive for new signings after the late 1970s, although EMI continued to use the name on reissues.

CARL BENSON

HARVEY, MORTON (1886–15 AUG 1961)

American vaudeville and Broadway singer, born in Omaha, Nebraska. He made the first vocal blues-styled recording, "Memphis Blues," accompanied by members of the New York Philharmonic Orchestra (Victor 17657; January 1915). Among his finer recordings were "In the Hills of Old Kentucky," and "I Didn't Raise My Boy to Be a Soldier" (Edison Diamond Disc 80226; 1915); and "Melody of My Dream" (Victor 18151). "They're Wearing 'Em Higher in Hawaii," his only Columbia record, was a

great seller (#A2143; 1917). In 1916–1917 he was with Emerson, using his pseudonym, Gene Rogers. He died in Los Gatos, California. [Walsh 1955/11–12.]

HATCH, MIKE (16 JAN 1963–)

After earning a degree in music and sound recording from the University of Surrey in 1985. Hatch spent two years as freelance engineer, specializing in classical recording. In 1987, he founded Floating Earth Ltd., jointly with engineer Mike Clements. He has remained with the company since that time and continues to develop its reputation in specialist music recording projects, in addition to broadening the range of material undertaken by the company to include jazz and pop work. Floating Earth has been responsible for recording more than 1,500 CDs since 1987. Hatch engineered more than half of them, winning numerous awards for his work. These projects have seen him working with the world's top recording artists in venues all over Europe and as far afield as Japan and Hong Kong.

HOWARD FERSTLER

HATHUT (LABEL)

Swiss label founded in 1975 by Werner X. Uehlinger, originally recording avant-garde jazz but then expanding to include contemporary classical music, as well. Among the jazz artists HatHut has championed are the avant-garde players/composers Cecil Taylor, Steve Lacy, and Anthony Braxton; in contemporary classical music, the label is best known for its recordings of Morton Feldman's works, although it has also issued recordings of works by John Cage and Karlheinz Stockhausen, to name two. The label currently has three subdivisions, Hat[now]ART for contemporary classical, HatOLOGY for jazz, and Hat NOIR for "uncategorizable projects." [Website: www.hathut.com/home.html.]

HAWAIIAN MUSIC RECORDINGS

This genre was highly popular in the U.S. before World War I. There were at least 29 Hawaiian discs issued by 1905, and in 1906 the American Record Co. made 27 discs by the royal Hawaiian Troubadours. (Four of the records were issued in Europe on the American Odeon Record label.) Victor had 175 titles in the 1917 catalog. The Hawaiian Quintette — guitars, ukuleles, and vocals — was the outstanding ensemble. There was also an Hawaiian Trio (Helen Louise, Frank Ferrara, and Irene Greenus) active in 1918. Genuine Hawaiian artists,

on Victor and Columbia in 1914–1917, included David K. Lua and Pale Kaili of the Irene West Royal Hawaiians. One of the most prolific artists on the Hawaiian steel guitar was Sol Hoopi, who recorded extensively during the late 1920s and early 1930s. The Hilo Hawaiian Orchestra became one of the leading exponents of the style in the 78-rpm period; another star in the field was Anthony Franchini. By 1927 Victor was listing only 16 Hawaiian items; the number had doubled by 1938 and remained at the level into the 1940s.

With the arrival of the LP record, the number of groups on disc multiplied quickly. A 1960 Schwann catalog listed (under "Popular Music from Other Countries," although Hawaii had become one of the United States in 1959) about 90 albums; popular artists included Alfred Apaka, Webley Edwards, Arthur Layman, and Danny Steward. A revival of interest in traditional Hawaiian music led to several new artists arising in the 1980s and 1990s, particularly players of the Hawaiian "slack key" guitar such as Bob Brozman.

HAWKINS, COLEMAN

(21 NOV 1904–19 MAY 1969)

American jazz tenor saxophonist, born in St. Joseph, Missouri. He played piano and cello as a child before taking up the saxophone. In 1921 He was performing in Kansas City, and in 1922 was in New York, where he played duets with singer Mamie Smith, then joined Fletcher Henderson from 1923 to 1934. He developed a full legato tone with a strong vibrato, setting a standard for later saxophonists, and displayed a great gift for melodic improvisation and rhythmic variety. He was much acclaimed in Europe during 1934–1939, in particular for performances with Django Reinhardt and Benny Carter in Paris, 1937. Hawkins toured with various groups, including his own, through the 1940s. During the 1950s he was seen on television and in motion pictures, and he toured Europe again, appearing also with Jazz at the Philharmonic. He was among the first of the older jazzmen to embrace the bebop style. His last concert was at Chicago's North Park Hotel, on 20 Apr 1969; he died in New York about a month later.

The first record with an important Hawkins solo (if not a highly inspired one) was "Dicty Blues" (Vocalion 14614; 1923) with the Fletcher Henderson band. His 1939 "Body and Soul" (Bluebird 10523) is a landmark in jazz, offering a completely shaped melody in flawless counterpoint to the original tune. Another notable example of his art is the unaccompanied "Picasso" (Jazz Scene [no label number]; ca. 1948). [Villetard 1984 lists the 1922–1944 releases;

HAWTHORNE AND SHEBLE MANUFACTURING CO.

Villetard 1985 covers 1945–1957; Villetard 1987 covers 1958–1969.]

HAWTHORNE AND SHEBLE MANUFACTURING CO.

A Philadelphia firm, active in the early days of the record industry as manufacturers of audio equipment. It originated in 1894 as the Edison Phonograph Agency. Partners were Ellsworth A. Hawthorne and Horace Sheble; they gave their name to the firm in 1900. The company made brass and aluminum horns for the Edison phonographs, and claimed to have made patterns for the five-inch Concert cylinder machine. Cabinets were another product, some of them based on a Sheble patent. In another patent, Sheble gained the rights to a tone arm that was intended to rival the tapered tone arm of Eldridge Johnson.

The firm produced record players under the names of Busy Bee, Discophone, Yankee Prince, Harmony, Aretino, and Star, and in 1907 produced a record with the Star label. Its Illustraphone of 1907 showed pictures to accompany music played on coin-ops. American Graphophone sued the firm in 1898, for converting without authorization Edison phonographs into Graphophone Grands, and won an injunction. It was Victor that finally forced Hawthorne and Sheble out of business in 1909, through successful litigation over patent infringements.

HAY, GEORGE DEWEY (9 NOV 1895–8 MAY 1968)

American radio announcer and executive, born in Attica, Indiana. He was a pioneer promoter of country music, starting the radio *Barn Dance* on station WLS, Chicago, and announcing for it. In 1925 he moved to Nashville to direct a new station, WSM; he initiated the *WSM Barn Dance* show, acting as host. In January 1926 the show was renamed *Grand Ole Opry*. Hay recruited talent and developed the format of *Opry* through the 1940s, then retired in 1951. He was named to the Country Music Hall of Fame in 1966.

HAYDEN LABORATORIES, LTD.

A British audio firm established in 1967, known for import and distribution of German products such as the Nagra tape recorder, Dual turntables, and Denon components. The firm has also handled Acoustic Research products since 1989, and the Korean-made Sherwood line.

HAYDEN QUARTET

A male vocal quartet, among the first to achieve commercial success, originally consisting of John Bieling, Harry Macdonough, S.H. Dudley, and William Hooley. Tenors on the earliest recording were Fred Rycroft and Charles Belling. Later, Reinald Werrenrath sometimes sang in place of Dudley, whose executive duties for Victor placed increasing demands on his time. The group's name was spelled "Haydn" until April 1913. It was known as the Edison Male Quartet on more than 100 Edison cylinders, made over a span of about 10 years to 1908. The quartet recorded for G&T in London in 1902. For Victor the group recorded extensively, starting out on 6 May 1903, with "The Tear" and "The Bridge" (#2196); the 1917 catalog listed 120 numbers by them. "In the Sweet By and By" (#16352; 1908) remained in the catalog to 1930. The quartet disbanded in 1914, after making their last (and one of their best) records, "Across the Great Divide I'll Wait for You."

HAYES, ROLAND

(3 JUNE 1887–1 JAN 1977)

American tenor, born in Curryville, Georgia, the son of former slaves. He studied at Fisk University, Nashville, then in Boston and Europe. His debut was in Boston on 15 Nov 1917, after which he toured the U.S. and Europe, singing a command performance for King George V. He earned great acclaim for his singing of Lieder and French art songs, and above all for Negro spirituals, many of them in his own arrangements. Hayes recorded for Columbia in 1916–1918, notably "Swing Low, Sweet Chariot" (#62050). "Go Down Moses" was made in 1922 for Vocalion (#A21002 in U.S.; #R-6131 in U.K.); "Were You There?" (Columbia 68912-D; 1941) was sung without accompaniment, with great effect. There were several LP reissues of his favorite material, and the HMV *Record of Singing* included his voice (1984). He died in Boston. [Knight, A. 1955.]

HDCD (HIGH DEFINITION COMPATIBLE DIGITAL)

Developed by Keith Johnson and Michael Pflaumer, in its purest form HDCD is a specialized noise-shaping, encoding/decoding system that employs dedicated compression during recording and expansion during playback. Supposedly, this allows the 16-bit technology used for the compact disc (CD) system to simulate a 20-bit system. Proper playback of certain HDCD encoded compact discs requires an outboard decoder.

Without the decoder, the sound may appear somewhat compressed and overly reverberant. The system is mainly used by Reference Recordings, but a number of other companies are also using it, and in 1998 and 1999, more than 10 percent of all Grammy-nominated discs were HDCD mastered.

HOWARD FERSTLER

HEAD

SEE ERASE HEAD; PLAYBACK HEAD

HEAD-RELATED TRANSFER FUNCTION (HRTF)

A characteristic of the human hearing mechanism that allows us to localize sound sources in three-dimensional space. Many physical factors are involved: ear spacing, the frequency-response detecting ability of the inner ear, the shape of the outer ear, and even the shape of the head itself. Indeed, the HRTF is a surprisingly complicated function of four variables: three different space coordinates, as well as frequency. In spherical coordinates, for distances greater than about one meter, the source is said to be in the far field, and the HRTF falls off inversely with range. Most HRTF measurements are made in the far field, which essentially reduces the HRTF to a function of azimuth, elevation, and frequency. Because of the different physical variables involved with HRTF, it is likely that no two single people hear the world in exactly the same way.

HRTF plays a big part in the formation of images with stereophonic sound reproduction and also with headphone performance with both standard stereo recordings and binaural sound recordings. Indeed, the HRTF captures all of the physical cues to source localization. Once you know the HRTF for the left and right ears, you can synthesize accurate binaural signals from a monaural source.

See also **Crosstalk; Interaural Crosstalk**

HOWARD FERSTLER

HEAD SHELL

The housing of a phonograph cartridge.

HEADPHONE

An audio device (sometimes called earphone, or simply phone, and often in the plural form) designed to fit over the ears, presenting each with a miniature loudspeaker. The purpose is to allow for individual listen-

ing, without disturbance to others nearby, and to focus the listening experience by eliminating much environmental noise. New types of headphone do allow the entrance of external sounds: they are called "open-air," "hear-through," "high velocity," and "dynamic velocity" headphones. Piston speakers are used in less expensive headphones, and electrostatic transducers in more costly types. Low impedance models do not require a separate power amplifier, but the electrostatics and high impedance models do require one. Headphones may transmit monaural signals (both ears receiving the same one), or stereo signals, with the left and right ears receiving the same portions of the signal as full-size loudspeakers do.

HEALTH BUILDER RECORDS (LABEL)

American exercise records issued from 1921 to at least 1925. The discs were packaged with 12 charts and 60 illustrations of Walter Camp's exercises. The firm claimed in July 1922 that it was doing a million dollar annual business. Pat Wheelan, president of Health Builders, Inc., was also president of the Wallace Institute, which issued Wallace Reducing Records through mail order on seven-inch discs in March 1923.

HEARING

The remarkable organ that is the human ear is a miniature (about a cubic inch) sound system that includes the equivalents of "an impedance matcher, a wide-range mechanical analyzer, a mobile relay-and-amplification unit, a multichannel transducer to convert mechanical energy to electrical energy, a system to maintain a delicate hydraulic balance, and an internal two-way communications system" [Stevens 1965, p. 38]. In the act of hearing, sound waves enter the canal of the outer ear and cause the eardrum to vibrate. Those vibrations are taken up by the ossicles of the middle ear, and transferred to the so-called oval window of the inner ear. This much of the process, complex as it is, no longer offers any puzzle to science. But when vibrations act upon the fluid-filled inner ear, certainty gives way to speculation. It is known that sound vibrations produce rippling waves across the basilar membrane of the cochlea, and it is reasonable to picture these waves as having the same contours as those that are drawn by acoustic instruments; indeed, their contours are thought to be the same as the tracings of a phonograph or the cuttings in a record groove. As the waves move along the cochlea, thousands of hair tips are bent, producing minute quantities of hydraulic pressure; this pressure is converted to electrical energy by the organ of Corti

HEAVY METAL

at the end of the cochlea. And here we cross the border into mystery, for the organ of Corti transmits its electrical impulses through the nervous system to the brain in such a way that the source signal can be decoded into its original composite of frequencies, amplitudes, and timbres. While it is comprehensible that a single pure sound wave — for example, from a tuning fork — may be read and identified by the brain, so that the hearer is able to state what pitch has been struck, it is by no means clear how a signal made up of many pitches, amplitudes, and timbres can at the end of its passage through the ear be again sorted out into its components so that the hearer is able to state (for example) that it is the opening chord of the *Eroica* Symphony, played by a full orchestra, with one of the horns playing a little flat. Indeed, it is not even clear how the ear and brain are able to distinguish among pitches in a simpler signal; a renowned specialist observes that “we must know how the vibrations produced by a sound are distributed along the length of the basilar membrane before we can understand how pitch is discriminated... [but] it is hardly possible to observe any vibration in the nearly transparent gelatinous mass in the cochlea of a living organism” (Von Békésy 1960, p. 539). In the resonance theory of Hermann Helmholtz, each of the transverse fibers of the basilar membrane is “tuned” to a different frequency, and is stimulated only by tones of that frequency. Since there are several thousand of those fibers, it may be further theorized that they are clustered in pitch regions, and that certain ones in a given cluster resonate to different patterns of harmonics; if one accepts that view, it is possible to credit the fibers with the ability to discern the sources of tones, that is, different musical instruments. And, since each component of a complex sound is carried into the nervous system by distinct fibers, it is also possible to understand how the brain recognizes each bit in the mosaic of an orchestral chord. The trouble with the resonance theory is that the environment of the fibers appears to be hostile to such resonating: they are, after all, buried in a membrane and covered with a fluid.

A variety of theories have been based on the idea of a sound pattern that emerges as sinusoidal movement sets up a series of standing waves along the fibers; each of these waves is perceived by the nervous system as a single tone — but, as Von Békésy comments, “Because the entire task of analysis is relegated to the nervous system, whose activities are completely unknown, it is not possible to draw any further conclusions on the basis of this theory.” Von Békésy himself, after a lifetime of imaginative experimentation, was unable to answer the question of tone recognition and the question of how the ear resolves complex sounds.

Lacking any measurable evidence for the theories suggested above, it is probably just as reasonable to approach the act of hearing in another way: “We may concede that one day the whole process, including the chemico-electrical actions in the brain, will be bared. The tone, however, will never be found. It is not an object, to be found in the outer world; and the organ of Corti, the nerves, and the brain are all part of the outer world. One might as well expect to find the soul by dissecting the body” (1965, p. 165).

As we depart from the rigid viewpoint of the physical sciences, we encounter other fascinating questions about “subjective” hearing — recently termed “psychoacoustics.” Why, for instance, do we hear music with more pleasure than we hear a screeching noise? Why is a minor chord “sad?” How does our brain allow us to imagine, as we listen to a musical work, what had gone before and what is yet to be heard, and to remember simultaneously other performances of the work? And how does the brain establish, in response to a stereo recording, the source of the signal as somewhere between the loudspeakers? [Backus 1969; Helmholtz 1887; Levarie 1977; Levarie 1980; Stevens 1969; Von Békésy 1960.]

HEAVY METAL

William Burroughs introduced the term “heavy metal” into the pop culture vernacular in his Beat novel, *Naked Lunch*. It first appeared within a musical context via the line, “heavy metal thunder,” from the Steppenwolf hit, “Born To Be Wild” (Dunhill 4138; 1968). The style focuses on heavily amplified electric guitars, distorted by means of fuzz-boxes, wah-wah pedals, and a host of other accessories. The sound is generally augmented by slowly throbbing bass patterns and flashy drum solos.

The British hard rock bands of the mid-1960s anticipated the genre, both its sound and attitude. Notable pioneers included the Who (e.g., “My Generation,” Decca 31877, 1966; “I Can See for Miles,” Decca 32206, 1967) and the ex-Yardbirds guitarists Eric Clapton, Jeff Beck, and Jimmy Page, all masters of fuzztone-and-feedback drenched onslaughts. Jimi Hendrix provided the link between these antecedents and the earliest practitioners of the style proper via his guitar pyrotechnics and banshee vocals.

While California bands — specifically, renegades from psychedelia (e.g., Blue Cheer), and acid rock (e.g., Iron Butterfly) — were playing heavy metal, or something close to it, by early 1968, the British scene proved more prolific at the outset of the 1970s. Three divergent movements quickly emerged there, including (1) post-psychedelic hard rock, exemplified by the cinematic guitar stylings and evocative lyric imagery

of Led Zeppelin, Black Sabbath, and Robin Trower; (2) blues-derived, working-class rock, built on predictable heavy riffs and the cultivation of a “bad boy” image (e.g., Deep Purple, Bad Company); and (3) aristocratic Anglo-metal, featuring the glam dress of acts like Queen and Sweet.

During this time, American bands projected a distinctly working-class image; e.g., Cactus, Mountain, the Frost, Aerosmith, Kiss, Grand Funk Railroad, and Bachman-Turner Overdrive (Canada). Two subdivisions grew out of this school: American revolutionary bands, who considered rock to represent an instrument of social change (e.g., MC5); and boogie bands, dedicated to simple riffing for the sake of partying (e.g., Black Oak Arkansas, ZZ Top). In reaction to these subgenres, yet another offshoot — the American Deviates — emerged. Generally inspired by the Velvet Underground, its practitioners (e.g., Iggy and the Stooges, Alice Cooper, Blue Oyster Cult), were dedicated to, in Lester Bangs’s words, “The reinforcement of whatever vestiges of primal infantilism have managed to survive into adolescence, and the glorification of adolescence as the Time of Your Life.”

By the late 1970s the genre had fallen into middle-of-the-road respectability largely due to the effort of artists such as Toto, Triumph, Foreigner, Journey, Heart, Def Leppard, Van Halen, and Ted Nugent. What little flair and freshness remained was appropriated by two newly emerging genres, speed metal and punk rock. The foremost practitioners of the former — e.g., Metallica, Megadeth, Godflesh — remained viable throughout the 1990s, grudgingly appropriating the trappings of the more progressive hard rockers. Punk, however, proved to be the more important of the two, stripping heavy metal down, speeding it up, and providing some lyric content beyond the customary macho posturing. The resulting stylistic offshoot, hardcore, enjoyed considerable commercial success by the early 1990s; its leading practitioners included Soundgarden, Anthrax, and the Meat Puppets.

The riot grrrl movement of the early 1990s also borrowed heavily from heavy metal. Notable bands from the period included Bikini Kill and L7. Groups such as Luscious Jackson and Fluffy opted for a sound more closely aligned with the pop mainstream.

The late 1990s have seen a revival of the more traditional exponents of the genre. Reformed first generation bands such as Black Sabbath, Alice Cooper, and Grand Funk Railroad have again found success via both recordings and the stage; third generation copy bands such as Poison, Cinderella, Warrant, and Motley Crue have also enjoyed a commercial resurgence. In short, heavy metal has continued to thrive, a genre secure in the fact that its primary audience — teenaged

males — will always derive immense sustenance from its manic energy and rebellious attitude. [Miller 1980.]

FRANK HOFFMANN

HEGAMIN, LUCILLE (29 NOV 1894–1 MAR 1970)

American blues singer, born Lucille Nelson in Macon, Georgia. She was a church singer, then on stage. She married pianist William Hegamin, who acted as her accompanist. She achieved success on a West Coast tour in 1918–1919, and began recording for Arto. Her earliest record, “Jazz Me Blues” and “Everybody’s Blues” (Arto 9045; 1920), “could be considered the first real blues disc” (Dixon). Hegamin had a hit with her next record, “I’ll be Good but I’ll be Lonesome”/“Arkansas Blues” (Arto 9053; 1921), which was released on 10 labels from the Arto masters. She introduced “Pretty Baby” and “Jelly Roll Blues,” and she may have been the first to sing the “St. Louis Blues.” With a group she named the Blue Flame Syncopaters [*sic*] she made another dozen popular discs. When Arto went bankrupt in 1923, Hegamin worked mostly for Cameo until 1926. She was heard on more than 20 labels during her career. She quit recording for six years, singing in clubs, then returned briefly with Okeh in 1932. Hegamin retired shortly thereafter, though she made a few more records in 1961–1962 for Prestige, Bluesville, and Victoria Spivey. She died in New York. [Dixon 1970; Kundstadt 1962.]

HEIDT, HORACE (21 MAY 1901–1 DEC 1986)

American big band leader, born in Alameda, California. He was playing piano professionally by 1923, and toured with vaudeville companies. In 1930 he formed an orchestra named the Californians, successful in the New York Palace Theater. He had a long run at the Drake Hotel in Chicago in 1935, and became prominent on the radio. His group was a smooth dance ensemble, with several outstanding musicians in the group: Alvino Rey (electric guitar), Frankie Carle (piano), and Larry Cotton (vocals). The whistler Fred Lowery was featured, and later, singer Gordon MacRae and cornetist Bobby Hackett. The orchestra achieved its peak in 1939–1942, renamed Horace Heidt and His Musical Knights. They recorded regularly for Brunswick and then for Columbia. Mary Martin did a series of vocals with the band in 1942, including “That Old Black Magic” (Columbia 36670). Heidt concentrated on radio and television through the mid-1950s, then retired. Heidt died of pneumonia in

HEIFETZ, JASCHA

Los Angeles. His son led the band in later years, and was also a talented drummer.

HEIFETZ, JASCHA

(2 FEB 1901–10 DEC 1987)

Lithuanian/American violinist, born in Vilnius. Taught by his father, he played in public at age four. In 1910 he entered the St. Petersburg Conservatory, studying with Leopold Auer, and the next year he gave his debut recital. Young Heifetz performed the Tchaikovsky Concerto with the Berlin Philharmonic Orchestra in 1912, and made world tours. He achieved instant fame in America after his first appearance, at Carnegie Hall on 27 Oct 1917. He became a U.S. citizen in 1925, and continued to perform worldwide until 1970, gaining general recognition as the finest of virtuosos on his instrument. Heifetz made fewer appearances after World War II, and taught at the University of Southern California from 1962 to 1972. He performed for the last time in 1974.

A Victor artist from 1918, Heifetz at first recorded light recital pieces with piano accompaniment, such as "On Wings of Song" (#6512). In the 1930s he approached the grand repertoire, recording Mozart sonatas (with Emanuel Bay) and the principal concertos. He joined with Thomas Beecham and the London Philharmonic Orchestra in 1935 to produce what may

be his finest disc, the Sibelius Concerto (#14016/19). There were 44 items in the 1938 Victor catalog, including his famous arrangement of Dinicu's "Hora staccato" (#1864). He then made an outstanding recording of the Cesar Franck Sonata with Artur Schnabel (#14895/97). Important chamber music interpretations with Rubinstein, violist William Primrose, and cellist Emmanuel Feuermann appeared in the 1940s. Six albums of four LP discs each, covering the Heifetz releases of 1917 to the 1950s, were issued by RCA (ARM-0942/47). RCA RD85402 (1985) presented the acclaimed performances of the Beethoven and Brahms concertos with the Boston Symphony Orchestra.

HEINEMANN, OTTO

German-born recording industry executive, active in Berlin from 1902 and in the U.S. after 1914. He established the Otto Heinemann Phonograph Supply Co. in New York in 1914, with a factory in Elyria, Ohio. The firm made tone arm rests, needle cups, and other accessories; then began to make the Okeh (originally spelled "OkeH") disc in May 1918. The success of this record led to the opening of branch offices in Chicago and Toronto. In October 1919 Heinemann renamed his firm the General Phonograph Co. When Columbia bought the Okeh label in 1926, he became president of

VICTOR RED SEAL RECORDS

HEIFETZ, Violinist (*High'-fetz*)

To few it is given while still on the threshold of life to achieve the success which comes ordinarily—if it comes at all—only after maturity and experience. Yet that is what Heifetz accomplished. He commenced playing the violin at three, completed the course at the Royal Music School in Vilna, Poland, at the age of seven, and, after study with Professor Leopold Auer in Petrograd, was a mature artist at the age of ten. His tour through Russia was a triumph; the keenest critics of Europe had nothing but praise for him. And after a leisurely trip from Russia to the United States, by way of Vladivostock and California, he swiftly conquered America. Though his years can be counted, the measure of his genius knows no bounds. His technique is flawless; the intonation is perfect, the quality of tone superb and utterly individual, complete mastery over bow and violin having been vouchsafed him in childhood by a Nature bent upon a perfect model.



Jascha Heifetz as he is described in the 1917 Victor catalog. Courtesy Jerald Kalstein

the Okeh Phonograph Co., a Columbia subsidiary. Heinemann was the first vice president of the Phonograph Manufacturers National Association on its establishment in 1925.

HELIODOR (LABEL)

A German record, the low-priced series of DGG, issued from June 1959. The name was not carried forward into the CD period.

HELMHOLTZ, HERMANN (31 AUG 1821–8 SEP 1894)

A groundbreaking German researcher in acoustics, physics, optics, and the physiological effects of sound, Helmholtz was born in Potsdam and initially studied medicine and natural science. From 1849 until 1871 he was professor of physiology at the universities of Königsberg, Bonn, and Heidelberg, and from 1871 until his death he was professor of physics at the University of Berlin. Helmholtz was one of the great scientists of the 19th century, and his contributions to the science of sound were only part of his accomplishments. His analysis of musical signals resulted in the discovery that the tonal quality of a musical sound is created by the overtones or harmonics. In 1862, he published *The Sensations of Tone*, which formed the scientific basis for the study of acoustics.

See also **Loudspeaker**

HOWARD FERSTLER

HEMPEL, FRIEDA (26 JUNE 1885–7 OCT 1955)

German coloratura soprano, born in Leipzig. She studied at the Leipzig Conservatory from age 15, as a piano student, and then went to Berlin to study voice. She sang in Breslau, then at the Berlin Opera on 22 Aug 1905 and throughout Germany. Hempel made her Metropolitan Opera debut as the Queen in *Huguenots* on 27 Dec 1912, and remained with the company to 1919. She lived in New York most of her life, returning to Berlin just before her death.

Hempel's repertoire emphasized the Italian/French operas and the lighter German works. She recorded first for Odeon in 1906–1909, then for the Gramophone Co., and for Victor from 1912 to 1917 (25 items in the 1917 catalog). She also made Edison discs and cylinders from 1917 to 1923 (beginning with "Air and Variations" by Heinrich Proch, #5937), and again in 1928. HMV recorded her in 1923–1925. "Infelice sconsolata" from *Zauberflöte* (HMV DB331)

is a favorite among collectors; "Volta la terra" from *Ballo in maschera* (Victor 87235) is another fine rendition. Hempel sang popular material as well as opera and Lieder, including "My Old Kentucky Home" with the Criterion Quartet (Edison Diamond Disc 82551, Blue Amberol cylinder #5966; 1918) and "Aloha oe" with the Criterion Quartet (Edison Diamond Disc 82551, Blue Amberol 5992; 1918). Her final commercial record was a Diamond Disc of "Songs My Mother Taught Me," in German (#80888; 1928), but she was also recorded on the air during the *Edison Hour* program of 11 Feb 1929, an observation of the inventor's birthday. Nimbus has issued a CD of her recordings (7849), and in 1998 Amadeus Press published her memoirs, *My Golden Age of Singing*, which previously had appeared only in German immediately following her death in 1955. [Reed 1955; Wile 1971/3.]

HEMUS, PERCY (CA. 1878–22 DEC 1945)

New Zealand baritone, born in Auckland. At an early age he moved to the U.S., settling first in Kansas, and then going to New York. He was a soloist at St. Patrick's Cathedral for five years, and sang in operetta; later he performed in minstrel shows. By 1906 he was making records for Columbia and Imperial; and from 1907 to 1916 he was a Victor artist, beginning with "The Sailor's Prayer" (#5348; 1907). Hemus used the pseudonym Charles Gordon at times. He died in New York.

HENDERSON, FLETCHER (18 DEC 1897– 29 DEC 1952)

American big-band leader and arranger, born in Cuthbert, Georgia. He took a chemistry degree in Atlanta before going to New York in 1920, where he worked for a song publisher, became house pianist for Black Swan, and made his first recordings for them in 1921; and toured with Ethel Waters. He formed his first band in 1921 and began to compile a vast list of recordings; his group is considered the earliest major swing band. Star performers in his various groups include Louis Armstrong, Coleman Hawkins (whose first important solo record was made with Henderson in 1923), Rex Stewart, Benny Carter, Roy Eldridge, and J.C. Higginbotham. He began arranging in the 1930s, and was recognized as one of the shapers of the new swing sound. Working with Benny Goodman he wrote the outstanding arrangements of much that Goodman featured during the prime years of his band. He was also pianist in the Benny Goodman sextet of 1939, recording "Rose Room" (Columbia 35254) and six other numbers. Henderson also did

HENDERSON, JOE

arrangements for the Casa Loma Orchestra, the Dorseys, and others.

His bands played under various pseudonyms on myriad labels: High Society Seven, National Music Lovers' Dance Orchestra, Carolinians, Original Black Band, Maryland Dance Orchestra, Eldon's Dance Orchestra, Roseland Dance Orchestra, Club Alabam Orchestra, Sam Hill and His Orchestra, Regent Orchestra, Henri Gendron and His Strand Roof Orchestra, Club Wigwam Orchestra, California Melodie Syncopators, Carolinians, Lenox Dance Orchestra, Southampton Society Orchestra, Missouri Jazz Band, Sid Terry's Collegians, Dixie Stompers, Louisiana Stompers, Earl Randolph's Orchestra, Curry's Dance Orchestra, Savannah Syncopators, and others.

His career ended with a stroke in 1950, and he died in New York two years later. [Allen 1973 is a bio-discography.]

HENDERSON, JOE (24 APR 1937–30 JUNE 2001)

Joe Henderson, a tenor saxophonist and composer born in Lima, Ohio, developed a personal, virtuosic style of improvising that influenced many jazz saxophonists in the latter decades of the 20th century. Many of his compositions have become jazz standards, and his writing in the 1960s both reflected and helped drive the movement to expand jazz's harmonic vocabulary.

Henderson was signed to Blue Note in 1963 as a leader after playing with Jack McDuff and Kenny Dorham. His album, *Page One* (Blue Note 84140; 1963), helped make jazz standards out of "Blue Bossa" by trumpeter Kenny Dorham and the Henderson composition, "Recordame." *Inner Urge* (Blue Note 84189; 1964), contained two important, harmonically adventurous Henderson compositions, "Inner Urge" and "Isotope." Later in his career Henderson sold a considerable number of albums with releases that explored the music of one particular composer or performer. *Lush Life: The Music of Billy Strayhorn* (Verve 314 511 779–2; 1991), featured a new generation of jazz musicians including Christian McBride on bass and Stephen Scott on piano. Other successful themed albums include *So Near So Far: Musing for Miles* (Verve 314 517 674–2; 1992), and *Double Rainbow: The Music of Antonio Carlos Jobim* (Verve 314 527 222–2; 1994). Henderson's playing career was cut short in the mid-1990s by difficulties with emphysema, which led to his death due to heart failure in 2001.

GARTH ALPER

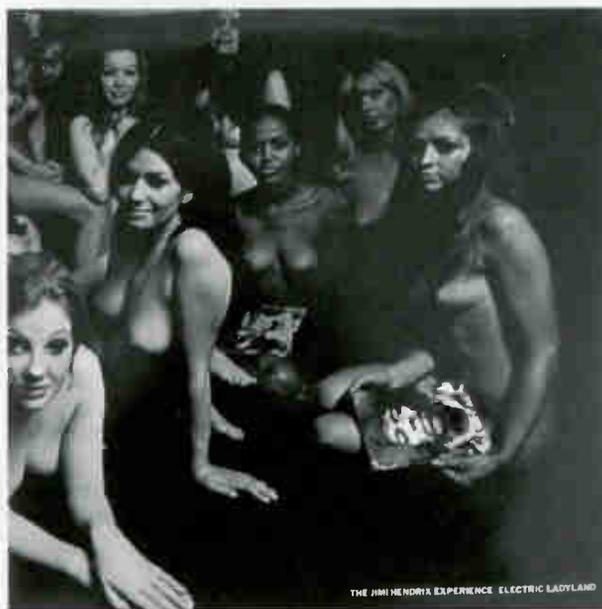
HENDRICKS, SCOTT (26 JULY 1956–)

Country producer and label executive. Born in Oklahoma, Scott Hendricks has made Nashville his home and career headquarters beginning in 1985, getting his first career opportunities from a former college buddy and now Nashville power broker, Tim DuBois. A former songwriter, Hendricks gained greater traction as an independent producer, and has worked with Alan Jackson, Brooks and Dunn, and Faith Hill. In 1995, he was named CEO of Capitol Nashville Records, but two years later got into a feud with Capitol's biggest act, Garth Brooks. Brooks was unhappy with Capitol's support for his latest album, targeting Hendricks for the decline in his sales. Hendricks was forced out of his position, and subsequently moved to another EMI label, Virgin Nashville. However, in early 2001 the label was closed, and Hendricks returned to working as an independent producer.

BRAD HILL

HENDRIX, JIMI (27 NOV 1942–18 SEP 1970)

Rock singer and guitarist, born James Marshall Hendrix in Seattle, Washington. He taught himself to play the guitar and performed with various acts, including Little Richard and the Isley Brothers. He toured widely in the 1960s, developing a stage presence that included bizarre costumes, flamboyant guitar techniques, and oftentimes the smashing or burning of his



Jimi Hendrix's notorious *Electric Ladyland* inner sleeve. Courtesy Frank Hoffmann

instrument to close a show. Under the guidance of former Animals guitarist Chas Chandler, he formed a group called the Jimi Hendrix Experience in 1966, and cut a chart single, "Purple Haze" (Reprise 0597; 1967), and a very successful album, *Are You Experienced?* (Reprise R6250; 1967), that was on the charts for 87 weeks. The album featured an extensive repertoire of engineering effects, such as playing some material backwards. In 1967 Hendrix was a hit at the Monterey Pop Festival in California, and he toured the U.S., receiving mixed notices. He opened his own recording studio, Electric Lady, in Greenwich Village and continued to work on new timbres and recording techniques. Hendrix had several important albums in the late 1960s, including *Axis: Bold as Love* (Reprise RS 6281; 1968), and *Electric Ladyland* (Reprise 2RS 6307; 1968). He died of a drug overdose in London in 1970.

Although he released only a small number of albums while alive, the catalog of Hendrix's recordings has grown exponentially since his death, including official recordings, live material, and semifinished sessions. His trove of studio material was first issued in a series of albums overseen by producer Alan Douglas; Douglas controversially added additional parts to the original tapes played by new musicians, offending many long-time fans. Hendrix's father finally regained control of the recorded legacy in 1995, and began reissuing the material, beginning in 1997 with the original three albums on CD, finally using the original master tapes (rather than LP pressings) for vastly improved sound quality. More material followed of varying quality, both in "official" reissues and on the family's own Dagger label, which has featured live recordings for diehard fans. A four-CD boxed set of alternates and rarities was released in 2000 (Universal International 112316).

REV. CARL BENSON

HERMAN, WOODY (16 MAY 1913–29 OCT 1987)

American jazz clarinetist, saxophonist, vocalist, and big band leader; born Woodrow Charles Herman in Milwaukee, Wisconsin. He studied at Marquette University, and began playing clarinet in bands in 1931. In 1934–1936 he was with Isham Jones, and when that group dissolved he drew on the membership to form his own band in 1936; it soon became known for a progressive jazz style, blended with a blues idiom. In the several bands that he directed — known as "Herds" or "Woodchoppers" — there was a strong ensemble with virtuosic improvisations. Among the great soloists were Herman himself, Dave Tough, Stan Getz, and baritone saxophonist Serge Chaloff. Gordon

Jenkins made numerous arrangements. Herman was a skilled performer in the classical idiom as well; Stravinsky's *Ebony Concerto* was written for him. He premiered the work at Carnegie Hall on 25 Mar 1946, and recorded it for Columbia (#7479M; 1946). He was active as a leader and soloist with various groups into the 1970s, adjusting to new popular styles as they came along. The band continued after Herman's death under the direction of Frank Tiberi.

The earliest recording by Herman's orchestra took place on 6 Nov 1936 for Decca: "Wintertime Dreams," with vocal by Herman (#1056). Among his finest records were "At the Woodchopper's Ball" (Decca 2440; 1939); "Blues on Parade" (Decca 3501; 1939); "Blue Prelude" (Decca 3017; 1940); "Caldonia" (Columbia 36789; 1945), and "Lemon Drop" (Capitol 15365; 1948). There were many LP albums and reissues.

HERMAN'S HERMITS

Although considered to be a lightweight novelty act by many rock music critics, Herman's Hermits were one of the most successful British Invasion acts, selling more than 40 million records between 1964 and 1967.

The group was formed in 1963 when Peter Noone, a Manchester School of Music student with limited stage and BBC-TV experience, hooked up with an area rock band, the Heartbeats. Famed record producer Mickie Most began working with them in 1964; their debut single, a remake of the Earl-Jean song, "I'm Into Something Good" (MGM 13280), topped the British charts and sold more than a million copies worldwide. The following year, the Hermits placed more songs in the U.S. Top 10 (seven) than the Beatles: "Can't You Hear My Heartbeat" (MGM 13310), "Silhouettes" (MGM 13332), "Mrs. Brown You've Got A Lovely Daughter" (MGM 13341), "Wonderful World" (MGM 13354), "I'm Henry VIII, I Am" (MGM 13367), "Just A Little Bit Better" (MGM 13398), and "A Must To Avoid" (MGM 13437).

The hit recordings had disappeared by early 1968 due to public interest in heavier rock styles. The group dissolved in 1971 during heated legal disputes over royalties payments. Noone tried to launch a solo career and hosted a BBC-TV series for three years in the 1970s. During the 1980s, he recorded both solo and with the Tremblers; he also appeared in the Broadway production of *The Pirates of Penzance* and hosted the VH-1 show, *My Generation*. By the 1990s, Noone had re-formed the Hermits to perform in various oldies tours. [Romanowski and George-Warren. 1995.]

FRANK HOFFMANN

HERSCHEL GOLD SEAL (LABEL)



Label issued in 1926–1927 by the Northwest Phonograph and Supply Co., St. Paul, Minnesota. Courtesy Kurt Nauck/Nauck's Vintage Records

HERSCHEL GOLD SEAL (LABEL)

An American record issued in 1926–1927 by the Northwest Phonograph and Supply Co., St. Paul/Minneapolis, Minnesota. Masters came from Gennett. Only 21 items were released, mostly dance music. Vaughn De Leath and Vernon Dalhart were among the popular vocalists on the label. [Henriksen 1975; Rust 1978.]

HERTZ (HZ)

The name often given to the unit of frequency formerly identified as one cycle per second. This designation, in use since 1967, was derived from the name of Heinrich R. Hertz, German physicist. One kilohertz (kHz) equals 1,000 cycles per second; one megahertz (MHz) equals 1,000,000 cycles per second.

HERTZ, HEINRICH RUDOLF (22 FEB 1857–1 JAN 1894)

Modern electronic communication systems, as well as radar, all benefited from the research of Hertz, and his experiments on the reflection, refraction, polarization, interference, and velocity of electric waves triggered the invention of the wireless telegraph, and later on radio. Having received a magna cum laude Ph.D. from the University of Berlin in 1880, where he studied under Helmholtz, Hertz began his studies of the electromagnetic theory of

James Clerk Maxwell in 1883. Indeed, he was the first to demonstrate experimentally the production and detection of Maxwell's waves and the validity of Maxwell's theorems.

Between 1885 and 1889, while he was professor of physics at the Karlsruhe Polytechnic, he produced electromagnetic waves in the laboratory and measured both their length and velocity, showing that the nature of their vibration and susceptibility to reflection and refraction were the same as those of light and heat waves. In 1888, in his physics classroom in Berlin, he generated electric waves by the oscillatory discharge of a condenser through a loop provided with a spark gap. With this arrangement, he had demonstrated that the velocity of radio waves was equal to that of light. Hertz was not sure there was any practical benefits possible from his research in this area, but his proofs of Maxwell's theories triggered a flurry of experimentation among other scientists, including Marconi. In 1889, he was appointed professor of physics at the University of Bonn. His writings were translated into English soon after their publication in German and include *Electric Waves* (1883), *Miscellaneous Papers* (1896), and *Principles of Mechanics* (1899). In recognition of his work, the unit of frequency of radio and acoustic waves (one cycle per second, abbreviated Hz) was named after him.

HOWARD FERSTLER

HERWIN (LABEL)

An American record issued by the Artophone Corp. of St. Louis from 1924 to 1930. The label name was derived from the names of the two chief officers of Artophone, Herbert and Edwin Schiele. Only 18 releases are known, including some interesting jazz material and 11 songs by Vernon Dalhart. Paramount, which had provided some of the masters, bought the firm through its subsidiary, the Wisconsin Chair Co. The label name was revived, briefly, in the mid-1970s by Bernard Klatzko, a record collector, for a series of LP reissues of blues and early jazz recordings. He sold the rights to these albums to Yazoo Records after issuing only a handful of releases. [RR #69 and #71 has lists; Rust 1978.]

HESS, MYRA, DAME (25 FEB 1890–25 NOV 1965)

British pianist, born in London. She studied at the Royal Academy of Music, and made her London debut at age 17, playing the Beethoven G-Major Concerto under Thomas Beecham. European and American

tours followed. During World War II she initiated the National Gallery Concerts as a morale measure, and was awarded the honor Dame of the British Empire in 1941. She died in London.

Hess recorded for Victor/HMV and Columbia, featuring Mozart, Haydn, Beethoven, Brahms, and Schubert. She assisted in a revival of interest in Schubert through recitals and recordings, including the A-Major Sonata (Columbia L2119/21; 1928). Early piano roll performances of Bach, Brahms, Rachmaninoff, and others were reissued by HMV in 1974 (#GVC28). Several CD reissues have appeared. [Clough 1966.]

HEXAPHONE

A coin-op cylinder phonograph manufactured by Regina Music Box Co. in 1906. It allowed a choice among six indestructible two-minute records, using a spring-driven motor, or in some cases an electric motor, with a wooden horn.

HEYSER, RICHARD (1931–14 MAR 1987)

An audio journalist and inventor who was awarded nine patents in the field of audio and communication techniques, including time-delay spectrometry (TDS). Heyser was by training a scientist at the Jet Propulsion Laboratory of the California Institute of Technology. In addition to his work on TDS, outlined in a 1967 Audio Engineering Society journal article, he published numerous other articles in both technical and popular audio magazines, and was widely known for his patience and ability to clearly present and communicate new and complex technical ideas. Heyser generously aided the AES not only through his technical contributions, but also through his service to its growth and organizational development as an Audio Engineering Society governor and an AES silver medal recipient. He died shortly before he was able to assume office as the president of the society.

HOWARD FERSTLER

HI RECORDS

Pioneering Memphis soul label, Hi Records, was launched in late 1957 by former Sun Records artist Ray Harris, former Sun producers Quinton Claunch and Bill Cantrell, record store owner Joe Cuoghi, and three silent partners, including Cuoghi's lawyer, Nick Pesce. Success came in 1959 with Bill Black's Combo (led by Elvis Presley's former bassist). In 1961, Black's saxophonist, Ace Cannon, scored a

major hit with "Tuff." Quinton Claunch was forced out of the partnership in 1959, and his share was bought by Jerry Lee Lewis's cousin, Carl McVoy, who had recorded the first disc on Hi and worked with Black's combo. Willie Mitchell became a Hi artist in 1961, and moved into production after discovering Al Green in 1968. Cuoghi died in 1970, and Harris retired shortly afterward. Nick Pesce became president and Willie Mitchell was made vice president. Mitchell's work with Al Green was both groundbreaking and hugely successful, but he couldn't replicate the achievement with other artists, such as Ann Peebles or O.V. Wright. In 1976, Hi was sold to Al Bennett, former president of Liberty Records, but the label couldn't survive Al Green's retirement and an industry-wide downturn. New recordings ceased to appear on Hi in 1978.

COLIN ESCOTT

HICKORY (LABEL)

Hickory was founded in 1953 as an outgrowth of the successful Nashville publishing firm, Acuff-Rose Music, owned by singer Roy Acuff and songwriter Fred Rose and Rose's son, Wesley. Its first hit came from Al Terry with "Good Deal Lucille" in 1954, and recorded many other artists through about 1980, including Acuff himself, Rusty and Doug Kershaw, Ernie Ashworth, Don Gibson, and Mickey Newbury. For a while in the mid-1970s, the label was distributed by the larger ABC label. In 1985, the label was sold to Gaylord Entertainment along with the balance of Acuff-Rose's assets, and was closed.

CARL BENSON

HIDLEY, JACK (29 JAN 1967–)

Interested in audio systems since he was 12 years of age, Hidley was determined to be a loudspeaker designer by age 20. After five years of electrical engineering at California Polytechnic State University in San Luis Obispo, he went to work for NHT loudspeakers, in Benicia, California, in 1992. At NHT, he participated in a wide range of activities, including the electrical, mechanical, and acoustical design of products. When International Jensen moved their Acoustic Research loudspeaker branch to Benicia in 1995, Hidley helped with product development at that company. Early in 1997, he left NHT and began work as an independent loudspeaker consultant, and in early 1998, he joined Vergence Technology (NHTPro) as chief design engineer. In 2001, he returned to NHT,

HI-FI

and has been responsible for the design of some of their more notable systems.

HOWARD FERSTLER

HI-FI

SEE HIGH FIDELITY (HI-FI)

HI-FI VIDEO SOUND RECORDING

The two-channel, video-tape medium that makes use of specially encoded signals to carry the audio part of a video program. The Beta hi-fi version developed by Sony used the video heads on the VCR's rotating tape drum. The VHS hi-fi system developed by JVC has separate audio heads, also on the tape drum, in addition to the video heads. Hi-fi video sound, which must make use of Dolby matrixing if it is to deliver surround sound, is not as capable as current digital systems, particularly the 5.1-channel versions. Nonetheless, it does have impressive performance, and it is more than able to handle the dynamics and clarity requirements of all but the most demanding matrixed-surround motion picture material.

HOWARD FERSTLER

HIGGINBOTHAM J.C.

(11 MAY 1906–26 MAY 1973)

American jazz trombonist, born in Atlanta. In the late 1920s he played with Luis Russell, and Chick Webb, then in 1931–1933 with Fletcher Henderson. Later groups were Benny Carter, Louis Armstrong, and Red Allen. He had a strong, bold tone, influential on subsequent artists. Higginbotham led his own band for a time, and remained active into the 1970s. He died in New York.

One of his outstanding records was Okeh 8772, of 5 Feb 1930: "Give Me Your Telephone Number"/"Higginbotham Blues." He had prominent solo work in Armstrong's "Once in Awhile"/"On the Sunny Side of the Street" (Decca 1560; 1937), and in Bechet's "Coal Black Shine"/"Baby, Won't You Please Come Home?" (Victor 27386; 1941).

HIGH FIDELITY (HI FI)

The term given to realistic reproduction of sound, concerned mainly with its frequency-response range and smoothness, and distortion levels. The phrase came into use in the mid-1930s in the U.S. record business, although commercial recordings of that time

had no deep bass capabilities, and high-range frequency response rarely exceeded 6 kHz. During the 1940s, the 78-rpm disc was able to cover a somewhat wider audio range and even had a fairly decent dynamic range, and as a result of this a greater credibility was attached to the term. In the 1950s there was a popular appetite for achieving maximum fidelity, expressed through the interest in separate components and in the purchase of audio kits to be constructed at home. Two-channel "stereo" sound in the 1950s further enhanced playback realism, and got the wider public interested in the concept, particularly after the advent of small, high-quality speaker systems like those pioneered by Acoustic Research and KLH. Modern systems, employing digital technology in the electronic realm and very high-quality speaker designs, have expanded the concept to include bandwidth coverage over the full audible spectrum, dynamic range that can encompass even the most robust symphony orchestra playing, and surround-sound configurations that simulate live music environments better than ever.

REV. HOWARD FERSTLER

HIGH FIDELITY

The name of a magazine published in the U.S. from 1951 to 1989.

See also Sound Recording Periodicals

HIGH PASS FILTER

SEE FILTER

HIGHAM AMPLIFIER

A sound amplifying device invented by Daniel Higham of Massachusetts, U.S. patent #678,566 (granted 16 July 1901). "Amplified vibrations were delivered by means of a variable tension device involving a cord running over an amber wheel, augmenting the pull from the stylus bar by force supplied by the motor turning the amber wheel" (Read). In 1904 the inventor formed the Higham-O-Phone Co., and developed the concept continually (six further patents were granted). The device was shown at the St. Louis Exposition of 1904, and was used in the 1905 Columbia Twentieth-Century Premier Graphophone (Model BC) and in the Home Premier (BM). Thomas Edison obtained the rights for use in the Kinetophone in 1912. [Koenigsberg 1990; Read 1976.]

HIGHTONE RECORDS (LABEL)

Independent country-blues label founded in 1983 by Bruce Bromberg and Larry Sloven. It has released albums by alternative-country singer/songwriters like Dave Alvin, Joe Ely, Jimmie Dale Gilmore, and Buddy and Julie Miller, along with pop-blues performers like Geoff Muldaur, Jessie Mae Hemphill, and Little Willie G. In 2000, the label established HighTone Latino for popular Spanish-language acts. [Website: www.hightone.com.]

CARL BENSON

HILL, MURRY K.**(15 APR 1865–23 OCT 1942)**

American vaudeville singer and comedian, born Joseph Tunnicliffe Pope, Jr., in New York. He had a long stage career, based in Chicago, before making his first Edison cylinder at age 42: "In the Good Old Steamboat Days" (#9619; 1907) — a comic song, in contrast to his later records, which were monologs. Among his hit cylinders were "Grandma's Mustard Plaster" (Edison 291; 1909), and "Seated Around an Oil Stove" (Edison 1019; 1912), both reissued as Blue Amberols. Hill also made at least four U-S Everlasting cylinders and one Columbia Indestructible. On disc he worked for Columbia in 1911 and Victor from 1910. His most popular disc was "A Bunch of Nonsense" (on cylinder earlier), on Victor 16446 (1910). He died in Chicago.

HILL, RICHARD S.**(25 SEP 1901–7 FEB 1961)**

American music librarian, born in Chicago. He took a B.A. from Cornell in 1924, then attended Oxford University. In 1939 he joined the music division of the Library of Congress. From 1943 to 1961 he edited *Notes*, the journal of the Music Library Association. Hill was coeditor with Kurtz Myers of *Record Ratings* (1956). He died in Naples, Florida.

HILL AND DALE STEREO RECORDING

An early version of stereophonic recording developed by Emory Cook. The problem with "hill-and-dale" was that it would have made earlier and contemporary lateral groove monaural recordings incompatible, with both channels being 180 degrees out of phase. Hill-and-dale stereo had been used by Bell Telephone Laboratories for the groundbreaking Leopold Stokowski recordings of 1933, and was used in monaural radio program transcription disks through the

1940s. Whatever advantages each had in the monaural format evaporated with the advent of stereo, because the major labels were looking for both compatibility and listener convenience. In 1957, the Recording Industry Association of America ruled that a mono-compatible system would be required, and Cook's system was bypassed.

HOWARD FERSTLER

HILL, FAITH (21 SEP 1967–)

Faith Hill typifies the 1990s wave of best-selling solo singers found in the pop-rock and country genres. Possessing cover girl good looks and a smooth, processed vocal style perfect for crossing over to the pop charts, she has become one of the top media stars of the new millennium, a familiar figure in magazine celebrity bios, posters, and television ads.

Born in Jackson, Mississippi, Hill began singing in a variety of settings at an early age. Interested in emulating Reba McEntire's career as a country artist, she moved to Nashville at age 19. After working in a number of temporary positions (e.g., selling T-shirts at Fan Fair), she made her performing debut with songwriter Gary Burr. Securing a recording contract with Warner Bros., her first single — "Wild One" (Warner Bros.; coproduced by Burr) — spent four weeks at number one on the country singles charts in the fall of 1993. Her debut album, *Take Me as I Am* (Warner Bros.; 1994) also did well, reaching the country Top 10 and earning a gold record for million dollar sales.

Follow-up albums — *It Matters to Me* (Warner Bros. 45872; 1995), *Faith* (Warner Bros. 47690, 1998; #7), and *Breathe* (Warner Bros. 47871; 1999; #1) — have maintained Hill's upward career trajectory, finding increasingly greater success abroad (particularly Asia), and with a mainstream pop audience. Further media attention has been generated by her storybook marriage to dashing country star Tim McGraw. She has also branched out into other projects, providing background vocals for the recordings of Matraca Berg, Vince Gill, McGraw, and others, in addition to appearing on film soundtracks — *Maverick* (1994), *Practical Magic* (1998), *Prince of Egypt* (1998), and *Grinch* (2000); the TV special, *King of the Hill* (1999); and the Carole King tribute album, *Tapestry Revisited* (1995).

In late 2002, Hill issued a new album, *Cry* (Warner 48001), which spawned the major title hit on its release. On this album, Hill moved even further in a pop direction, without apparently losing her core country audience.

FRANK HOFFMANN

HILLIARD, JOHN KENNETH
(22 OCT 1901–21 MAR 1989)

Born in Wyndmere, North Dakota, Hilliard was one of the most accomplished acoustical engineers of the past century. He received a B.S. in physics at Hamlin University in St. Paul, Minnesota, in 1925, and a B.S.E.E. at the University of Minnesota. He began work on a M.E.E., but left in 1928 before completing that degree to take a position with United Artists in Hollywood.

This was at the very beginning of the movie sound industry. The first full-length talking picture, *The Jazz Singer*, had been released the year before and there was a mad rush by all studios to develop sound motion pictures. Hilliard was selected from a group of engineers trained in physics, engineering, and acoustics to work at United Artists Studios, and was placed in charge of the recording, monitoring, and sound-editing operations for studio's first sound picture, *The Coquette*. He was forced by circumstances to develop many recording techniques that later became industry standards.

In 1933, Hilliard transferred to MGM's sound department. His first task was a systematic review and redesign of all recording amplifiers, concentrating on an existing phase-shift problem. The solution was to use transformers with very high self-inductance and relatively large coupling capacities. Transformers with these capabilities had been developed by Lansing Manufacturing Company and this resulted in Hilliard forming a business partnership with James B. Lansing. That connection subsequently led to their most successful collaboration, involving the design of a new, two-way loudspeaker system for theater use. Hilliard was the project manager for this system and was responsible for the overall concept, while Lansing was responsible for the development of the drive units. The end product was a loudspeaker system released in 1944, appropriately named the "Voice of the Theater," that became an industry standard. The work resulted in a technical accomplishment award from the Academy of Motion Picture Arts and Sciences.

In 1946, Lansing left Altec to found Lansing Sound, Inc., whereupon Hilliard took over Lansing's vacated position as vice president of engineering, at Altec, and would hold that position until 1960. During this tenure at the company, Hilliard was responsible for the development of many significant products, including the refined 604B speaker driver, the 603, the "Lipstik" condenser microphone, and numerous amplifier and crossover designs. In 1960, Hilliard became director of the LTV western research center, which was a branch of Altec Lansing's parent company. At LTV, he considerably broadened his field of

work to include research on sonic booms, highway noise, hearing conservation, and gun silencing. He left in 1970 to undertake a decade-long career in consulting that focused on noise studies and architectural acoustics.

Hilliard was the author of *Motion Picture Sound Engineering* (1938), published more than 80 technical articles on sound, and received an honorary doctorate from the University of Hollywood, in 1951. He was also an active member of the Institute of Electrical and Electronics Engineers, the Society of Motion Picture and Television Engineers, and the Acoustical Society of America. A long-time member of the Audio Engineering Society, in 1961 he was awarded the society's John H. Potts award, which later became the society's gold medal.

See also **Loudspeaker**

HOWARD FERSTLER

HIMMELREICH, FERDINAND M.
(15 NOV 1880–11 DEC 1937)

American pianist and organist, born in New York. Virtually sightless from age five, he was known as "The Blind Pianist." He was organist for nine years at the Wanamaker department stores in New York and Philadelphia. He also played at Gimbel's and Strawbridge and Clothier department stores, and for four seasons at Haddon Hall in Atlantic City, New Jersey. He also appeared as pianist on the Rudy Vallee radio program. Probably his first recording was a piano roll made for Aeolian in 1905: "Valse brillante" (his own composition: #8094); his first disc was "The Rosary" (Victor 17055; 1912). The latter, his own transcription of the song, was a steady seller for 13 years. He recorded many other arrangements, as well as salon pieces, for Victor (to 1917), and Edison (to 1924), and also worked for Okeh in 1922. Himmelreich died in Laurel Springs, New Jersey. [Walsh 1969/11.]

HINDERMYER, HARVEY WILSON

American tenor and ballad singer, born in Easton, Pennsylvania, probably in the 1880s. His name was usually misspelled "Hindermeyer" on record labels. Hindermyer was one of the Shannon Four, and an Edison artist from 1907 until 1929. His first record was "She Was a Grand Old Lady" (Edison 9614; 1907), after which he worked for Victor and Columbia for a time. His "Take Me Out to the Ball Game" was a popular number on Columbia (#A586; 1908). Two favorites were "I Am the Monarch of the Sea" and "Roses, Roses,

Everywhere" (Edison cylinder 1554; 1912). One of the most popular of all Edison Diamond Disc records was Hindermeyer's "In the Evening by the Moonlight" (#82510; 1914). During the anti-German fervor of World War I in the U.S. Edison issued his discs under the name Harvey Wilson. He participated in Edison tone tests, and said that no person had ever been able to distinguish his recorded voice from his real one. Hindermeyer was tenor soloist with the Dann Trio on all their national tours. He was a church organist and radio performer in the 1920s. [Walsh 1957/8.]

HINES, EARL "FATHA"

(28 NOV 1903–22 APR 1983)

American jazz pianist and big band leader, born in Duquesne, Pennsylvania. He began playing professionally with various groups in Pittsburgh at age 13, then joined Louis Armstrong's quintet in Chicago in 1927. He formed his own band in 1928 and toured the U.S. with it; the band was among the few Black groups to perform in the South at that time. Hines also performed in Europe, in 1957 and 1966, and in Japan. His band broke up in 1948, after which he was heard as a freelance artist with many partners, continuing through the 1970s. After 1960 he was based in Oakland, California, where he died.

The first recording by Hines was "Blues in Thirds," backed by "Off-Time Blues" (QRS R-7036; 1928). He then worked for Okeh in 1928, Victor in 1929, and several labels from 1932 to 1938. In 1939–1942 his band was featured on Bluebird, making many outstanding discs, several of them with vocalist Billy Eckstine. "You Can Depend on Me" (Bluebird B-10792; 1940), "Jelly Jelly" with Eckstine (Bluebird B-11065; 1940), and "Stormy Monday Blues" also with Eckstine (Bluebird B11567; 1942) are among the finest. His biggest hit was "Boogie Woogie on the St. Louis Blues" (Bluebird B-10674; 1940).

HIRSCH, JULIAN

(15 MAY 1922–25 NOV 2003)

Arguably the most accomplished and well-known consumer-audio product reviewer of the second half of the 20th century, Hirsch earned an electrical engineering degree from Cooper Union in 1943, and went on to become an officer in the U.S. Army Signal Corps, as part of the forces occupying Japan after the war. After military service, he went to work for General Precision Labs, and later went on to work for Panoramic Instruments, which was later bought by Singer.

Hirsch had long been a ham radio and sound quality enthusiast, and his interest in audio eventually had

him and three other enthusiasts found the first consumer-interest, audio-testing magazine, *The Audio League Report*. One notable achievement of the journal was the enthusiastic and accurate review it did on a new loudspeaker system being produced by an at that time nearly unknown company called Acoustic Research. The report on the company's revolutionary model AR-1 help to launch AR into the big leagues, and also helped to bring attention to Hirsch's skills as an audio columnist and consumer-product reviewer. The league magazine eventually was bought out, but Hirsch continued to write part-time, and produced a number of pieces for *High Fidelity* magazine, while still employed by Singer/Panoramic.

He soon showed himself to be one of the most insightful writers in the business, and he was approached by the Ziff-Davis Company to become a full-time reviewer for *Stereo Review* magazine. He accepted the job and continued in that position until his retirement, in 1998. Hirsch defined the standards for level-headed and honest audio journalism for more than four decades, and there is no doubt that during his long career he was the most accomplished and straightforward product reviewer in the audio-magazine business.

HOWARD FERSTLER

HIRT, AL (7 NOV 1922–27 APR 1999)

American jazz trumpeter, born Alois Maxwell Hirt in New Orleans. After study at the Cincinnati Conservatory of Music from 1940 to 1943, he played in various popular groups, including the bands of Tommy Dorsey and Jimmy Dorsey. In the 1950s he teamed with clarinetist Pete Fountain and was successful on tour and on records with a sophisticated Dixieland idiom. "Java" (RCA 8280) was an acclaimed single; it won a Grammy in 1963. Hirt made 14 chart albums, of which the most popular were *Honey in the Horn* (RCA 2733; 1963), and *Cotton Candy* (RCA 2917; 1964). *Pops Goes the Trumpet* was a collection made with the Boston Pops Orchestra (RCA LPM 2729; 1964). Hirt remained active, primarily performing in his New Orleans club, until his death.

HIS MASTER'S VOICE

The trademark of the Gramophone Co. and the Victor Talking Machine Co., originally registered in the U.S. Patent Office by Emile Berliner in July 1900. It is the familiar Nipper portrait, found in Eldridge Johnson's 1900 catalog of Consolidated Talking Machine Co. products, and used on record players and (from 1909) on disc labels in Britain. Gramophone Co. records have



His Master's Voice label. Courtesy David A. Jasen.

been customarily identified as "HMV." In other countries, affiliated labels have used translations as their trademarks, for example, La Voce del Padrone (in Italy). From 1931 the trademark was used by EMI, Ltd.

HISPANO MUSIC AND CULTURE OF THE NORTHERN RIO GRANDE: THE JUAN B. RAEL COLLECTION (LIBRARY OF CONGRESS)

This is a multiformat ethnographic field collection documenting religious and secular music of Spanish-speaking residents of rural northern New Mexico and southern Colorado. In 1940, Juan Bautista Rael of Stanford University, a native of Arroyo Hondo, New Mexico, used disc recording equipment supplied by the Archive of American Folk Song (now the Archive of Folk Culture, American Folklife Center) to document alabados (hymns), folk drama, wedding songs, and dance tunes. The recordings included in the Archive of Folk Culture collection were made in Alamosa, Manassa, and Antonito, Colorado, and in Cerro and Arroyo Hondo, New Mexico. In addition to these recordings, the collection includes manuscript materials and publications authored by Rael that provide insight into the rich musical heritage and cultural traditions of this region.

The collection consists of approximately eight hours of audio recordings (146 titles on 36 recording discs), one graphic image, and 218 pages of print material including administrative correspondence,

recording logs, song text transcriptions, and publications. The online presentation provides access to 146 audio titles, the graphic image, and all the print material in the collection. [Website: <http://www.loc.gov/>.]

MARTIN MANNING

HISS

Random noise of a sibilant character, a byproduct of tape recording for which no antidote existed until the advent of noise reduction systems. High speed recording lowers the amount of hiss, but speed of playback has no effect on it.

HISTORIC MASTERS, LTD.

A British firm, located in Lancaster, specializing in the reissue of 78-rpm records in cooperation with the National Sound Archive. Beginning in 1972, material by such artists as Nellie Melba, Feodor Chaliapin, Toti Dal Monte and Agnes Nicholls has appeared in four series, the latest dated 1987.

HISTORIC RECORD SOCIETY (HRS)

An organization that reissued acoustic vocal records until 1949. It was located in Chicago.

HIT (LABEL)

An American record issued from 1942 to 1945. Most of the material was by dance bands, including numbers by Abe Lyman, Art Kassel, Ray McKinley, Cootie Williams, and Louis Prima. An interesting item was the only recording by Chico Marx and his short-lived orchestra: "We Must Be Vigilant" and "Johnny Doughboy Found a Rose in Ireland" (#7003; 1942). Eli Oberstein was producer of the label, which was an affiliate of his Elite and Majestic labels, all drawing on Varsity and Royale for masters. Some original pressings were also made, in clandestine opposition to the recording ban imposed by the American Federation of Musicians in 1942. The Hit label bore the notice that it was made by the Elite Record Manufacturing Co., or by the Classic Record Co. of New York. [Blacker 1977/10 tells the Oberstein story; the Hit label listing appeared in *RR* #161-62, 163-64, 165-66, 171-72, 173-74, and 181-82.]

HIT OF THE WEEK (LABEL)

A 10-inch record issued by the Durium Products Corp. of New York from February 1930 to 1932. The

disc was a flexible one, made of a paper fiber laminated with a synthetic resin called "durium," recorded on one side, sold on newsstands for only \$.15 (while standard labels were selling for \$.75). "A ray of sunshine" in the industry — according to *Variety* — the label brought good performers of dance and jazz music to a public that was unable, in the Depression, to buy their work through normal channels. The choice of each week's "hit" was made by a committee made up of Florenz Ziegfeld, Eddie Cantor, and Vincent Lopez. Among the artists on the label were the orchestras of Donald Voorhees, Phil Spitalny, Vincent Lopez, Sam Lanin, Dick Robertson, Harry Reser, Erno Rapee, and the Hit of the Week Orchestra directed by Bert Hirsch; with vocalists Morton Downey, Rudy Vallee, Gene Austin, Eddie Cantor, and Smith Ballew. Important jazz/swing instrumentalists like Tommy Dorsey and Duke Ellington were heard on one or two discs.

Great success marked the enterprise at first, with weekly releases selling a half million copies. However, by March 1931, as the economic crisis deepened, sales had dropped sharply, and the corporation went into receivership. A longer-playing Hit of the Week record — the first five-minute 10-inch disc on the American market — appeared in August 1931, offering two songs instead of one. But sales continued to drop, reaching a low point of 60,000 per week at the end of 1931. In June 1932 the final disc went to the newsstands.

Low-cost subsidiary labels by the major companies, issued in the 1930s, probably owe their initiation to the Hit of the Week model. [Englund 1967 is a label list; Rust 1978; Waters 1960 is a history and label list.]

HMV

SEE HIS MASTER'S VOICE

HODGES, JOHNNY (25 JULY 1907–11 MAY 1970)

American alto and soprano saxophonist, born John Cornelius Hodge in Cambridge, Massachusetts. He is regarded as one of the principal saxophonists of the swing era. As a child Hodges was a pianist and drummer, but he took up the saxophone at age 14. He played in Boston and New York, and in 1928 joined Duke Ellington, remaining 40 years in that partnership. He also led a small group drawn from the Ellington band, and he played with other bands from time to time. He took part in the Benny Goodman Carnegie Hall concert of 1938.

Among the fine discs that feature Hodges are "Passion Rock" (Bluebird 30-0817; 1941), "Castle Rock" (Clef 8944; 1951), and — with Ellington — "I'm Beginning to See the Light" (Victor 20-1618; 1944). He died in New York.

HODGES, RALPH W. (1944 –7 JAN 1994)

Born in Hartford, Connecticut, Hodges was educated at several private schools, and went on to graduate from Columbia University in 1965. He joined *Stereo Review* magazine in 1969, and was named its technical editor in 1977. He left to work for Dolby Labs in 1979, but decided to turn to freelance writing and reviewing in 1984. He was contributing insightful monthly columns on the consumer-audio scene to *Stereo Review* right up until his death.

HOWARD FERSTLER

HOFFAY J.

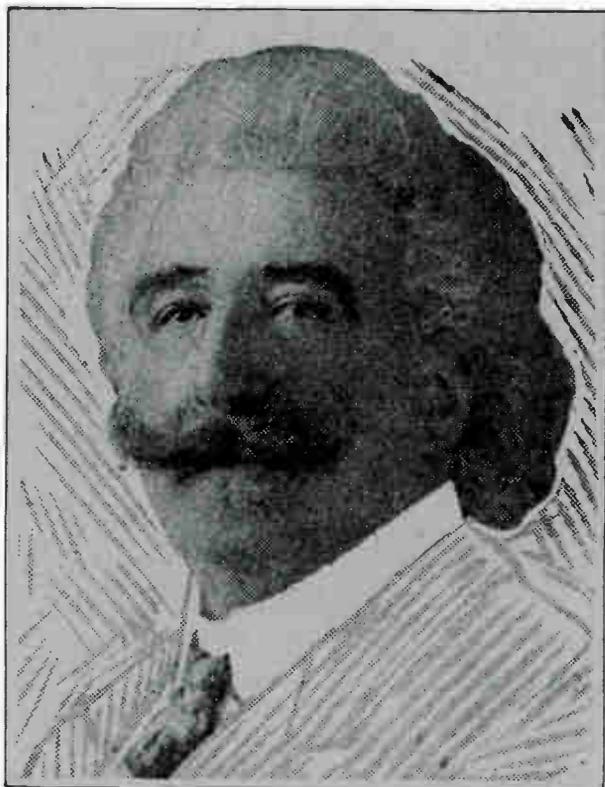
A New York firm, with a branch in London, active in 1915. It produced a disc player advertised as one whose sound does not penetrate walls, "no matter how loud it is inside the flat."

HOFMANN, JOSEF (20 JAN 1876–16 FEB 1957)

Polish/American pianist, born near Kracow. He first appeared in public at age six, and at age 10 played the first Beethoven concerto with the Berlin Philharmonic Orchestra under Hans von Bülow. His American debut in New York on 29 Nov 1887 "electrified the audience" (Slonimsky), but he determined to resume his studies for several years in Europe before further concertizing. At age 18 he returned to the stage, gaining recognition as one of the greatest artists of the 19th century. Chopin and Liszt were his specialties. When the Curtis Institute was founded in Philadelphia in 1924 Hofmann headed the piano department, and from 1926 to 1938 he directed the Institute. In 1926 he became an American citizen. He retired to California, where he died in Los Angeles.

In the history of sound recording Hofmann holds a significant place, for he was the first recognized artist to make a record. It was an Edison white wax cylinder, made on a Perfected model phonograph in the Edison laboratory while the pianist was 12 years old. He could also be considered the first composer to record, although his composing career (under the name Michel Dvorsky) was not a stellar one. He recorded commercially for Columbia in 1912–1922, beginning with the Mendelssohn "Spring Song"

HOFMANN, TONY



Josef Hofmann in the 1917 Victor catalog. Courtesy Jerald Kalstein

(#1178), and making 13 double-sided discs of Chopin, Liszt, Rachmaninoff, Mendelssohn, etc. He was a Brunswick performer from 1923 to 1925. His complete solo recordings made from 1935 to 1948 are available on a two-CD set from Marston records, which plans to reissue all of his known recordings on eight CDs.

HOFMANN, TONY

SEE *KLH CORPORATION*; *KLOSS, HENRY*; *LOUDSPEAKER*

HOGWOOD, CHRISTOPHER

(10 SEP 1941–)

English conductor and keyboardist, born in Nottingham. He studied at Cambridge University, and at Charles University, Prague. In 1967 he and David Munrow established the Early Music Consort to perform medieval music, and in 1973 he founded the Academy of Ancient Music, which has emphasized the Baroque period. The academy has also programmed Mozart and other more recent composers. Hogwood is one of the leaders in the authentic

performance movement, using original instruments. He has also been active as an editor, publishing works of J.S. Bach and Purcell.

Among Hogwood's striking recordings are the Beethoven and Haydn symphonies he conducted from the fortepiano, solo discs of the Bach *French Suites* on the harpsichord, and a long list of works with the Academy of Ancient Music (including complete Handel oratorios). Decca, Philharmonia, and L'Oiseau Lyre have been his favored labels.

HOLCOMB AND HOKE MANUFACTURING CO.

An American firm primarily devoted to popcorn machines and refrigerated display cases; it also made the Electromuse, an early coin-op (nonselective) with electrical amplification. Homer Capehart worked for them as a salesman for a time in the 1920s.

HOLCOMBE, HERBERT (CA. 1867–1908)

American baritone and vaudeville artist, a partner in the stage team of Sadie Cushman and Holcombe. He recorded for Columbia in 1895–1896, for the Chicago Talking Machine Co., and also for Berliner. [Brooks 1979.]

HOLIDAY, BILLIE

(7 APR 1915–17 JULY 1959)

American blues and jazz singer, known as "Lady Day," born Eleanora Fagan Gough in Baltimore, Maryland. Although facts about her early life are uncertain, it seems her parents were Sadie Fagan and Clarence Holiday, and that her given name was Eleanora. After a troubled childhood that included a reformatory and brothels, she began singing in Harlem clubs at age 15, was heard by John Hammond and brought to the attention of Benny Goodman; she sang with the Goodman band from 1933. She also teamed with Count Basie, Artie Shaw, and Teddy Wilson, and was soon recognized as the foremost female jazz vocalist. Holiday was among the few Black singers to be members of white orchestras in the 1930s. She made European tours, gaining acclaim wherever she appeared. Holiday recorded for Vocalion/Columbia through the 1930s, Decca from the mid-1940s through 1950, and then for Verve in the early 1950s. Her voice declined around 1950, leading to a less effective period. She made some final recordings in the late 1950s again for Columbia. Holiday died in New York. The motion picture *Lady Sings the Blues* (1972) purported to be her life story.

Her first records were with Goodman in 1933: "Your Mother's Son in Law" (Columbia #2856-D; 27 Nov 1933), and "Riffin' the Scotch" (Columbia 2867-D; 1933). She was next on Brunswick making a landmark series of records with Wilson's band (including Roy Eldridge), among them "I Wished on the Moon" (Brunswick 7501; 1935), "What a Little Moonlight Can Do" (Brunswick 7498; 1935), "If You Were Mine" (Brunswick 7554; 1935), and "These Foolish Things" (Brunswick 7699; 1936). She led her own group in "Billie's Blues" (Vocalion 3288; 1936), "A Fine Romance" (Vocalion 3333; 1936), "I Can't Get Started" with Lester Young (Vocalion 4457; 1938), "Strange Fruit" (Commodore 526; 1939), and "Lover Man" (Decca 23391; 1944). Most of these were reissued on Time-Life STL-J03 P3-14786 (1979), and in the Columbia nine-CD set (originally on LP) *The Quintessential Billie Holiday* (completed in 1991, with 153 songs recorded up to 1942). There have been countless other reissues of her recordings made for Columbia, Verve, and other labels.

HOLLAND, DAVE (1 OCT 1946-)

Holland has emerged as one of the most important jazz bassists, composers, and bandleaders of our time. Born in Wolverhampton, England, his exceptional technique and musicality helped him land a job as a sideman with Miles Davis in the late 1960s. Holland performed on Davis's watershed album *Bitches Brew* (Columbia GP26; 1969), which brought rock/funk grooves and electric instrumentation to jazz. He was also a member of the influential group Circle with Chick Corea, Barry Altschul, and Anthony Braxton. The album, *Circle: Paris Concert* (ECM 1018/19 ST; 1971), is considered a masterpiece of free jazz.

Holland's first album as a leader, *Conference of the Birds* (ECM 1027; 1972), was the first of his 16 albums, many of which have received critical acclaim. *Emerald Tears* (ECM 1109; 1977), was a tour de force of unaccompanied bass playing. His notable bandleading and compositional skills continued to shine with the release of *Jumpin' In* (ECM 1269; 1984), and *Seeds of Time* (ECM 1292; 1984). The album *TriPLICATE* (ECM 1373; 1988), features Jack DeJohnette on drums and Steve Coleman on sax in a no-piano trio. In two of his most recent releases, *Prime Directive* (ECM 1698; 1999), and *Not for Nothin'* (ECM 1758; 2001), Holland has continued leading a quintet that performs extremely challenging material with precision, energy, and a superb level of improvisational skill.

GARTH ALPER

HOLLAND-DOZIER-HOLLAND [BRIAN HOLLAND (15 FEB 1941-); LAMONT DOZIER (16 JUNE 1941-); EDDIE HOLLAND (30 OCT 1939-)]

The three songwriter-producers, Holland-Dozier-Holland, all born in Detroit, formed a working team as part of Berry Gordy's Motown-Gordy-Tamla record company in the early 1960s. They quickly gained recognition as vital contributors to the label's polished, pop-soul output, known collectively as the "Motown Sound." During 1963-1966, they produced an unprecedented 28 Top 10 hits, including the Four Tops's "Baby I Need Your Loving" (Motown 1062; 1964), "I Can't Help Myself" (Motown 1976; 1965), "It's the Same Old Song" (Motown 1081; 1965), and "Reach Out I'll Be There" (Motown 1098; 1966); Martha and the Vandellas's "Nowhere to Run" (Gordy 7039; 1965) and "Jimmy Mack" (Gordy 7058; 1967); and the Supremes's "Where Did Our Love Go" (Motown 1060; 1964), "Baby Love" (Motown 1066; 1964), "Come See About Me" (Motown 1068; 1964), "Stop! In the Name of Love" (Motown 1074; 1965), and "I Hear a Symphony" (Motown 1083; 1965).

Motivated by a desire for more creative freedom and a greater share of the profits, Holland-Dozier-Holland departed Motown in 1967 to found Invictus/Hot Wax. In addition to producing such artists as the Chairmen of the Board, Honey Cone, and Freda Payne, all three harbored solo ambitions. Whereas Eddie Holland's success was limited to four charting singles in the early 1960s — including the Top 30 hit, "Jamie" (Motown 1021; 1962) — his brother Brian and Dozier both released hit recordings in the 1970s. The trio disbanded in 1973 and Dozier continued his momentum as a recording artist with ABC Paramount Records.

FRANK HOFFMANN

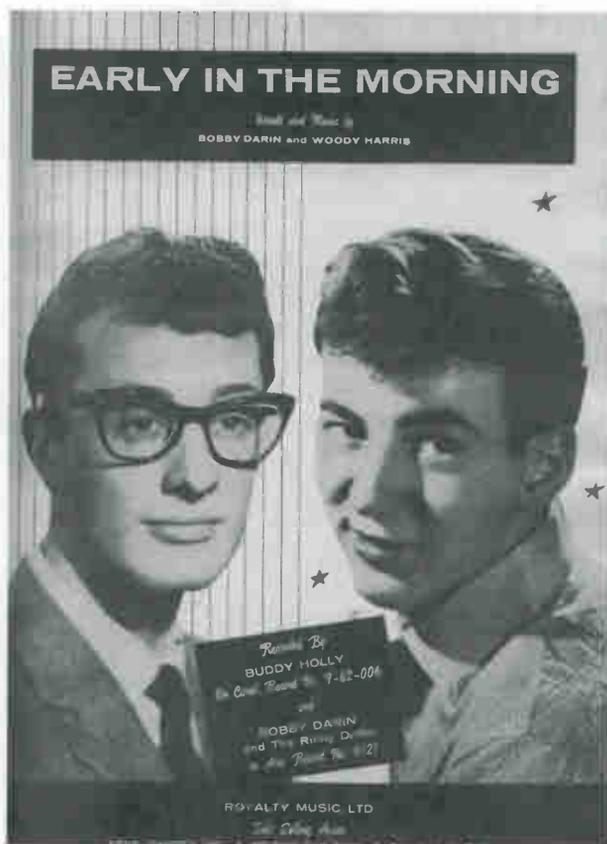
HOLLAND BROTHERS

An Ottawa firm appointed Edison's sales agent for Canada in 1891. It was one of the affiliated companies of the North American Phonograph Co.

HOLLY, BUDDY (7 SEP 1936-2 FEB 1959)

American rock singer, guitarist, and composer, born Charles Hardin Holley in Lubbock, Texas. Influenced by Elvis Presley, he combined country lyricism with a driving R&B-derived beat. Following an unsuccessful stint with Decca in Nashville, Holly and his backup band, the Crickets, signed with Clovis, New Mexico-

HOLLYWOOD (LABEL)



Rare sheet music cover showing Buddy Holly and Bobby Darin together, both of whom recorded Darin's song "Early in the Morning." Courtesy David A. Jasen.

based producer Norman Petty. Building immaculate arrangements around Holly's compositions, Petty found a way to tap the brash energy of the combo. They garnered wide praise for the LP, *The Chirping Crickets* (1957); the single, "That'll Be the Day" (Brunswick 55009; 1957), topped the charts, spurring Brunswick to release their material simultaneously under Holly's name on the Coral subsidiary. While continuing to utilize Petty and the Crickets, Holly's solo-billed "Peggy Sue" (Coral #61885; 1957) achieved great success. Additional hits followed, most notably "Oh Boy" (Brunswick 55035; 1957), and "It Doesn't Matter Anymore" (Coral 62074; 1959). The latter recording — featuring a pop string arrangement — revealed Holly to be searching for a mainstream sound more in keeping with the likes of Paul Anka and Bobby Darin. Along with studio tracks like "Moonbeams" and "True Love Ways," it reflected his wish to transcend teen idol status by building a long-term career geared to an adult audience. However, Holly remained trapped by live performing demands; in the midst of a poorly planned Midwestern package tour, he died in a plane crash along with Ritchie Valens

and the Big Bopper on 3 Feb 1959 near Clear Lake, Iowa. A motion picture, *The Buddy Holly Story*, based on his life, was released in 1978.

FRANK HOFFMANN

HOLLYWOOD (LABEL)

An American record distributed by the Hollywood Record Co., Hollywood, California, in the mid-1920s. Material was dance music and some jazz. [Rust 1978.]

HOLLYWOOD RECORDS (LABEL)

An imprint of Walt Disney Inc. active since the late 1980s, primarily releasing film and TV soundtrack recordings, but also with a small roster of original artists. [www.hollywoodrecords.go.com.]

HOLMAN, TOMLINSON (6 AUG 1946–)

A noted audio researcher and designer, Holman has a 1968 B.S. degree in communications from the University of Illinois at Urbana-Champaign. During his career, he has worked for the motion picture production center at the University of Illinois, Advent Corporation (chief electrical engineer, assisting Henry Kloss), Apt Corporation (founder and chief engineer), Lucasfilm Ltd. (corporate technical director), and the University of Southern California (professor in the school of cinema-television), and during this time also started his own company, TMH Corporation. His notable design achievements include the Advent radio and receiver, several television and loudspeaker designs, the highly-regarded Apt/Holman preamplifier and power amplifier, and perhaps most significant of all, the THX Sound System for both theater and home-audio use.

In addition to numerous magazine essays, Holman published *5.1 Surround Sound Up and Running* (1997) and *Sound for Film and Television* (2002). Among other organizations, he is a fellow of The Audio Engineering Society, a fellow in the British Kinematograph Sound and Television Society, a fellow and past chairman of the audio recording and reproduction committee, an honorary member of the Society of Motion Picture and Television Engineers, a member of the Institute of Electrical and Electronics Engineers, and a member of the Acoustical Society of America. He has seven U.S. patents, as well as 23 corresponding foreign patents.

HOWARD FERSTLER

HOLT, J. GORDON (19 APR 1939–)

One of the most influential journalists in audio, Holt was born in Charlotte, North Carolina, but moved early to Melbourne, Australia, where a music appreciation course in school and a then “state-of-the-art” record player introduced him to excellent sound. He started collecting records, played them on his family’s wind-up acoustical phonograph, and discovered that some phonographs sounded better than others.

Holt returned to the U.S., and while earning a journalism degree from Lehigh University, wrote articles for a magazine called *High Fidelity*, accepting a full-time position with them as an equipment reviewer after graduation. After many tiffs with the publisher about things Holt claimed to hear that the publisher insisted he could not, he left *High Fidelity* to become director of technical services for Paul Weathers, where he started a dealer newsletter that discussed the sound of equipment and recordings. When dealers started ordering extra copies for their customers, he suspected there might be a demand for such a publication, and left Weathers in 1963 to start *Stereophile* magazine, which featured subjective, as opposed to wholly measurement-oriented, reviewing, thereby pioneering a trend in consumer-audio journalism.

In 1992, Holt sold the ailing magazine to Larry Archibald, who resuscitated it and later hired John Atkinson as editor. Holt stayed on as a contributor and did what he liked best: playing with unaffordable audio equipment and writing about it. Atkinson expanded the magazine’s circulation, but took it in directions Holt had no sympathy with. Consequently, he left in 1998 in order to do freelance writing. As of 2002, Gordon Holt was a regular reviewer for *Stereophile’s Guide to Home Theater* and *The Absolute Sound*, and was self-publishing booklets of interest to audiophiles and home-theater enthusiasts. His long-time hobby remains recording orchestras.

HOWARD FERSTLER

HOLZMAN, JAC (15 SEP 1931–)

After studying liberal arts at St. John’s College, in Annapolis, Maryland, Holzman went on to pioneer the independent record-company movement that began in the early 1950s. As the founder and president of both Elektra Records, in 1950, and Nonesuch Records, in 1964, he was acutely conscious of the importance of sound quality in recordings. As a result, he developed innovative close-up microphone techniques and made use of small, high-quality full-range speaker systems that assisted him in location work, because traditional studios were inappropriate for most of Elektra’s music.

After the merger of Elektra with Warner and Atlantic in 1970, Holzman became chief technologist for the Warner Music Group and its parent, Warner Communication (now AOL/Time Warner), and held that position from 1973 until 1979. He was also director of Atari, Inc., between 1977 and 1984, chairman of Panavision, Inc., from 1982 until 1985, and returned as chief technologist with the Warner Music Group in 1991, where he continues to work with all parties in the development and exploitation of multichannel surround sound, the compact disc (CD), and most recently on high resolution DVD-Audio. Holzman is a charter member of the Audio Engineering Society and Society of Motion Picture and Television Engineers, and was on the scientific and technical award committee of the Academy of Motion Picture Arts and Sciences from 1982 until 1988.

HOWARD FERSTLER

HOME RECORDING

Making records at home (outside a studio) was always a possibility with cylinder phonographs, and remained one of their selling points in competition with disc machines. The earliest home disc maker was offered by the Neophone Co., Ltd., in Britain in around 1905. The earliest U.S. product was marketed by the American Home Recorder Co. in August 1920. An attachment advertised in 1924 permitted direct home recording from radio programming. Home disc-cutting recorders were available from the mid-1920s on, used to make both transcriptions from radio broadcasts as well as personal records.

The introduction of home tape recording equipment after World War II led to a home-recording boom. Open reel tapes were used to record off the radio, TV, and LP records, plus for making personal recordings. Mixers and other equipment enabled hobbyists to create their own home studios. The introduction of the smaller and easier to use audiocassette in the 1960s led to a boom in recordings made for personal use; boomboxes and the later Sony Walkman furthered the popularity of this format. The introduction of digital recording technology to the home market in the 1980s led to further interest in home recording; minidisc and other formats became popular for making personal recordings. In the 1990s, the ability to “rip and burn” sound files onto CDs using the home computer made piracy an increasing concern for record labels. Into the 21st century, the wide availability of sophisticated sound recording software allows individuals to make home recordings of a quality that could have only been achieved in a professional studio even a few years earlier.

See also Instantaneous Recordings

REV. CARL BENSON

HOME THEATER

Film reprints (usually 16mm) of movies have been available on a limited basis for decades, but the concept never caught on for a variety of reasons. However, since the late 1980s, video copies of motion pictures have been available for home playback, first as prerecorded tape with hi-fi video sound (available for sale or rental), later on a smaller scale in laserdisc form, and more recently on a very large scale indeed as the DVD. Home theater has expanded to the point where it is a multimillion-dollar business, eclipsing the home-music business, and its success has resulted in dramatic, market-driven improvements to both audio and video technology. Today, home theater continues to boom, and videocassette and DVD movies (rentals and sales), as well as music videos, are a huge percentage of the total income generated by the entertainment industry. It can also be argued that modern audio-music sound reproduction in the home owes its current state-of-the-art sound quality to the home-theater technology and home-theater economics.

See also Surround Sound

HOWARD FERSTLER

HOMER, LOUISE

(30 APR 1871–6 MAY 1947)

American soprano and mezzo-soprano, born Louise Dilworth Beatty in Shadyside, Pennsylvania (near Pittsburgh). She studied in Philadelphia, Boston, and Paris, and married one of her teachers, Sidney Homer, in 1895. Her opera debut was as Leonora in *Favorita* in Vichy, France, on 15 June 1898. She was a great success in Covent Garden, singing Wagner, in the next year, and gave a command performance for the queen. With a range of three octaves, she was able to select from a wide repertoire, finally settling for roles in the lower register; she made her Metropolitan Opera debut as Amneris on 22 Dec 1900 (also the occasion of Marcel Journet's debut), and remained with the company until 1919, save for one season. She was also heard in Chicago (1920–1925), San Francisco, and Los Angeles. Homer was highly acclaimed for her Eurydice of 1909 in Paris, and in New York under Arturo Toscanini. *Delilah*, opposite Enrico Caruso, was perhaps her greatest triumph. Her last appearance was in 1929. She died in Winter Park, Florida.

Homer began recording in 1903, and was a Victor exclusive artist for 25 years. She was known best for her ensemble work, including important duets with Caruso, Geraldine Farrar, Johanna Gadschi, Alma



Louise Homer in the 1917 Victor catalog. Courtesy Jerald Kalstein

Gluck, and Giovanni Martinelli; the *Rigoletto* Quartet, first with Caruso, Antonio Scotti, and Bessie Abbott (Victor 96000, 1907, selling at a premium price of \$6.00), then with Beniamino Gigli, Amelita Galli-Curci, and Giuseppe De Luca, coupled with the *Lucia* Sextet with the same artists plus Ezio Pinza and Angelo Bada (Victor 10012). Her most famous solo discs were from *Samson et Delilah*: "Amour, viens aider" (Victor 6165), and "Mon cœur s'ouvre à ta voix" (Victor 1422); both remained in the catalog into the 1940s. Other distinguished interpretations were "O toi, qui m'abandonne" from *Prophète* (Victor 85004, reissued on IRCC #103-A), and "Fatal divinità" from *Alceste* (Victor 88286, reissued on IRCC 153). Homer's work has been reissued on CD, including an anthology of her solo recordings on Pearl (9950); she also appears on various collections of early opera recordings. [Poole 1947.]

HOMESTEAD (LABEL)

A rare American issue, affiliated with Plaza and perhaps with Crown, distributed by the Chicago Mail Order Co. during the mid-1920s. Material was popular vocals and dance music. [Kendziora 1989/4; Rust 1978.]



Homestead, a budget label issued by the Chicago Mail Order Co in the mid-'20s. Courtesy Kurt Nauck/Nauck's Vintage Records

HOMESTEAD TRIO

A female vocal trio formed to make Edison Diamond Discs. They recorded from 1917 to 1923, making 24 sides. Members were Gladys Rice, Betsy Lane Shepherd, and Amy Ellerman. Elizabeth Spencer replaced Rice in 1921. Their first record was "Indiana" (Edison Diamond Disc 80334; 1917); it became one of Edison's best sellers. Another popular item was "Keep the Home Fires Burning" (82149; 1918). [Walsh 1973/2.]

HOMOCHORD (LABEL)

A British (originally German) record distributed in the years before World War I, made from European matrices. Discs with the Homochord label and the Homophone label were both issued until 1914, when Homophone ceased. The first issues were sold in 1913 by agents Bernhard Andres and Co., brightened by the registered trademark of a nude harpist on the label. Limited distribution resulted from the war, but the Andres Brothers remained in business until March 1917, when they were interned as enemy aliens. The label was sustained by Carl Lindström (London), Ltd., using British pressings.

In August 1920 a new "Homokord" record was announced in Britain, from the Berlin firm Homophon. Then, in October 1921, British Homophone Co., Ltd., began to issue a locally produced series, using matrices from prewar British and European recordings,

new recordings from Europe and America, and U.S. matrices owned by the Aeolian Co., Ltd. At first the pressing was done by the Universal Music Co., Ltd., at Hayes, Middlesex. Later, British and American Pathé recordings became available, as well as Zonophone recordings. The spelling of the label was again Homochord. In 1922 actual recording began in London, during 1926–1928 in studios of the Gramophone Co. Material was dance music and popular vocals, some of it by stars like Fletcher Henderson or the California Ramblers, disguised by pseudonyms. There were 10-inch and 12-inch discs, with standard labels, and a series of 10-inch and 12-inch discs with plum and gold labels. Homochords were sold in the U.S. by the Sterno Manufacturing Co. from February 1924 to December 1925. Production stopped in Britain in 1930, then resumed in 1933; a 10-inch disc selling at one shilling was advertised in October. However, production finally ceased in 1935. [Andrews 1985/12; Rust 1978.]

See also **Homophon (Homophone) (Label)**

FRANK ANDREWS

HOMOKORD (LABEL)

SEE HOMOCHORD (LABEL)

HOMOPHON (HOMOPHONE) (LABEL)

A German record issued by the Homophone Co. GmbH of 92 Klosterstrasse, Berlin, from 1905. In the first catalog, September 1905, there were inglesided and double-sided 10-inch discs, and six-inch "Liliput" discs. The record was available in Britain from June 1906, through mail order at first, then through Bernhard Andres and Co. as agent. In the U.K. advertising, the spelling "Homophone" was used. Artists on the label included La Garde Republicaine Band, the Johann Strauss Orchestra of Vienna, and many opera singers (none particularly well known today) from various European houses. From October 1908 Andres began to trade under the name Homophone Disc Record Co. The label trademark (registered in Germany June 1906 and in Britain August 1907) showed a nude harpist with a recording horn in the bushes behind her. Following legal action by International Zonophone Co., claiming too much similarity between the names Homophone and Zonophone, the Homophon Co. obligingly changed its label name to Homokord, with the British spelling Homochord. The change took effect in August 1911. Columbia bought all

HOOKER, JOHN LEE

shares of the German firm in 1928. [Andrews 1985/12.]

See also **British Homophone Co., Ltd.; Homochord (Label)**

FRANK ANDREWS

HOOKER, JOHN LEE (22 AUG 1917–21 JUNE 2001)

John Lee Hooker is known as the “father of the boogie”; he recorded many songs in this genre, featuring an insistent beat, typically emphasized by the clicking of hob-nailed shoes and his primitive — but expressive — staccato guitar lines. He was also a master of the slow blues form, possessing one of the most powerfully expressive voices ever captured on disc. According to blues historian Gerard Herzhaft [*Encyclopedia of the Blues*. 1997], he probably made more recordings than any other bluesman, considerably more than 500 tracks in all.

Born in Vance, Mississippi — part of the fabled delta region native to many great blues interpreters — Hooker already possessed a mature style by the time he migrated to Detroit in 1943, in search of work. He began recording in 1948; “Boogie Chillen” (Modern 627; 1948; #1 R&B) and “Hobo Blues”/“Hoogie Boogie” (Modern 663; 1949; #5 R&B/#9 R&B) — particularly popular in the Black sections of Chicago and Detroit — led to further demand for recordings. He would work with many rhythm and blues labels of the period — including Modern, King, Chess, Vee-Jay, Sensation, Specialty, Chart, JVB, Savoy, Regent, Chance, Gotham, DeLuxe, Gone, Rockin’, Prize, Staff, Swing Time, and Acorn — often using pseudonyms such as Birmingham Sam and His Magic Guitar, Delta John, John L(ee), Booker, John Lee Cooker, Johnny Lee, Johnny Williams, Texas Slim, and the Boogie Man.

Many of Hooker’s classic recordings — including “Boom Boom” (Vee-Jay 438; 1962; #60 pop, #16 R&B), “Dimples” (Vee-Jay 297; 1964; #23 UK) “I’m In The Mood” (Modern 835; 1951; #30 pop, #1 R&B), and “I’m Mad” (Specialty 528; 1954) — would be covered by British Invasion artists in the 1960s; one band, the Groundhogs, took their name from his “Groundhog Blues.” While still a top-selling R&B artist, he actively participated in the country blues revival beginning in the late 1950s, shifting back to acoustic guitar and folk material. Hooker’s collaboration with the American blues revival group, Canned Heat. *Hooker ‘N Heat* (Liberty 35002; 1971; #73; double-disc set), followed by an appearance in the hugely successful film *The Blues Brothers* (1980), would broaden his appeal to rock fans. Although uneven in

quality, his later albums — particularly *Endless Boogie* (ABC 720; 1971; #126), *Never Get Out of These Blues Alive* (ABC 736; 1972; #130), *The Healer* (Chameleon 74808; 1989; #62), and *Mr. Lucky* (Charisma 91724; 1991; #101 US, #3 UK) — typically featured a wealth of big-name guest artists and, as a result, sold moderately well. He was inducted into the Rock and Roll Hall of Fame in 1991.

FRANK HOFFMANN

HOOLEY, WILLIAM F. (16 APR 1861–12 OCT 1918)

Irish bass, born in Cork. He sang comic songs, Irish ballads, opera, and the standard bass repertoire, achieving his greatest success in ensemble work, where he earned the name “King of the Quartet Bassos.” Hooley was an original member of the Haydn Quartet, and belonged to numerous trios and quartets in the 1890s and 1900s, including the American Quartet and the Lyric Trio (with whom he made early cylinder records for Babson Brothers, Chicago, in 1899). He made discs for Berliner, then went to Victor, which carried four solos in the 1917 catalog, “Asleep in the Deep” (#16949), and “Wearing of the Green” (#17348) among them. Hooley made records in Britain, too, for G&T. He also sang in the Victor Light Opera Co., and was for a time president of the American Phonograph Record Co. He died in New York. [Walsh 1944/3; corrections in May 1952.]

HOPPER, WILLIAM DE WOLFE (30 MAR, 1858–23 SEP 1935)

American actor and monologist, born in New York. His greatest Broadway success was in *El Capitan* (1896), with music by John Philip Sousa. Hopper appeared in many other Broadway shows and Gilbert and Sullivan operettas. His final notable appearance was in *Everything* (1918), with music by Sousa and Irving Berlin.

Hopper is remembered principally for his rendition of “Casey at the Bat,” which he first performed in 1888. His recording of that poignant tale (Victor 31559; 1906) was a sensation, remaining in the catalog to 1927 (backed by “O’Toole’s Touchdown” on #35783). It was his only successful recording. [Bayly 1985; Brooks 1990.]

HORIZONTAL TRACKING ERROR

The difference between the angle formed by the cutting stylus in disc recording (90 degrees) and the angle

formed by the playback cartridge to the disc surface. It results from the pivoting of the tone arm, and the consequent inward slant of the headshell. Distortion in the playback is proportional to the difference between the recording and playback angles. A tangential tone arm eliminates the problem.

HORN (I)

The device used in acoustic recording to capture the sound signal and transmit the vibrations to the cutting stylus.

HORN (II)

The device used in playback of records to amplify the vibrations taken from the disc or cylinder surface by the cartridge. Early recording and playback horns were in simple conical shape, giving poor efficiency and poor tonal quality. As results improved with the length of the horn, manufacturers made them longer and longer; by 1900 a playback horn of 56 inches was marketed.

Experiments led to the exponential horn, in which the cross-sectional area doubles with each increase of x inches in distance along the axis. By 1920 the exponential horn was universally accepted, and in 1925 the orthophonic horn formalized the design and increased the length. Horns were external at first, then (from the Victrola of 1906) were concealed inside the phonograph's cabinet; the concealment was achieved by folding the horn. Internal horns did not improve the sonic quality of the system, and, in fact, worsened it, but had cosmetic appeal; the term "hornless player" was used in advertising internal horn machines.

The first horns were of spun brass or copper, and brass remained a favored material. Wood horns were introduced in the Regina Hexaphone of 1908, and were in general use by 1911, and later there were folding cardboard horns on portable machines. With the introduction of electrical recording, the horn was replaced by the loudspeaker. For the type of horn used on a specific record player, see the player model under the manufacturer's name; for example, EDISON RECORD PLAYERS — TRIUMPH.

See also Acoustic Recording; Edison Horns; Folded Horn

HORNBOSTEL, ERICH MORITZ VON (25 FEB 1877–29 NOV 1935)

A pioneering Austrian-born sound archivist and ethnologist, Hornbostel was director of the Berlin Phonogramm-Archiv from 1906 to 1933. He was one

of the founders of comparative musicology (later known as ethnomusicology), and in 1906 made field recordings of Pawnee Indians in the United States. In 1914, working with musicologist Curt Sachs, he developed a method of classifying musical instruments from around the world that is still in use today. He died in Cambridge, England.

HORNE, LENA (30 JUNE 1917–)

Lena Horne has enjoyed a long distinguished career as a singer/actress, marked by frequent appearances in Broadway musicals, films (e.g., *Cabin in the Sky*, *Stormy Weather*, *Broadway Rhythm*, *Till the Clouds Roll By*, and *Words and Music*), radio, and television. Best known as a nightclub entertainer, she won the National Academy of Recording Arts and Sciences lifetime achievement award in 1989.

Born in Brooklyn, New York, she became a member of the Harlem's Cotton Club chorus while still a teenager. This led to singing stints with bands led by Noble Sissle and Charlie Barnet. She began recording in the late 1930s; her hits included "Stormy Weather" (Victor 27619; 1943; #21), "One For My Baby (And One More for the Road)" (Victor 1616; 1945; #21), "Deed I Do" (MGM 10165; 1948; #26), and "Love Me or Leave Me" (RCA 6073; 1955; #19). She enjoyed even greater success with LPs, most notably *Lena Horne at the Waldorf Astoria* (RCA 1028; 1957; #24), *Give the Lady What She Wants* (RCA 1879; 1958; #20), *Porgy & Bess* (RCA 1507; 1959; #13; with Harry Belafonte), *Lena on the Blue Side* (RCA 2465; 1962; #102), *Lena...Lovely and Alive* (RCA 2587; 1963; #102), *Lena & Gabor* (Skye 15; 1970; #162; with Gabor Szabo), and *Lena Horne: The Lady and Her Music* (Qwest 3597; 1981; #112). The latter release was culled from her one-woman Broadway show, which led to a career revival and earned her a Tony award.

FRANK HOFFMANN

HORNE, MARILYN (16 JAN 1934–)

A celebrated American mezzo-soprano, born in Bradford, Pennsylvania, Horne studied at UCLA and then traveled to Europe, where she made her debut in 1957; her first U.S. appearance was with the San Francisco Opera in 1960. Her Metropolitan Opera debut came on 3 Mar 1970, and she became one of the company's biggest draws through the early 1990s. She is particularly well known for her interpretation of the operas of Bellini and Donizetti. She was awarded the National Medal of the Arts (1992) and given a Kennedy Center honor (1995). In 1994, she formed a foundation to support the training of new singers; she

HOROWITZ, VLADIMIR

has been director of the voice program at the Music Academy of the West since 1995. She gave her last solo recital in Chicago in 1999.

As a recording artist, Horne has recorded many complete operas, as well as popular selections of arias for the general listener. She has recorded for several labels, with key releases on RCA and Decca, from the mid-1960s.

HOROWITZ, VLADIMIR (1 OCT 1903–5 NOV 1989)

Russian/American pianist, born in Berdichev. He made his debut in Kiev on 30 May 1920, and began touring Europe in 1926. His American debut in 1928 was at the concert in which Thomas Beecham was also heard for the first time in the U.S.; they collaborated on the Tchaikovsky First Concerto, creating a sensation. Horowitz was recognized, while still in his 20s, as one of the great virtuosos of all time. He specialized in the romantic composers, Scriabin, and Scarlatti. From 1953 to 1965, and from 1969 to 1974 he was absent from the concert stage, but continued to make recordings. In 1986 he made a triumphant return to Russia after a 60-year absence. He died in New York.

A CD set from HMV (#CHS7 63538–2; 1990) offers a group of recordings from 1930 to 1951: Bach, Chopin, Beethoven, Debussy, Haydn, Schumann (the remarkable “Arabesque” recording of 1935), Liszt, Rachmaninoff, the Prokofieff “Toccatà” of 1930, among others. *Horowitz Encores* is a CD from RCA (#GD87755; 1990) that gives performances for the 1940s and 1950s, including the pianist’s famed transcription of the Sousa “Stars and Stripes Forever” and his “Variations on a Theme from Bizet’s Carmen” — two exuberant showpieces. *Horowitz Plays Chopin* (RCA CD GD87752; 1990) presents the brilliant “Andante Spianato and Grand Polonaise in E-Flat Major” of 1945 (originally album #VM 1034), played as nobody else at the time could play it, plus etudes, ballades, and smaller works. *A Tribute to Vladimir Horowitz* (CBS 45829; 1990) is a reissue of a Carnegie Hall recital of 1965, featuring Scarlatti and Scriabin.

One of the immortal Horowitz performances, the Tchaikovsky First Concerto with Arturo Toscanini, recorded 25 Apr 1943 in Carnegie Hall, was reissued in 1990 on RCA 87992; it is coupled with another definitive interpretation, of the Beethoven “Emperor” Concerto under Fritz Reiner, made in Carnegie Hall on 26 Apr 1952. Horowitz recordings received 20 Grammy awards (more than any other classical instrumentalist) from 1962 to 1988, and he was also recognized at the 1989 ceremony with a lifetime achievement award.

HOT AIR MOTOR

A drive mechanism used in certain gramophones from about 1909 to 1914, based on the Stirling cycle engine patented in 1816 by Robert Stirling and James Stirling. It was an external combustion engine, fired by a methylated spirit (alcohol) burner; the fatal flaw in the design was that a flame was present, one that was difficult to stabilize. This feature, plus the cost — eight times the cost of a spring motor — and overall complexity of its mechanism, prevented the device from gaining wide acceptance. It did have quiet operation and maintained constant turntable speed. The motor was used in the Apollo and Maestrophone gramophones. [Evans, H. 1989.]

HOT RECORD SOCIETY (HRS) (LABEL)

A record issued from 1937 to 1939. Using masters from American Record Corp. and Decca, the society marketed high quality material, and also made original records of Muggsy Spanier and Sidney Bechet. The label was briefly revived in 1946. [Rust 1978.]

HOUGH, JAMES EDWARD (1848–1925)

British recording industry executive. He began as an exhibitor in London, with members of his family, in December 1893. He used equipment of the Edison Bell Phonograph Corp., Ltd., without authorization, making records of songs and speeches. Hough’s business was carried on under the name of the London Phonograph Co. From 1894 he sold imported cylinders



Hot Record Society label, c. late '30s. Courtesy Kurt Nauck/Nauck's Vintage Records

and his own London Records. Edison Bell's suit against Hough required three years of litigation, at the end of which he was enjoined by the court. However, he did obtain sales rights from Edison Bell for their entertainment phonographs (not for leased office machines), and set up Edisonia, Ltd., in 1897 to succeed the London Phonograph Co. He continued to sell London Records. Under pressure from Edison Bell, he sold out to it in 1898; and the Edison Bell Consolidated Phonograph Co. was created to handle sales and leases of phonographs, with Hough as general sales manager. Hough acquired both Edison Bell Consolidated and Edisonia in 1909, and formed J.E. Hough, Ltd. He introduced the popular Winner record in February 1913.

FRANK ANDREWS

HOUSE MUSIC

The genre originated as Chicago House, which featured electronic soul and Latin mixes created by deejay Frankie Knuckles at the Warehouse club during the late 1970s. Providing music for a predominantly gay audience known to use psychedelic drugs, he favored recordings built around aggressive bass patterns, looping drums, reverb, and sexually suggestive vocals sung by males in drag.

As the music took on a more cerebral tone, featuring extended instrumental breaks, area labels began placing a premium on studio innovation. Perhaps the most influential record of the time, Phuture's "Acid Tracks" (Trax XXXX; 1987), employed minimalist, repetitive darting sound effects to pioneer a hypnotic spin-off style later known as Acid House.

By the mid-1980s, the genre's creative center had shifted to Great Britain where The Art of Noise's debut release, *(Who's Afraid Of?) The Art of Noise!* (Island 90179; 1984; #85) anticipated Ambient House in its use of sampling and lush, synthesizer-dominated arrangements. However, London deejays tended to add psychedelic touches to the Chicago model, most notably spacey grooves and media sound bites. Genesis P-Orridge coined the term "Acid House" while further refining the sound with *Jack the Tab: Acid Tablets Volume One* (Castalia 001; 1988), and a series of follow-up LPs. By this time, many British postpunk artists were releasing acid mixes of their hit recordings.

Like techno, House continued to splinter off into new hybrid styles in the 1990s, including the Spiritual House, best exemplified by Enigma's *MCMXC A.D.* (Charisma 91642; 1991; #6; platinum record), and Progressive House. The latter form looked to Tangerine Dream's extended synthesizer washes for inspiration; notable proponents included

Mixmaster Morris and the Future Sound of London, whose greatest success came with *Lifeforms* (Virgin 2722; 1994; #6 UK).

FRANK HOFFMANN

HOUSTON, DAVID (9 DEC 1938-)

American country singer and guitarist, born in Shreveport, Louisiana. Encouraged by Gene Austin, a friend of his father, Houston learned guitar and piano, and was singing with the *Louisiana Hayride* show at age 12. In the late 1950s he was established on television and on national tours. He signed with Epic records in 1963 and made a great success with his first disc, "Mountain of Love" (#9625); it was on the charts for 15 weeks. Hit records followed regularly thereafter: Houston had 50 chart records by 1980. "Livin' in a House Full of Love" (Epic 9831; 1965), and "Almost Persuaded" (Epic 10025; 1966), were among the most notable singles. An album entitled *Almost Persuaded* (Epic LN 24213; 1966), was extremely popular, on the charts for 13 weeks.

HOUSTON, WHITNEY (9 AUG 1963-)

The daughter of soul/gospel singer Cissy Houston and cousin of pop chanteuse Dionne Warwick, Whitney was destined for singing success. In addition to possessing one of the truly distinctive voices within mainstream popular music, Houston's good looks have enabled her to secure starring film roles — most notably *The Bodyguard* (1992), *Waiting To Exhale* (1995), and *The Preacher's Wife* (1996) — and a prominent part in the accompanying soundtrack albums.

Born in Newark, New Jersey, Houston burst onto the scene in the mid-1980s with a string of best-selling singles, including "Saving All My Love for You" (Arista 9381; 1985; #1), "How Will I Know" (Arista 9434; 1985; #1), "Greatest Love Of All" (Arista 9466; 1986; #1), "I Wanna Dance with Somebody (Who Loves Me)" (Arista 9598; 1987; #1), "Didn't We Almost Have It All" (Arista 9616; 1987; #1), "So Emotional" (Arista 9642; 1987; #1), and "Where Do Broken Hearts Go" (Arista 9674; 1988; #1). By the 1990s — despite hits like "I'm Your Baby Tonight" (Arista 2108; 1990; #1), "All the Man That I Need" (Arista 2156; 1991; #1), "I Will Always Love You" (Arista 12519; 1992; #1), and "Exhale" (Arista 12885; 1995; #1) — her career lost some momentum due to mediocre albums encumbered with insipid material and routine synthesizer-drenched production work and a slew of imitators (e.g., Mariah Carey, Toni Braxton, Brandy, and Celine Dion). Houston was also dogged

HOWL

by tabloid rumors of martial and drug-related problems. Nevertheless, as the preeminent torch singer of her time, Houston's best recordings may still lie in the future.

FRANK HOFFMANN

HOWL

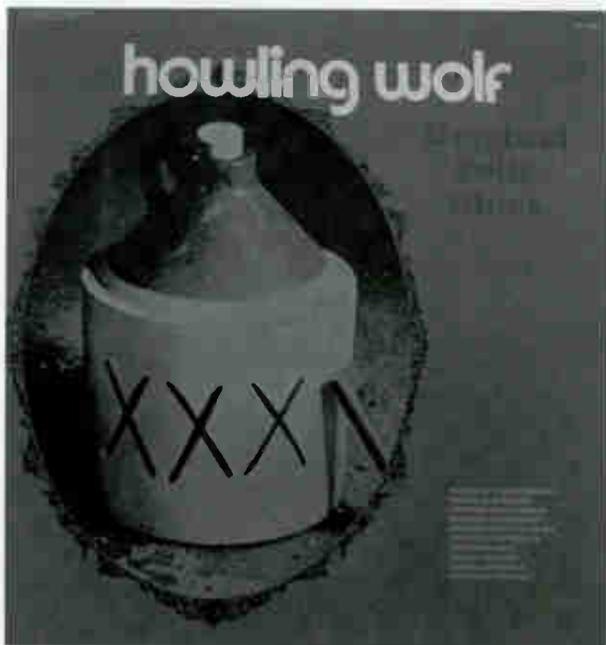
Also known as howlaround, howlback. A shrieking animal-like noise that results from excessive buildup of feedback in a sound system.

See also **Acoustic Feedback**

HOWLIN' WOLF

(10 JUNE 1910–10 JAN 1976)

American blues singer, harmonica player, and guitarist, born Chester Arthur Burnett in West Point, Mississippi. He taught himself guitar as a child, then learned to play the harmonica. His deep voice was shaped in the likeness of the blues singing he heard, notably that of Charley Patton. He began playing in public around 1928, and formed a group that performed in Memphis. Brought to the attention of Leonard Chess, he made a hit record of "Moanin' at Midnight" (Chess 1479; 1957). Burnett earned his stage name Howlin' Wolf with the wolf-like baying he brought to his interpretations. His influence was important in the development of electric Chicago



Howlin' Wolf album issued to take advantage of the folk-blues revival in the early '60s. Courtesy Frank Hoffmann

blues. Other notable records included "Smokestack Lightning" (Chess 1618; 1956), and "My Country Sugar Mama" (Chess 1911; 1964). His most popular album was *The London Howlin' Wolf Sessions* (Chess CH60008; 1971), 15 weeks on the charts. After several years of ill health, he died in Hines, Illinois.

HOXIE, CHARLES A.

(26 FEB 1867–13 OCT 1941)

American electrical engineer, born in Constable, New York. He made an early career in photography, then in 1895 began to study electrical engineering by correspondence, and two years later was an electrician in Detroit. Hoxie moved to Brockton, Massachusetts, in 1899 to work for the Southern Massachusetts Telephone Co., and in 1901 became wire chief for the New England Telephone Co. He built in his home one of the first wireless transmitting and receiving sets. In 1902 he moved to Schenectady, New York, working first for the Hudson River Telephone Co., then in 1912 as an engineer for General Electric. He worked in the areas of telephony, as well as broader fields of electricity. During World War I Hoxie was called on to improve radio communications, and developed the pallophotophone, which recorded sound on film for transmission. That invention was followed by the photophone, which converted the photographed film back into sound. The method was to project the exposed film in front of a photoelectric cell (U.S. patent #1,598,377); this was basically the Pallatrope system used by Brunswick discs in the later 1920s. It also was used in the synchronization of sound on talking film, with the film carrying both the audio and visual signals, demonstrated by General Electric in the 1922 motion picture *Wings*. This method eventually replaced the disc/film method used in *The Jazz Singer* (1927). Hoxie retired in 1932, and died in Alplaus, New York.

HSU, POH SER (30 MAR 1955–)

A native of Singapore, with a civil engineering doctorate from MIT, Hsu is noted for his reasonably priced but still very high performance subwoofers. He is also an expert in econometrics and statistics, both of which have influenced his "form-is-function" designs. In addition to his role as chief engineer for his California-based company, Hsu Research, he is also a consultant in civil engineering, econometrics, and audio.

HOWARD FERSTLER

HUDSON (LABEL) (I)

An American record issued by the Detroit department store J. Hudson in 1924. Masters were from Emerson, and pressing was done at the Bridgeport Die and Machine Co. Most of the output consisted of dance and popular vocal numbers.

HUDSON (LABEL) (II)

A British label issued during the 1930s by the publishing company of M. de Wolfe. Matrices came from Edison Bell, Filmophone, Tono, and perhaps other companies. The repertoire was classical, including operatic and concert vocals, light orchestral pieces, and several organ works. None of the artists were especially well known.

HUGO AND LUIGI

1950s-era pop hitmakers and producers whose work has developed a camp following over the decades. Of Italian heritage, Hugo Peretti (6 Dec 1916–May 1986), and Luigi Creatore (21 Dec 1920–) were musical cousins who grew up in New York City. Peretti began his career playing trumpet in local dance bands and Broadway pit bands, while Creatore was an aspiring songwriter. The two hooked up after World War II when they ran into each other at Creatore's brother's wedding, and began writing songs together. They had their first break in 1954 when their song "The Little Shoemaker" (Mercury 70403) was a hit for the vocal group the Gaylords at Mercury. This led to production work for white pop star Georgia Gibbs (the #1 "Tweedlee Dee"; Mercury 70517, 1955). In 1957, the duo partnered with notorious music-business figure Morris Levy in the Roulette label, producing hitmaker Jimmie Rodgers (notably "Honeycomb," Roulette 4015; #1, 1957). In 1959 RCA hired them as independent producers, the first such arrangement with a major label for an outside production group. They had hits with the Isley Brothers ("Shout, Pts. 1 & 2," RCA 7589, 1959), oversaw Sam Cooke's transformation into a pop-styled crooner, and cowrote and produced the Tokens's big hit "The Lion Sleeps Tonight" (RCA 7954; #1, 1961), a reworking of the South African folksong "Wimoweh." The duo also cocomposed (with George Weiss) Elvis Presley's hit "Can't Help Falling in Love" (RCA 7968; #2, 1961). They also recorded instrumental pop leading their own studio orchestra for the label. They left RCA in 1964, scored a flop Broadway show, and then purchased the small Avco/Embassy label, where they did their last production work. However, pop music was changing

and by 1979 they retired. Peretti died after a long illness in Boynton Beach, Florida.

CARL BENSON

HUGO WOLF SOCIETY

The first organization to offer a subscription set of lesser known music. Walter Legge and critic Ernest Newman worked out the plan, which gained the support of *Gramophone* editor Compton Mackenzie, and eventually the desired 500 subscribers were acquired, each paying \$6 for the first album. Seven 78-rpm albums appeared between 1931 and 1938, presenting the whole Wolf output of *Lieder*, sung by Alexander Kipnis, Elena Gerhardt, Herbert Janssen, Gerhard Hüsch, Alexandra Trianti, Friedrich Schorr, John McCormack, Helge Roswaenge, and Karl Erb. Accompanists were Conrad Bos, Michael Raucheisen, Ernst Victor Wolff, and Gerald Moore. All seven albums have been reissued as seven LP records, EMI RLS 759 (1981).

HUGUET, JOSEFINA (22 SEP 1871– 1951)

Spanish soprano, born in Barcelona. She sang at La Scala, using the first name Giuseppina. She recorded extensively for G&T in 1903–1908, singing the lyric and coloratura repertoires. A favorite among collectors is "O luce di quest' anima" from *Linda di Chamounix* (G&T 53513; 1907). She also made distinguished duets with tenor Fernando de Lucia: "Parigi o cara" from *Traviata* (G&T 054081; 1906), "Tardi si fa, addio" from *Faust* (G&T 05473; 1907), and several others. She died in Barcelona, Spain.

HUM

A low droning sound originating in the alternating current power of an electrical device. In the U.S. the hum frequency is 60 Hz (approximately B natural), but it may be the first or second overtone of 60 Hz, that is 120 Hz (also B natural) or 150 Hz (approximately F sharp). In Europe the hum frequency is 50 Hz. Various reasons may be given for a hum in an audio system: multiple grounding, placement of components near a magnetic field, inadequate insulation, or faulty valves. Reversal of the plugs in the outlet, or plugs within the system, may alleviate a hum problem.

HUMPERDINCK, ENGELBERT**(2 MAY 1936–)**

Engelbert Humperdinck was part of the middle-of-the-road (MOR) revival of the mid-1960s, which featured a

HUNGAROTON (LABEL)

new generation of pop stylists seeking accommodation with the era's prevailing rock values. Along with artists like Herb Alpert and the Tijuana Brass, Chris Montez, the Fifth Dimension, the Association, the Mamas and the Papas, and Neil Diamond, Humperdinck appealed to baby boomers who were beginning to assume the responsibilities of adulthood and had tired of the more abrasive features of rock music.

Born Thomas Arnold George Dorsey in Madras, India (his father was a captain in the British Royal Engineers), his singing career took off after hooking up with Tom Jones's manager, Gordon Mills. Mills had him adopt the Engelbert Humperdinck moniker (after the 19th century German composer of the romantic opera, *Hansel and Gretel*) in order to attract industry-wide attention. Capitalizing on Humperdinck's dark good looks and velvety baritone voice, Mills marketed him as a suave balladeer. After his breakthrough single, "Release Me (And Let Me Love Again)" (Parrot 40011; 1967; #4; a cover of Jimmy Hemp's 1954 Top 10 country song), he enjoyed a string of pop hits — including "There Goes My Everything" (Parrot 40015; 1967; #20), "Am I That Easy To Forget" (Parrot 40023; 1968; #18; a Top 10 country hit for Carl Belew in 1959), "A Man Without Love" (Parrot 40027; 1968; #19), "Winter World of Love" (Parrot 40044; 1970; #16), and "After the Lovin'" (Epic 50270; #8 pop, #1 adult contemporary) — as well as his own TV variety show in 1970. Not surprisingly, given the older age of his fans, Humperdinck's album releases — most notably *Release Me* (Parrot 71012; 1967; #7; 118 weeks on the charts), *The Last Waltz* (Parrot 71015; 1967; #10), *A Man Without Love* (Parrot 71022; 1968; #12), *Engelbert* (Parrot 71026; 1969; #12), *Engelbert Humperdinck* (Parrot 71030; 1970; #5), and *After the Lovin'* (Epic 34381; 1976; #17) — achieved even greater success.

He remains an international star (dropping his last name in the early 1990s), recording in the German, Italian, and Spanish languages as well as English. In recent years, his fragrance for women, *Release Me*, has retailed via cable television and the Internet.

FRANK HOFFMANN

HUNGAROTON (LABEL)

A record issued in Hungary, with worldwide distribution. The U.K. agent is Conifer, Ltd., of Middlesex. American distribution is handled by Qualiton Imports, of Long Island City, New York.

HUNT, FREDERICK (1905–21 APR 1972)

After receiving two bachelor's degrees (one in the arts and one in engineering) from Ohio State University,



Hungaroton label. Courtesy Frank Hoffmann

and later earning a Ph.D. in physics from Harvard, Hunt became widely respected in both academic and government circles for his brilliant work in a variety of fields related to physics, communication engineering, and underwater sound. During World War II he was instrumental in developing technologies that helped to destroy enemy submarines. He eventually won both the post of Rumford professor of physics and Gordon McKay professor of applied physics at Harvard University, and was responsible for a number of innovative discoveries, with his most significant work being a brilliant analysis of transducers, with particular emphasis on phono pickups and record players. Among the numerous awards and honors he received during his lifetime were the Presidential Medal of Merit, the Audio Engineering Society's John H. Potts award (later renamed the gold Medal) and Emile Berliner award (later renamed the Silver medal), and the U.S. Navy's distinguished public service award. Hunt was a member of numerous organizations, including the American Academy of Arts and Sciences and the Acoustical Society of America.

HOWARD FERSTLER

HUNTER, ALBERTA

(1 APR 1895–19 OCT 1984)

American blues singer, born in Memphis, Tennessee. She began her career at age 11 in Chicago nightclubs; at one of these, the Dreamland Cafe, she sang with the house orchestra (which included Fletcher Henderson) and made her first records: "He's a Darned Good Man"

(Black Swan 2019; 1921), and "How Long, Sweet Daddy, How Long" (Black Swan 2008; 1921), the second being listed with Henderson's Novelty Orchestra, "probably the same group" (Rust). Hunter made a group of blues records for Paramount in 1922, with a pickup group, and sang with Eubie Blake accompanying on three Paramount discs. She became famous in the 1920s, singing and recording with many groups in New York, Chicago, and London. Her labels included Gennett in 1924, Okeh in 1925–1926, Victor in 1927, and Columbia in 1929. In 1939 she worked for Decca, and in 1940 for Bluebird. She wrote the song "Down-hearted Blues," a best-selling record of Bessie Smith (1923), and recorded it herself for Decca in 1939 (#7727).

Hunter left the stage and became a scrub nurse in a New York hospital for 20 years, endeavoring to help humanity. When she was forced to retire from that job, she returned to singing (at age 82) and was a sensation in Greenwich Village. She continued performing until the year of her death in New York at age 89.

HUNTING

The result of a defect in an audio system that causes alternating speeds in the transport mechanism.

HUNTING, RUSSELL (8 MAY 1864–20 FEB 1943)

American monologist and recording industry executive, born in West Roxbury, Massachusetts. He established a reputation for his Irish monologs; he recorded them for the New England Phonograph Co., Columbia, and Edison, becoming "the most popular pre-1900 recording artist" (Gelatt). The Casey series was his favorite: "Casey as Judge" (Columbia 9615; 1898; also on Edison 3810 and Berliner 612), "Casey's Visit to the Hospital" (Columbia 9653; 1898; also on Edison 3814), and about 20 others. "Casey at the Bat" was one of his originals (Edison 3802, before 1900), but it was taken over by William De Wolfe Hopper. (Walsh has raised the possibility that the Edison titles were in fact made by Jim White rather than by Hunting.) Hunting also recorded Casey numbers in Britain for Sterling records and for Odeon. Aside from comic numbers, Hunting recorded more serious items like the Lincoln's Gettysburg Address (Edison 3821), and a speech from *Richard III* (Edison 3822).

Hunting took an early interest in the business side of recording. He founded and edited the first independent magazine in the field, *Phonoscope* (1896–1900); and he had a phonograph shop at 45 Clinton Place, New York, in 1896 (in partnership with Charles M. Carlson). In an interesting event of censor-

ship history, he was accused by Postmaster General Anthony Comstock of selling obscene records, and brought to trial; the outcome is not known, but it is clear that Hunting remained active.

Hunting went to Britain in 1898 and worked for James Hough as recording director of Edison Bell. In December 1904 he joined with Louis Sterling in founding the Sterling Record Co., Ltd. The firm name was changed on 17 Dec 1904 to Russell Hunting Record Co., Ltd. Hunting was recording director. Products of the firm were Sterling cylinder records and Linguaphone language instruction records.

On 27 Aug 1906 Sterling and Hunting, Ltd., was formed by the Russell Hunting Record Co., Ltd., to be the British sales agency for the Odeon and Fonotipia discs of Fonotipia, Ltd. It was also the sales agency for Sterling cylinders and the Linguaphone language course records, the products of the Russell Hunting Record Co., Ltd. Imaginative promotional methods brought early success to the new agency, but in the poor economic climate of 1908 the Sterling business could not meet the competition of Edison Bell's records, which were selling at 25 percent less than Sterling, and of the new Clarion cylinder records. Sterling left the two firms in the spring of 1908 to set up the new Rena Manufacturing Co., Ltd. The Russell Hunting Record Co., Ltd., was out of business 10 Dec 1908; but Hunting himself continued trading for two more months under the name of Russell Hunting and Co. Then Sterling and Hunting Co., Ltd., dissolved on 6 Aug 1909.

With the demise of his companies, Hunting moved to Pathé as recording director, and traveled the world for them. He set up the U.S. branch, then, from 1922 (as U.S. Pathé came under Columbia control), he worked out of Paris, heading the Pathé European activities. It was not until 1940 that he returned permanently to America, and retired in New York.

Hunting's business life did not prevent him from appearing before the recording horn. He made discs for Zonophone in Britain (ca. 1904), and rerecorded some Casey material after 1914 in the U.S. "Departure of the First U.S. Troops for France" was an interesting topical record of September 1917, complete with bands and crowd noises. During the 1920s he recorded for the Regal label of Sterling's Columbia Graphophone Co., Ltd.

Hunting's son, Russell Jr., was also in the industry; he was reported in January 1921 to be the head of the Nipponophone Co. [Brooks 1979; Walsh 1944/1–12; 1945/1–2; corrections in 1952/5.]

HUNTING (RUSSELL) RECORD CO., LTD.

A London firm established on 17 Dec 1904 by Russell Hunting and Louis Sterling, being, in fact, their

HUPFELD SELF-PLAYING PIANO

Sterling Record Co., Ltd., (founded a short time earlier) with a new name. Products of the company were Sterling (label) cylinders and Linguaphone language instruction cylinders. The firm claimed to sell a million records in the first 22 weeks of issue. On 27 Aug 1906 the company formed Sterling and Hunting, Ltd., to be its sales agency for Sterling and Linguaphone records, and to handle sales for Odeon and Fonotipia, Ltd., products. Unable to meet the competition of lower-priced Edison Bell records, and the new Clarion records, the Russell Hunting Record Co., Ltd., went out of business on 10 Dec 1908. Hunting acquired some of the stock and matrices and remained active for two more months, trading under the name of Russell Hunting and Co. J.E. Hough, Ltd., bought the manufacturing assets. (Sterling had already left in spring of 1908, to set up the new Rena Manufacturing Co.) Sterling and Hunting, Ltd., dissolved on 6 Aug 1909.

FRANK ANDREWS

HUPFELD SELF-PLAYING PIANO

A very early player piano, the first of the genre to be seen in the U.S., at the World's Columbian Exposition in 1893. Ludwig Hupfeld, a maker of outstanding orchestrions and band organs, was producer of the instrument. It was referred to by a commentator at the exposition as "a revelation to thousands of musical visitors to whom the idea had previously come only as a hint of future possibilities." The mechanism was attached under the piano keyboard, with the roll moved either electrically or by a hand crank; there was no pedaling. American rights were held by Blasius, whose name appeared on the instrument at the exposition.

HÜSCH, GERHARD

(2 FEB 1901–23 NOV 1984)

German baritone, born in Hannover. He sang with the opera companies in Cologne, Berlin, and Bayreuth, but gained greatest fame as a Lieder singer. His recordings of *Winterreise* (1933), and *Schöne Müllerin* (1935), were important in the promotion of Lieder to a wide audience.

He was one of the performers in the Hugo Wolf Society albums (1931–1938). A CD from Preiser (#89017) in 1990 offered a good selection of Hüschi singing Schubert from Electrola and HMV recordings of 1934–1938.

HUSKY, FERLIN (3 DEC 1927–)

American country singer, guitarist, and songwriter, born in Flat River, Missouri, on 3 Dec 1927. He was self-taught on the guitar, while pursuing an interest in

radio announcing. He held a number of disc jockey jobs, achieving success in Bakersfield, California. For variety, he introduced a comic character — played by himself — named Simon Crum, and made some records for Capitol in that guise. He used the name Terry Preston for country songs. In the 1950s he gained national acclaim as a singer on radio and television, and made a motion picture, *Country Music Holiday* (1958). Husky had a long list of chart records, 50 singles between 1957 and 1980. "Gone" (Capitol 3628; 1957) was the first, 20 weeks on the country charts. His greatest hit was "Wings of a Dove" (Capitol 4406; 1960), which charted for 37 weeks, almost one-half of them in the number one position. Despite having open heart surgery in 1977, he has continued to record and perform through the 1990s, although without scoring any hits.

HYLTON, JACK

(2 JULY 1892–23 JAN 1965)

British big band leader, born in Lancashire. He became "Britain's most famous — and most widely traveled — bandleader during the years between 1921 and 1940" (Rust). His orchestra was compared to that of Paul Whiteman. It was the first non-American big band to tour the U.S. Hylton recorded a vast number of dance items in the U.K., Europe, and America. His players were mostly British (one was Ray Noble), but they included American artists at times; for example, Coleman Hawkins is heard in "Darktown Strutter's Ball"/"Melancholy Baby" (HMV BD-5550; 1936). Some of Hylton's discs appeared on the American Decca label, including a "Gilbert and Sullivan Medley" (#15029), but most were on Victor (16 discs in the 1938 catalog). In the 1940s Hylton became an impresario. [Rust 1989.]

HYMN RECORDINGS

"Certain to have a powerful influence for good" is the promise Victor made in its 1917 catalog for the 200 plus titles of this category. Fewer than half that number appeared in the 1927 catalog, under the heading of "Sacred Songs" — and the category by then included such non-hymn material as the "Hallelujah Chorus" and "Swing Low Sweet Chariot." By 1938 the number of sacred music items was again close to 200, with cross references to Christmas records, liturgical music, oratorios, Negro spirituals, and others. Among the enduring hymn discs were Reinald Werrenrath's "Abide with Me"/"Lead Kindly Light" (#1279), and another "Abide with Me" by Olive Kline and Elsie Baker (#19873; 1925), coupled with their popular "Whispering Hope."

Edison recorded the first hymn cylinder, "Rock of Ages," with an unidentified quartet, in August 1890. The next hymns were performed by the Manhasset Quartette on 27 Sep 1891: "Hail Jerusalem" and "Glory Hallelujah." There were several sacred songs on Pathé cylinders made ca. 1897, including a group of nine "Ave Marias" by different composers, in series #0811-0823. Bettini's 1899 catalog included cylinders by baritone Aristide Franceschetti, who set out to present the evolution of music "from the remotest to the present time," and began with "Vegnareba" and "Edrosh," two Hebrew evening prayers; but Bettini did not otherwise interest himself in the sacred repertoire.

The earliest hymn disc was by Harry Macdonough, singing "The Holy City" (Victor Matrix #A-94; 14 June 1900), which he had done earlier on a cylinder for Edison (#B120). In the following month the Haydn Quartet performed "Lead Kindly Light" for the first time in the studio (Matrix #A-97; 10 July 1900); it was popular enough to be rerecorded in 1903. The Haydn added a few other sacred pieces later on. The Lyric Trio (as the Lyric Choir) made the earliest substantial series of sacred songs on 11 Mar 1901 beginning with "Holy, Holy, Holy" (Victor Matrix #A-716), and including "Rock of Ages," "Come Ye Disconsolate," "Just As I Am," "Blest Be the Tie that Binds," "Beulah Land," "Jesus, Lover of My Soul," and "Stand Up! Stand Up for Jesus!"

The first choral hymns were by the Sistine Chapel Choir, singing in Latin for G&T in Rome, in 1902-1905; the pieces included "Tui sunt coeli" (#54765; 1902), and Mozart's "Ave verum" (#54767; 1902). Victor's first choral hymn was "Onward Christian Soldiers" by the Trinity Choir (#2373; 27 May 1903), a group that returned in the following years to do a few other religious songs, followed by Ferruccio Giannini's "Holy City" (Matrix #A-169; 30 June 1903). The Lyric Quartet began its Victor career with a group of records that included "Rock of Ages" (#717; 1906, rerecorded in 1907); this ensemble (which included Olive Kline) had overlapping membership with the Trinity Choir.

On Columbia 10-inch discs there appeared "O Holy Night" by George Alexander (#3269), and "Ring the Bells of Heaven" by a male quartet (#3511), both recorded in November 1907. In December Columbia added a "Lead Kindly Light" by the Columbia Male Quartet (#510), as well as "Star of Bethlehem" by Henry Burr (#1890), and "Nazareth" by George Alexander (#3152).

In the later 78-rpm period hymns were not a focus of attention. Columbia's 1943 catalog, for example, lists about 100 records under sacred music, but Christmas carols, Bach cantata excerpts, and oratorio selections are among them. Decca was offering in

1944 about the same number as Columbia, also inclusive of carols. With the LP the sacred repertoire expanded rapidly. By 1960 there were about 350 sacred albums listed in Schwann. Compact disc (CD) catalogs present a wide selection of material in the category gospel/religious. A 1991 Schwann *Spectrum* had 10 pages of listings, mostly in the gospel genre.

See also Christmas Records

HYMNOPHONE

A disc player manufactured by Holzweissig of Leipzig, and sold by Bettini in New York, in 1907. It was also sold in Europe, with Hymnophone discs. The machine had "a tone arm carrying the reproducer, with a swivel joint connecting the tone arm to a horn which emerged from the front under the turn-table" (Read). It may have suggested the idea of the Victrola to Eldridge Johnson.

HYPERION (LABEL)

A London-based British independent record issued from 1980. The label has won more *Gramophone* record awards than any other independent. Edward Perry (1931-2003), the label's founder, first worked at a small London record store in the early 1950s. In 1956, he was hired by Deutsche Grammophon to open their British office, but a year later moved to Australia to work for the Festival label. In 1961, he returned to London and then worked for the Saga label. He formed his first label, Meridian, in partnership with John Shuttleworth in the mid-1970s, but then left in 1980 to form Hyperion, partnering with his then-wife, Doreen Perry, with financial backing from William Stinger. Perry held to the idea of exploring lesser-known repertoire, but he has also presented the classic masters (e.g., the complete Schubert songs, in a set completed in 1997 on 36 CDs). One of the fine recordings using authentic instruments is Handel's *Fireworks*, with the King's Consort. *A Feather on the Breath of God* (A66039) by Hildegard of Bingen, was the label's first award winner, and remains one of the most acclaimed of its output. At the time of Perry's death in early 2003, the label had more than 1200 releases. A subsidiary budget label, Helios, also releases classical works. [Website: <http://www.hyperion-records.co.uk/>.]

HY-TONE (LABEL)

An American record, affiliated with Arto, released from 1920 to ca. 1922. The Indestructible Phonograph Record Co. was named on the printed label as the producer. Material was blues and dance music.



I

IDEAL (LABEL)

SEE SCALA (LABEL)

ILLUSTRAPHONE

A 1907 coin-op made by Hawthorne and Sheble. It offered a picture to look at through an eye-slot in the top of the cabinet, and records to listen to through earphones ("auditrumpets"). The experience cost \$0.01.

See also Picturized Phonographs

ILLUSTRATED SONG MACHINE

SEE PICTURIZED PHONOGRAPHS

IMAGE ENHANCER

A stereo component that adds the impression of imaging to the sounds reproduced by the system. A potentiometer and two extra speakers are needed. The method is that of adjusting the delay time for signals as they reach the left and right ear of the listener.

IMAGING

A characteristic of advanced audio systems that duplicates for the listener the placement of the input signals relative to each other. Thus an orchestral recording will convey a sense of the sound space occupied by each instrument within the larger perceived "stage" of

the orchestra itself. Imaging may also be used by the recording engineer to create artificial effects, manipulating the virtual locations of certain signals in departure from their actual placement.

See also Image Enhancer

IMPEDANCE

The total opposition (reactance and resistance) to the flow of current in an electric circuit; it is measured in ohms. In an audio system, matching of the impedance value among components will minimize distortion and maximize energy transfer. For loudspeakers wired in series, the total impedance is the sum of their individual impedances. But for speakers wired in parallel, the total impedance is the sum of the reciprocals of the individual impedances, with the result inverted. For example, two 8-ohm speakers in parallel wiring have a total impedance of four ohms; calculated $1/8 + 1/8 = 1/4$, inverted to $4/1$, or 4.

IMMEDIATE (LABEL)

The Rolling Stones's manager, Andrew Loog Oldham, founded Immediate Records in London in 1965, along with another music manager, Tony Calder. It achieved success in the second half of the 1960s with a series of British performers including the Small Faces and Humble Pie. In 1966, Immediate topped the U.K. singles chart with Chris Farlowe's "Out of Time" (written by Mick Jagger and Keith Richards of the Rolling Stones), and the Small Faces' "All or Nothing." It went

IMPERIAL (LABEL) (I)

into liquidation in 1970, although Oldham and Calder briefly revived it in the mid-1990s.

WILLIAM RUHLMANN

IMPERIAL (LABEL) (I)

An American lateral-cut, single-sided disc issued by Leeds and Catlin Co., New York, from ca. 1900 to 1909. Imperial was sold in Britain also, for two shillings, from April 1906, by Cook's Athletic Co., London. Through agreements between Leeds and Catlin and the German Favorite Schallplatten Fabrik, masters from the Favorite catalog appeared with Imperial labels. The Leeds and Catlin factory in Middletown, Connecticut, was pressing 100,000 records a day in early 1907. Gilbert, Kimpton, and Co. assumed the role of European agents for Leeds and Catlin, claiming to be the sole authorized distributors; John G. Murdoch of London and Trevor Jones of Birmingham were licensed factors in the U.K. Success of the label, which carried operatic and popular music, was indicated by the international sales pattern that included South Africa, India, and South America. There were 500 titles in the catalog issued in October 1907.

Gilbert, Kimpton, and Co. acquired the label in 1907 and set up a division to handle it, the Imperial Disc Record Co. Remarkable promotion efforts brought great profits to the firm. However, long litigation in the U.S. finally ended with a ruling by the U.S.

Supreme Court in May 1909 that Leeds and Catlin had infringed the Berliner patent #534543 (19 Feb 1895), and would be forbidden to engage in the selling of records; the company filed for bankruptcy in June. Advertising of Imperial continued in Britain for some time, until the stock was sold at auction and made available by Gamage's department stores in London at 10 pence per disc. Among the artists heard on Imperial were Harry Anthony, Henry Burr, Albert Campbell, Arthur Collins, Byron Harlan, violinist Charles d'Almaine, the Garde Republicaine Band, Billy Murray, the Peerless Quartet, Frank Stanley, Alan Turner, Billy Golden, Ada Jones, Steve Porter, Elise Stevenson, Len Spencer, Edward Favor, George Gaskin, George W. Johnson, John W. Myers, Leo Medaer (clarinet), Vess Ossman, and Cal Stewart.

FRANK ANDREWS

IMPERIAL (LABEL) (II)

A British cylinder record sold by the Imperial Phono Exchange, Camden Town, before 1907. The firm was convicted of illegal duplication of records in January 1907 and ceased production.

IMPERIAL (LABEL) (III)

A British double-sided record issued before World War I by Sound Recording Co., Ltd. The wording on the label was New Double Sided Imperial Record. [Andrews 1972.]

IMPERIAL (LABEL) (IV)

A British record manufactured by Crystalate Gramophone Record Manufacturing Co., Ltd., from 1920 to 1934. Material was primarily dance music, light classical music, and popular songs. Some Wurlitzer organ records were imported from the U.S. Important jazz numbers heard for the first time in Britain on this label included items by Fletcher Henderson and Louis Armstrong. There was also folk music, Hebrew religious and secular music, Irish, Swedish, Scottish, French, and Italian numbers, and operatic music. [Rust 1978].

IMPERIAL (LABEL) (V)

A partnership between Lewis "Lew" Chudd and Max Feirtag, Imperial Records was started in Los Angeles in January 1946. Initially concentrating on ethnic music and square-dance records, Imperial broadened into R&B in 1949 with the signing of Fats Domino. Feirtag departed in 1952. By then, Imperial was a



Imperial label, issued by Leeds & Catlin Co., New York, from ca. 1900 to 1909. Courtesy Kurt Nauck/Nauck's Vintage Records

major player in R&B and had just signed country artist Slim Whitman. Chudd had a strong presence in New Orleans, hiring bandleader Dave Bartholomew as producer and songwriter, but his biggest coup was signing Ricky Nelson away from Verve Records in 1957. Nelson sold millions of records during the rock 'n' roll era, as did Fats Domino. Slim Whitman also sold well, especially overseas. Both Domino and Nelson left Imperial in 1962, and Chudd sold the label to Liberty Records the following year. Operated as a division of Liberty from 1963 until 1970, Imperial was the home of Johnny Rivers, who was successful throughout the 1960s, Jackie DeShannon, and others. Liberty/Imperial was purchased by United Artists in 1970 and new product ceased appearing on both labels that year. The catalog is currently owned by EMI. Lew Chudd died on 15 June 1998. [Rotante 1985 and Hayes, C. 1988 have matrix listings.]

COLIN ESCOTT

IMPERIAL QUARTET OF CHICAGO

A male group that recorded for Victor in 1916; they had 11 titles in the 1917 catalog. Members were Wallace Moody, C.R. Wood, Ben Q. Tufts, and Oliver Johnson.

IMPROVED GRAMOPHONE

The Berliner product of mid-1897, developed by Eldridge Johnson and Alfred Clark. It was a disc player with spring motor and a new sound box. In 1898 Frank Seaman marketed the player as the Zonophone. This is the machine that appears in the Nipper painting and trademark.

IMPULSE! (LABEL)

Jazz label founded in 1960 as a division of ABC-Paramount. The label was run by producer Creed Taylor initially, and then by well-known jazz/pop producer Bob Thiele. It specialized in hard bop (recording artists like Max Roach and Art Blakey), and progressive players (Albert Ayler, John Coltrane, and Pharoah Sanders, among others). The label was also known for its elaborate packaging; most albums were issued with foldout sleeves, a novelty at the time. However, by the end of the 1960s, the label had retreated from signing more adventurous artists. The original label was shut in 1974. In 1978, ABC was sold to MCA, including its Impulse! back catalog. In the 1980s, the label briefly was revived primarily for reissues, and then again in 1995. As of 2002, it was part of the Universal Music Group's Verve Music Group.

CARL BENSON

INDEPENDENT LABELS

In the pop/rock industry, these are often referred to as "indies." They are small companies without the full range of facilities to make and distribute records; therefore, they arrange for other firms — usually the large record corporations, or "majors" — to press discs, and usually to handle marketing. Historically in the U.S. it could be said that all labels began as independents except Columbia and Victor, who monopolized the manufacturing and distribution of records during the early years of the industry. Gennett's 1921 victory in court challenging Victor's patent for lateral-cut disc recordings made it possible for many new labels to proliferate; previously Victor had guarded its patent closely and required smaller labels to pay a licensing fee to use this format, which effectively limited competition.

The independent movement really began after World War II, when the new LP and 45-rpm single formats were developed. A slew of budget classical labels, notably the famous Vox and Westminster lines, licensed recordings primarily from Eastern Europe to develop their catalogs. Jazz birthed many new labels, most run by enthusiasts of the music, including Blue Note, Norman Granz's labels (Clef and Verve), Riverside, and Prestige. Folk music also inspired new labels, notably Folkways Records and Elektra Records.

But it was in rock and R&B that small labels really had the largest impact. R&B labels like King, Federal, and Chess helped spread a new sound to teenagers through their 45-rpm releases. Atlantic Records began its life as an independent, recording jazz and R&B. Elvis Presley first recorded for the independent Sun Records label out of Memphis. In the 1960s, Motown, a Black-owned label out of Detroit, pioneered a pop sound that was second only to the Beatles in its impact. Herb Alpert's A&M Records began its life as a means for him to release his own recordings with his Tijuana Brass group, and then became a major purveyor of pop-rock music. Island Records began its life licensing music from the Caribbean before becoming a rock powerhouse. Other important labels included Roulette, Stax, and Hi.

The increasing cost of entering the record business, along with the high cost of breaking new acts, led many independents to either fold or sell out in the 1970s and 1980s. Nonetheless, new musical styles continued to spawn new labels. Punk had its Slash and SST labels; rap spawned Sugar Hill; bluegrass inspired Rounder Records; new age music brought forth Windham Hill Records. Almost anyone with access to a recording studio could invest a small amount of money and press a few hundred records, proclaiming him or herself a "label."

INDESTRUCTIBLE PHONOGRAPH RECORD CO.

Most "independents" of the last two decades have been funded in some way by a major label as a means of getting exposure and distribution. [Cooper, R. 1980; *Goldmine* 4 Nov 1988 has a directory of about 200 independent labels.]

REV. CARL BENSON

INDESTRUCTIBLE PHONOGRAPH RECORD CO.

SEE *CYLINDER*

INDUCTANCE

The extent to which an electric circuit or component is able to store magnetic energy when current is flowing. It is measured in "Henrys."

INFINITE BAFFLE

A loudspeaker enclosure designed to prevent sound waves emanating from the front of the speaker from reaching the back of the speaker. This is accomplished by means of a large open space behind the loudspeaker, causing the rear waves to be completely absorbed.

See also *Baffle*

INFINITY LOUDSPEAKERS

Founded in 1968 by Arnold Nudell, Cary Christie, and John Ulrich, Infinity quickly became a successful speaker building and marketing enterprise, specializing not only in affordable systems for mainstream consumers, but also producing some of the most monumentally impressive upscale speakers in the industry. The company also produced amplifiers and tone arms. Ulrich left in 1978, after the company was purchased from the original investors by EAD, and Cary, who was vice president in charge of operations, product development, and engineering, continued running the operation along with Nudell, who was then president. In 1981, the Infinity was purchased from EAD by Harman International (which still has sole ownership), and under the new corporate banner the company continued to thrive, due mainly to a wise hands-off policy. In 1989 Nudell, who was still president, left (he later helped to found Genesis Technologies), leaving Christie as the moving force behind the company. In 1994, Christie left to start still another company.

Some of the more noteworthy Infinity achievements were the first injected-molded polymer driver cones, the first high efficiency electrostatic driver, the first



Infinity Alpha 40 Freestanding Speakers. Courtesy Harman Kardon International

servo-controlled subwoofer, the first genuinely low mass tone arm, the first Class D amplifier, the first fully-integrated sub/sat system (the Servo Static), and the first electromagnetic drivers using high efficiency magnets: the EMIT and EMIM. The company continues to be a dominant force in the speaker business.

HOWARD FERSTLER

INFRASONIC FILTER

A high-pass filter that is designed to remove audio signals that are below the audible frequency range. By doing this, components like woofer and subwoofer systems and amplifiers are spared the task of trying to reproduce nonmusical signals that are inaudible.

HOWARD FERSTLER

INJECTION MOLDING

The method of making a recording disc by injecting the liquefied plastic biscuit into a die cavity of the desired dimensions.

INK SPOTS

Male vocal group, formed in 1934 in New York. The original members were Charles Fuqua, tenor and guitar; Jerry Daniels, lead tenor; Ivory Watson, baritone and guitar; and Orville "Hoppy" Jones, bass and string bass. At the peak of their popularity in the 1940s, Bill Kenny was the lead tenor. A distinctive sound was achieved by setting a high tenor against a rumbling — and often speaking — bass, with the middle voices accompanying. Among the first Black groups to achieve wide popularity on disc, the Ink Spots were a great success on radio and jukebox; they were also well received in Britain on several tours.

The group recorded for Victor in 1935, beginning with "Swingin' on the Strings" (#234851). Their outstanding numbers were done for Decca, including "If I Didn't Care" (#2286; 1939), "My Prayer" (#2790; 1939), "Whispering Grass" (#3258; 1940), "We Three" (#3379; 1940), "Do I Worry?"/"Java Jive" (#3432; 1940), and "Until the Real Thing Comes Along" (#3958; 1941). The group disbanded in 1952, though both Fuqua and Kenny formed new ensembles with the Ink Spots name.

INNER PLAYER

The type of player piano with its integral mechanism built into the piano. It was the opposite of the push-up player.

INPUT SELECTOR

The control on a preamplifier or audio receiver, or even a monitor-type TV set, that allows the user to choose one signal source from multiple inputs hooked up to the system.

HOWARD FERSTLER

INSTANTANEOUS RECORDINGS

Records made for nonretail purposes, mostly in the 1930s and 1940s, by a direct to disc process. The material used was typically aluminum, coated with acetate or a nitrate lacquer to make a soft surface. The use of acetate gave the popular name "acetates" to these recordings.

Home recording was a popular use of instantaneous records in the U.S. from 1920. (In Britain, the Neophone Co., Ltd., had offered a home disc recorder ca. 1905.) Radio stations made transcription discs that way, and researchers made field recordings (some of those on zinc, a more durable material than acetate). Diameters were the same as for commercial discs, except for transcriptions and conference/speech

records, which were usually 16 inches in diameter. Most ran at 78 rpm.

The earliest instantaneous records sold for home use in the U.S. were pre-grooved zinc blanks, six inches in diameter, sold as Echo Disc and Kodisk. They were offered by the American Home Recorder Co. of New York in August 1920. Since the recording method was still acoustic, the recordist had to shout into the horn, and was rewarded with only a faint return. With the arrival of electrical recording in 1925, it was possible to speak at normal volume into the microphone of the player, and to receive an amplified return; the medium was a plain metal disc, the best of them aluminum. The Speak-O-Phone Co. of New York, established in 1926, was a pioneer manufacturer.

Victor introduced a pre-grooved plastic "home record blank" in the early 1930s, to be used on a Victor home disc recorder. As it happened, the audio quality from the pre-grooved record was poorer than that from the ungrooved metal discs, and Victor's apparatus did not gain public acceptance.

An innovation of the early 1930s was the use of lacquer coated discs, first manufactured in France as Pylal records, and marketed in America from 1934 by Presto Recording Corp. of New York. The new surfaces allowed the direct to disc recording of all types of musical ensembles, including orchestras, and gave a clear reproduction. Radio stations embraced the lacquer disc, which could run at 33 1/3 rpm on 16-inch blanks, to give uninterrupted programming long enough for broadcast purposes. Lacquer also replaced wax in the major recording studios as the material used for masters in the production of commercial recordings. The lacquer was applied to an aluminum or glass base, or later to inexpensive fiber or paper bases. Presto solved the problem of freshly cut thread clogging the grooves by means of a blower system introduced in 1940, but a more practical and less expensive solution was provided by Audio Devices, Inc.: a wiper blade that brushed the fresh threads toward the center of the disc. Eventually, a vacuum suction device was developed to draw off the threads.

Early lacquer coated discs usually had three drive-pin holes, equally spaced around the center hole; the purpose was to secure the disc (onto drive pins on the turntable) and prevent slipping during the process. By 1940 there was a flourishing market for domestic disc recorders and their discs. The advent of the LP in 1948 had, in a few years, its application in the instantaneous field. Recordists of the 1950s could select from the 33 1/3, 45, or 78 rpm. Wire recording did not affect the home disc market, but tape recording ultimately obliterated it.

INSTITUTE FOR STUDIES IN AMERICAN MUSIC

Manufacturers of the home recorders included Recordio (manufactured by Wilcox-Gay), Howard, Federal, Packard-Bell, Phono-Cord, Rek-O-Kut, Universal, and Motorola. Montgomery Ward sold its house brand, Airline, and Sears, Roebuck, sold Silvertone machines. The most popular models had a built-in radio, allowing direct recording from the air (a feature first available in 1924).

Preservation has been a serious problem with instantaneous discs, since the surfaces permitted only a few playbacks without noticeable wear, and the unstable chemical structure lead to oxidation and brittleness of the entire record. A further problem arose from the breakdown of the bonding between the recording medium and its backing, so that the coating would peel or flake away. Finally, a greasy film often formed on the surfaces, from the castor oil used as an additive, rendering the disc unplayable. Archives seek to re-record an instantaneous disc immediately.

See also **Disc; Radio Program Recordings**

JOHN CASE

INSTITUTE FOR STUDIES IN AMERICAN MUSIC

An organization established in New York City in 1971 under the direction of H. Wiley Hitchcock; Carol J. Oja was its second director, from 1993 to 1997, and Ellie M. Hisama has served since then. It has published numerous monographs, bibliographies, and discographies, including *American Music Recordings* by Carol J. Oja (1982). The institute has sponsored important conferences and concerts, one of which was the first international meeting to honor an American composer, the Charles Ives Centennial Festival of 1974. A biennial newsletter is published. [Website: depthome.brooklyn.cuny.edu/isam/.]

INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS

An American organization established in 1963. It was formed in a merger of the American Institute of Electrical Engineers (established 1884), and the Institute of Radio Engineers (established 1912). The Institute sets standards in areas of impact on audio manufacture, among many other activities. There are more than 377,000 members in 150 countries, consisting of scientists in all fields related to electrical and electronic engineering. The national organization is broken down into 10 regions, 37 societies, four councils, approximately 1,200 individual and joint society chapters, and 300 sections. There are 1,000 student branches located at colleges and universities worldwide. Among the

37 societies are several devoted to the study of sound and its reproduction, including the Broadcast Technology Society. The Consumer Electronics Society's support for the Engineering Societies Library in New York is an important activity. The IEEE established the IEEE History Center in 1980, in anticipation of its centennial celebration in 1984. In 1990, the center moved to the campus of Rutgers University, which became a cosponsor. [Website: www.ieee.org.]

INSTITUTE OF JAZZ STUDIES

A research center established at Rutgers University, New Jersey, in 1952, by Marshall Stearns (1908–1966). The institute operates under its own board of directors, receiving support from Rutgers, the U.S. government, and industry. An archival collection of 100,000 jazz recordings, 7,000 band and score arrangements, and a large collection of sheet music, clippings, more than 30,000 photographs, 7,000 books, and related material is maintained, and rare recordings are being transferred to tape.

Important efforts of 1968–1969 were the organization of conferences on discographical research and on the preservation of the jazz heritage; conference proceedings were published as *Studies in Jazz Discography* (1971). Other publications of the institute have included *Journal of Jazz Studies* (1973–1980) — succeeded by *Annual Review of Jazz Studies* — and a series of 100 recordings: *The Greatest Jazz Recordings of All Time*. Seminars, conferences, and radio programs are sponsored. In 1994, the institute moved into a new facility as part of the Rutgers Newark library. Dan Morgenstern is the current director. [Website: www.libraries.rutgers.edu/rulib/abtlib/danlib/jazz.htm.]

INSULATOR

A substance that presents a strong resistance to the flow of electric current, or — in an audio system — to the passage of sound waves.

See also **Baffle**

INSULL, SAMUEL

(11 NOV 1859–16 JULY 1938)

British/American industrialist and record industry executive, born in London. He was educated at Reading and Oxford. He was private secretary to Colonel George E. Gouraud, the U.K. representative of Thomas Edison, in 1878. In 1881 Insull moved to the U.S. and became Edison's private secretary, also representing him at meetings of the National Phonograph Association in 1890–1892. In 1889 he became second

vice president of the new Edison General Electric Co. He was responsible for building and operating the machine works in Schenectady, New York, that evolved into the General Electric Co. in 1892, and he was for a short time second vice president of the new firm.

Insull moved to Chicago to become president of the Chicago Edison Co., its successor Commonwealth Electric Co. (1892–1907), and Commonwealth Edison Co. (1907–1930). From 1930 to 1932 he served as chairman of the board of Commonwealth Edison. He took U.S. citizenship in 1896. In Chicago Insull is remembered especially for his promotion of the new Civic Opera building (1929). He had been president of the Chicago Civic Opera since its organization in 1921, as the replacement of the old Grand Opera Co. Insull died in Chicago.

INTEGRATED AMPLIFIER

A device that unifies the functions of a power amplifier and a preamplifier. When the integrated amplifier is combined with a tuner, the result is called a receiver.

See also Amplifier

INTEGRATED CIRCUIT

A group of electronic components joined into a single package. It is distinguished from a discrete circuit, which consists of individually packaged elements.

INTENSITY

In an audio system, the strength of a sound signal; it is measured in dynes or Newtons, or in watts per square meter. The intensity of a sound depends first of all on the amplitude of its vibrations. This value is affected by various factors and components, especially the amplifier. For high-fidelity reproduction, peak levels reach 20 dynes per square centimeter (100 dBs)—above the threshold of hearing. What the listener finally perceives to be the relative intensity of the reproduced signal is referred to as loudness. Loudness is a physiological impression of the level of the sound; it has no quantitative measurement.

INTERMODULATION DISTORTION

SEE DISTORTION

INTENSITY STEREO

SEE BLUMLEIN STEREO RECORDING

INTERAURAL CROSSTALK

An effect created when the signals from a pair of stereo speakers are heard as individual events, rather than a coherent blend. The effect can muddy stereo imaging and soundstaging realism, particularly when not listening from the sweet spot. Several recording techniques, such as Q Sound, Spatializer, and Roland RSS, are designed to take advantage of the effect.

See also Crosstalk; Head-Related Transfer Function (HRTF)

HOWARD FERSTLER

INTERNATIONAL ASSOCIATION OF SOUND ARCHIVES (IASA)

The International Association of Sound Archives (IASA) is a nongovernmental organization affiliated to UNESCO. It was established in 1969 in Amsterdam to function as a medium for international cooperation between archives, which preserve recorded sound and audiovisual documents. The association is actively involved in all subjects relating to the professional work of sound archives and archivists including acquisition, documentation, copyright, access, distribution, preservation, and the technical aspects of recording and playback.

Membership of the association is open to all categories of archives and other institutions that preserve sound and audiovisual recordings. The association includes members representing archives of music, history, literature, drama, and folklife recordings; radio and television sound archives; collections of oral history, natural history, bioacoustic and medical sounds; and recorded linguistic and dialect studies. IASA holds an annual conference that includes a general assembly to report the business of the association to the members, working sessions for IASA committees, and sessions on topics of general interest.

The association has more than 350 members, individual and institutional, in more than 46 countries. Publications include a quarterly Information bulletin and the semiannual IASA journal, a membership directory, *Sound Archives: A Guide to Their Establishment and Development* (1983), and *Selection in Sound Archives* (1984). [Website: <http://www.llgc.org.uk/iasa/>.]

INTERNATIONAL ASSOCIATION QUARTET

A male vocal group that recorded for Edison in 1912. Members were Paul J. Gilbert, P.H. Metcalf, C.M. Keeler, and Edward W. Peck.

INTERNATIONAL CORRESPONDENCE SCHOOLS

An American firm, established in 1891 in Scranton, Pennsylvania, originally offering trade-related home study courses for miners in the region. In 1901, when they had enrolled more than 350,000 students, they also began giving language study courses (French, German, and Spanish, with Italian added later), aided by Edison cylinders. They were Edison's first molded records, of a surface sufficiently durable to allow for the repetitive playback required in language study; 24 records were included in each of the available languages. In 1902 the firm printed its first catalog entirely devoted to language instruction.

The phonograph first provided to students was the Standard Model A (*see* EDISON RECORD PLAYERS), with a repeat button that skipped back several grooves. In February 1910 a Gem replaced the Standard, and in 1915 the Amberola 30 was used. Blue Amberol I.C.S. records played for about eight minutes at 90 rpm. [Frow 1978; Petersen 1973.]

INTERNATIONAL FEDERATION OF PRODUCERS OF PHONOGRAMS AND VIDEOGRAMS (IFPI)

An entity founded in 1933 as the International Federation of the Phonograph Industry, to represent the rights of producers in their interactions with governments and nongovernmental organizations. Alfred Clark was the first president, and Louis Sterling one of the earliest vice presidents. In 1959 there were 250 member firms, a number that had grown to 1,400 — in 76 countries — by 2002. Among the affiliated groups are the Recording Industry Association of America (RIAA), and the Australian Record Industry Association. IFPI has consultative status with UNESCO, the Council of Europe, and other international bodies. IFPI's main office is located in London, with branch offices in Asia, Europe, and, as of January 2000, Latin America (formerly Federacion Latinoamericana de Productores de Fonogramas y Videogramas, or FLAPF).

IFPI's key mission is fighting piracy of recorded material. With the proliferation of digital media in the 1990s, the organization developed the ISRC (International Standard Recording Code) as part of this effort. It is an international identification system for sound recordings and music videorecordings. Each ISRC is a unique and permanent identifier for a specific recording, which can be permanently encoded into a product as its digital fingerprint. Encoded ISRCs provide the means to automatically identify recordings for royalty payments. [Website: www.ifpi.org.]

INTERNATIONAL INDESTRUCTIBLE CYLINDER RECORDS

SEE INTERNATIONAL PHONOGRAPH AND INDESTRUCTIBLE RECORD Co., LTD.

INTERNATIONAL INDESTRUCTIBLE RECORD CO.

SEE INTERNATIONAL PHONOGRAPH AND INDESTRUCTIBLE RECORD Co., LTD.

INTERNATIONAL JAZZ FEDERATION (IJF)

An organization of musicians, composers, record producers, distributors, journalists, collectors, and jazz fans; it is headquartered in London. It was founded in 1969 as the European Jazz Federation, then took its present name in 1975. IJF is associated with UNESCO, and is a member of the International Music Council. In 1983, the organization founded the Jazz World Database, with a listing of more than 50,000 recordings, as well as the Internet site JazzSociety.com as a clearinghouse for information on jazz.

INTERNATIONAL PHONOGRAPH AND INDESTRUCTIBLE RECORD CO., LTD.

A British firm established 16 Apr 1902, in Liverpool. Their product was a celluloid unbreakable cylinder record, using for the most part material from Edison recordings. The first three permanent directors were Walter FitzHugh Barry, chairman; Frederick M. Prescott, vice-chairman; and Henry T. Cramer Roberts, managing director and secretary. Ademor N. Petit was also a director, and served as works manager. After only two years of operation, the firm's assets were sold on 14 July 1904. However, the making and sale of records was continued by a firm named the International Indestructible Record Co. [Andrews 1974/10.]

INTERNATIONAL RECORD COLLECTORS' CLUB (IRCC)

An organization established in 1931 by William H. Seltsam, at 318 Reservoir Avenue, Bridgeport, Connecticut. Its purpose was to offer monthly reissues of golden age vocal records. Seltsam was able to arrange for special disc pressings from Victor and Columbia vault masters, and from Edison and Pathé. By 1937 he was transferring vertical-cut cylinder records to disc for distribution to club members. The first discs offered



IRCC was an early reissue label making available classic recordings from the acoustic era during the '30s. Courtesy Kurt Nauck/Nauck's Vintage Records

were by Geraldine Farrar, and altogether, 16 IRCC discs were Farrar numbers. The club's records had exact recording information, and were designed to play back at the correct original speeds. Some of the Mapleson cylinders were included in the IRCC offerings.

INTERNATIONAL RECORD CO.

An American firm, established ca. 1901, marketing 10-inch discs with the International Record label at \$0.40. Location was Auburn, New York. W.P. Bradley was sales manager. The first lists in *TMW* appeared in February 1906.

INTERNATIONAL TALKING MACHINE CO.

A Chicago firm, established in 1915. It manufactured the international and Operola disc players in six models.

INTERNATIONAL TALKING MACHINE CO. MBH

A German firm established in 1903 in Berlin by Frederick Marion Prescott to succeed his International Zonophone Co. A double-sided disc, the first to be marketed in Europe, was issued in February 1904 with the label Odeon Record. By 1906 there were 14,000 titles in the catalog. Emil Rink was general manager as of February 1908. The firm was out of business in 1932.

INTERNATIONAL ZONOPHONE CO.

A firm incorporated in Jersey City, New Jersey, on 7 Mar 1901. The directors were Francis T. Sargent, Edward S. Innet, Edward McCarthy, Frederick Marion Prescott (managing director), and John Prescott (treasurer). Prescott transferred his rights in the Universal Talking Machine Co. and their Zonophone trademark in exchange for \$20,000 of stock in the new company. An office was set up in New York. Prescott went to Berlin to establish a German company, factory, and recording operation, and by June 1901 the German company was advertising the sale of discs and players. The records were both seven-inch and the new nine-inch size. In September 1901 a 10-inch record was introduced, the so-called Concert or Grand record. Discs and machines were on sale in London by November 1901, with Nicole Frères as agent. A sales agent for Germany, Austria, and Hungary was established also, the Zonophone GmbH.

In April 1902 the firm announced that its stock included records made in Germany, Italy, France, Russia, Britain, and the U.S. Later there were Latin American issues as well. By mid-1902 the firm was pressing double-sided discs (the earliest known in the industry) for the Brazilian agency Casa Edison. Beginning in November 1902 the firm employed a trademark that showed a little girl with her kitten, both listening raptly to a Zonophone, in a pose reminiscent of Nipper and his "improved gramophone"; Frank Andrews has styled this picture as "Her Master's Voice."

The gramophones sold by the company were priced from £2 to £14 in Britain, and the records were 2 shillings to 4 shillings. A model known as the De Luxe Concert Zonophone No. 110 could play four full 10-inch discs at one winding. There were 3,500 items in the record catalog in November and 2,000 added for Christmas sales.

In early 1903 the firm moved to new quarters in Berlin. Ullmann's became the London outlet, managed by Emil Rink. Another 1,000 records were in the catalog, primarily European and South American pressings. Yet the firm was not to enjoy its success for very long. In June 1903 G&T acquired the major share of Zonophone stock, and turned the direction of its new subsidiary over to Theodore Birnbaum. The name of the company was retained, and Zonophone products continued to be advertised. Prescott resigned from the Zonophone board on 11 July 1903 and established the International Talking Machine Co. mbH. [Andrews 1980/2.]

See also Zonophone (Label)

INTERSCOPE (LABEL)

Pop label founded in 1990 by producer Jimmy Iovine and movie producer Ted Field, in a joint venture with

INVICTA (LABEL)/INVICTA RECORD CO., LTD.

Time-Warner Inc.'s Atlantic Records label. The label first achieved success as the distributor of Death Row's recordings, the (notorious) gangsta rap label. Time-Warner decided that the rap business was too controversial, so it sold its share to MCA records in 1996. At this point, Iovine aggressively moved the label into mainstream pop/rock, signing hit acts of the late 1990s including No Doubt, hard rocker Marilyn Manson, and white rapper Eminem. In 1998, MCA (now part of the Universal Music Group) placed Iovine in charge of two other labels, Geffen and A&M, along with Interscope; the new entity was named IGA. Field left the company in 2001 to return to film production.

CARL BENSON

INVICTA (LABEL)/INVICTA RECORD CO., LTD.

A British record sold by William Andrew Barraud, Ltd., from November 1912. The label originated with Berolina Schallplatten GmbH, which also provided the early material. There were popular vocal and instrumental pieces, some later of British origin. Disputes between Barraud and Berolina resulted in liquidation of Barraud's firm in June 1913, but he was soon back in business as the Invicta Record Co., Ltd., making only British recordings, and keeping the Invicta label name until May 1914. The Invicta label was also carried on by Berolina, which sold them in the U.K. as well as on the Continent. Thus there were two distinct Invicta records on sale in Britain for many months, until Berolina won a trademark case in court and Barraud had to cease using the name on recordings. In May 1914, Barraud brought out two new labels, Citizen and Guardsman. The firm also made Invicta gramophones, offering 26 different models in 1915. As Barraud went into semiretirement, Alfred J. Barton managed the company. Barton entered military service in 1917, and Athol Conway Simmons became manager. Invicta stayed in business until May 1922, with its labels taken over by others. [Andrews 1990.]

INVINCIBLE MALE QUARTET

A vocal group that recorded for Edison in 1902. The singers were Byron G. Harlan, George Seymour Lenox, Arthur Collins, and Frank C. Stanley. (A similar name, Invincible Four, was used by the Peerless Quartet in some Pathé recordings.) Among the eight records listed in Koenigsberg, the earliest was "On Board the Oregon" (#8042), and the last was "Nigger Stew." (#8537). [Koenigsberg 1987.]

IONOPHONE SPEAKER

A type of tweeter that uses a corona discharge to produce a direct acoustic effect through electrical vibration. It operates by application of a high voltage radio frequency oscillation between a Kanthal electrode housed in a small quartz tube and a counter electrode; the result is a glow discharge of the Kanthal. Air pressures in the Kanthal tube vary with the audio modulation. If the open end of the tube is connected to an exponential horn, the horn will be without resonance or amplitude distortion.

IOVINE, JIMMY (11 MAR 1953-)

Born in Brooklyn, New York, Iovine was a noted producer in the 1980s who became a major record-label executive in the 1990s. Iovine first worked at New York's famous Record Plant studio when he was 19 years old as an engineer-assistant, where he befriended John Lennon. Lennon introduced him to Bruce Springsteen's manager, and he engineered Springsteen's successful mid-1970s albums, notably 1975's *Born to Run*. His first production job came in 1978 for Patti Smith's *Easter* album, which produced the major hit, "Because the Night." It was followed by work for Tom Petty, Stevie Nicks, Bob Seger, and U2. He also masterminded the first *A Very Special Christmas* (A&M 3911) album in 1989 to benefit the Special Olympics; it spawned several follow-ups. In 1990, he established, with movie producer Ted Field, Interscope Records, with financial backing by Time Warner Inc. The label became notorious for its association with Suge Knight's Death Row Records imprint. In 1996, Time Warner sold its interest to MCA, and Iovine moved the label in a less-controversial direction. Rewarded for bringing solid hitmakers like Marilyn Manson and No Doubt to the label, Iovine was put in charge of an enlarged roster of labels, including Geffen and A&M, by new management of the Universal Music Group in 1998. In 2000, he formed Farm Club, an Internet-based system for undiscovered bands to submit music to industry insiders. Iovine became sole head of the Interscope group when Field left the firm in 2001.

IOWA PHONOGRAPH CO.

One of the 33 member firms of the North American Phonograph Co., operating from 1890 to 1893 in Sioux City, Iowa. W.P. Manley was president in 1892, with A.C. Brackenbush, vice president.

IRAGEN (LABEL)

A rare record issued from Richmond Hill, New York, by the International Records Agency in the mid 1930s.



Iragen, a rare label from the mid-'30s. Courtesy Kurt Nauck/Nauck's Vintage Records

Only seven issues are known, including jazz items, classical piano, and art songs, plus a trombone solo and a cornet solo. [RR #87 (December 1967) listed the issues; Rust 1978.]

IRCC

SEE INTERNATIONAL RECORD COLLECTORS' CLUB (IRCC)

IRISH MUSIC RECORDINGS

Irish songs appeared on record from the earliest days. In November 1899 the Gramophone Co. had an Irish section in its listing of seven-inch discs. Around 1910 major American labels began to identify Irish material in separate series or catalogs. Important labels with Irish series included Decca (to 1937), Vocalion, and Okeh (to ca. 1927, with a few more in ca. 1934).

Columbia had an important early series (33000) of Irish material, then from 1947 to 1951 released 563 items in the 33500-F series. Among the popular Columbia tenors were Seamus O'Doherty, Chauncey Olcott, Charles W. Harrison, William A. Kennedy, and Shaun O'Nolan. In addition to vocal material, there were reels, dances, and bagpipe performances. "Patrolman" Frank Quinn, who sang, recited, and played the accordion and fiddle, made one of the most enduring records of the series, "Leg of the Duck" (Columbia #33004-F). The Victor catalog of 1917 showed 130 titles, including songs and comic numbers, but the total was down to 16 in 1927; there were

30 in the 1938 catalog. Among the most popular of all Irish instrumental recording artists was fiddler Michael Coleman, who recorded for Columbia, Victor, and Decca, among others. His recordings were issued in the U.S. and in Ireland under a variety of pseudonyms.

The LP era saw renewed interest in Irish traditional music. The popular folk trio the Clancy Brothers founded their own label, Tradition, in the mid-1950s, to issue their own records and other traditional material (the label is now owned by Rykodisc, which has reissued many of the original LPs on budget CDs). In Ireland, the traditional music preservation group Comhaltas Ceoltóirí Éireann issued several LPs beginning in the early 1960s. The Chieftains, a popular Irish instrumental group, followed in the Clancy's footsteps by founding their own label in the mid-1960s. Claddagh, which also issued other traditional artists. Gael Linn was another label founded about this time to release traditional recordings. In the mid-1970s, Shanachie records was founded in the Bronx to document traditional musicians in America, and Green Linnet was founded in Connecticut with a similar mission; both remain the leading U.S. Irish music labels for both revivalists and older performers. Mulligan in Ireland was the major purveyor of younger revival performers from the mid-1970s through the 1980s; most of their catalog was handled by Green Linnet under license in the U.S. [Carolyn 1987; Gronow 1979.]

REV. CARL BENSON

I.R.S. (LABEL)

I.R.S. (humorously standing for International Record Syndicate) Records was founded by Miles Copeland III in Los Angeles in 1979, after Copeland had run several previous labels in London. It began with a distribution deal through A&M, to which Copeland had signed his brother Stewart's band, the Police. I.R.S. achieved success in 1981 with the Go-Go's, but the label's most popular act was R.E.M. Distribution switched to MCA in 1985, then to EMI, which bought I.R.S. and folded it.

WILLIAM RUHMANN

IRWIN MAY (27 JUNE 1862–2 OCT 1938)

Canadian comedienne, born in Whitby, Ontario. She specialized in Negro dialect songs and "shouts," and held the stage for four decades; once she was called to a White House performance by Woodrow Wilson. Irwin's only recording was done in three sessions for Victor in May 1907. The six titles included her biggest

ISLAND (LABEL)

hit, "May Irwin's Frog Song" (#5156). She died in New York. [Walsh 1963/6-7.]

ISLAND (LABEL)

Chris Blackwell established Island/Blue Mountain Records in London as a vehicle for distributing the Jamaican music he'd grown to love while visiting the Caribbean islands. Early releases consisted of imported Jamaican recordings by Jimmy Cliff, Bob Marley (aka Marley), and the Skatalites, among others. Within two years the company scored its first international hit, Millie Small's "My Boy Lollipop" (Smash 1893; 1964; #2 U.S.).

After merging with B&C Records in 1968, the label began emphasizing the development of rock and folk artists, adding the likes of Fairport Convention, Free, Jethro Tull, King Crimson, Cat Stevens, Richard and Linda Thompson, and Traffic to its roster. However, Island's commitment to reggae reemerged with Blackwell's investment in the Jamaican film, *The Harder They Come* (1971). The soundtrack (Mango 7400; reissued as 9202; 1973; #140 U.S.), featuring the music of Jimmy Cliff, became popular worldwide. Cliff would fail to equal this standard again, but the company continued to mine reggae via releases by Bob Marley — most notably *Rastaman Vibration* (Island 9383; 1976; #8), *Exodus* (Island 9498; 1977; #20), and *Uprising* (Island 9596; 1980; #45) — the Maytals, and Steel Pulse.

Throughout the 1970s and beyond, Island remained a fixture within the fad-driven British pop scene, scoring its first number one hit in 1979 with the Buggles' "Video Killed the Radio Star" (Island 49114; 1979; #40 U.S.). The following year the label signed the youthful Irish band, U2, which went on to the kind of stardom realized only by artists such as Elvis Presley, the Beatles, and the Rolling Stones.

Although Blackwell sold Island to Polygram in 1989, he continued to control major artistic decisions. The label continued to prosper into the 21st century, signing top alternative acts like the Cranberries, PJ Harvey, Pulp, and Tricky, and merging with the rap-oriented Def Jam. In 1999, Polygram would sell Island/Def Jam to Seagram's/Universal Music.

See also **Blackwell, Chris**

FRANK HOFFMANN

ISLEY BROTHERS

One of the more versatile and lasting soul-funk bands to achieve recording success, the Isley Brothers — like singer Sam Cooke — provided an early template for

minority artists with regard to taking creative and business control of career matters. In addition to establishing their own label, T-Neck, as early as 1964, they wrote timeless classics such as "Twist and Shout" (Wand 124; 1962; #17), and the Grammy-winning "It's Your Thing" (T-Neck 901; 1969; #2), and provided a forum for developing talented young musicians like guitarist Jimi Hendrix.

The group was originally comprised of three Cincinnati-based brothers — Ronald, Rudolph, and O'Kelly Isley — all of whom have roots in gospel singing. They recorded singles for several small labels in the late 1950s before achieving a minor hit with "Shout" (RCA 7588; 1959; #47). Stints with Atlantic, Wand (Scepter), United Artists, and Tamla (Motown) — while resulting in occasional chart successes, most notably "This Old Heart Of Mine" (Tamla 269; 1966; #12 US, #47 UK) — proved problematical, with these companies attempting to make the Isleys conform to a preconceived formulaic sound. As a result, the trio relaunched their own label in early 1969 and incorporated additional family members: brothers Ernie Isley (guitar, percussion) and Marvin Isley (bass, percussion), and cousin Chris Jasper (keyboards), who also composed many of their 1970s hits. Between 1973 and 1983, the Isleys released nine consecutive gold or platinum albums; their popularity was based on a seamless blend of pulsating dance rhythms, Ronald's soulful lead vocals (equally adept at silky-smooth ballads and hard-driving funk), and socially conscious lyrics, punctuated by Ernie Isley's Hendrix-inspired guitar riffs. Their most successful recordings during this period included 3 + 3 (T-Neck 32453; 1972), which featured the sexy, up-tempo workout, "That Lady" (T-Neck 2251; 1973; #6 US, #14 UK); *The Heat Is On* (T-Neck 33536; 1975; #1); *Harvest for the World* (T-Neck 33809; 1976; #9 US, #50 UK); *Go for Your Guns* (T-Neck 34432; 1977; #6 US, #46 UK); and *Showdown* (T-Neck 34930; 1978; #4 US, #46 UK).

With hit recordings becoming increasingly scarce in 1983, the group reverted back to the original trio following the departure of the younger family members to form Isley/Jasper/Isley. The Isleys became a duo in early 1986 following O'Kelly's death. In late 1988, Ernie and Marvin returned to the fold; the group as now billed as the Isley Brothers featuring Ronald Isley. They were inducted into the Rock and Roll Hall of Fame in 1992, and continue to tour and record to the present day.

FRANK HOFFMANN

ISSLER, EDWARD

Pianist and orchestra leader, "one of the most familiar names in record catalogs of the 1890s" (Brooks).

Issler worked for Edison as early as 1889, then for New Jersey Phonograph Co., Chicago Talking Machine Co., and others. He did not record after 1900. Issler's first Edison session was on 27 Aug 1889, when he and xylophonist A.T. Van Winkle inscribed seven numbers. He had a solo session on 14 Sep 1889, beginning with "Member of Congress March." His final piano cylinder was made on 31 Mar 1892. Issler's orchestra (consisting of A.T. Van Winkle, violin; George Schweinfest, flute; D.B. Dana, cornet; and Issler at the piano; with others later) began to record for Edison on 11 Nov 1889, with the "Men of Wall Street March," and remained with Edison to 1891. [Brooks 1979; Koenigsberg 1987.]

ITURBI, JOSÉ

(28 NOV 1895–28 JUNE 1980)

Spanish/American pianist and conductor, born in Valencia. He studied in Valencia and Paris, played and taught in Switzerland, and toured widely. Settling in the U.S. in 1929, he performed throughout the country. In 1936–1944 he was conductor of the Rochester (New York) Philharmonic Orchestra. Iturbi was not only the most renowned Spanish pianist of the time, but he also developed a large following among filmgoers as a result of his playing in the Chopin biography *A Song to Remember* (1945). His recording of the "Polonaise No. 6 in A-Flat Major" (Victor 11-8848; 1945) was the first by a classical pianist to exceed sales of a million copies. He died in Hollywood.

IVES, BURL

(14 JUNE 1909–14 APR 1995)

American folksinger and actor, born in Jasper County, Illinois. He attended Eastern Illinois State Teachers College from 1927 to 1929, then began touring as a singer and guitarist. He was popular simultaneously as an actor in films — notably in *Cat on a Hot Tin Roof* (1958), and in *The Big Country* (1958), for which he won an Academy Award — and on stage, with a leading role (while in military service) in *This Is the Army* (1942). On radio from 1942, he achieved wide recognition, and performed at Town Hall, New York, in 1945. Ives collected and published folk songs, and composed folk-like melodies himself. He was influential in producing the folk music revival of the 1940s and 1950s, and is regarded as one of the major folksingers of the century.

The principal Ives recordings were "Wayfarin' Stranger," "Foggy Foggy Dew," "Blue-Tailed Fly," — all on the Columbia LP *Wayfarin' Stranger* — and a



Burl Ives, c. early 1950s. Courtesy David A. Jasen

string of chart discs in the 1960s, including his compositions "A Little Bitty Tear" (Decca 31330; 1961), "A Funny Way of Laughin'" (Decca 31373; 1962), and "Mr. In-Between" (Decca 31405; 1962). The Decca album *Versatile Burl Ives* (DL 4152) was a best seller in 1962. His last great success was the album *Pearly Shells* (Decca DL 4578; 1965). Ives died in Anacortes, Washington.

IVOGÜN, MARIA

(18 NOV 1891–20 OCT 1987)

Austrian soprano, born Maria Kempner in Budapest. She studied with her mother, Ida von Günther, who had premiered *Merry Widow*, and then at the Musik Akademie in Vienna. Her debut was in Munich, as Mimi, on 1 Apr 1913. She remained with the Munich opera to 1925, working under Bruno Walter. Turning from lyric to coloratura roles, she gained acclaim throughout Europe, notably as Zerbinetta in *Adriane auf Naxos*. In 1922 she made her American debut in Chicago as Rosina. Later, she was a favorite in Covent Garden and Berlin, Vienna, and Scandinavia. From 1925 to 1934 she was with the Berlin Städtische Opera. She died in Beatenberg, Switzerland.

Ivogiün was recognized for her Mozart interpretations as well as Verdi, Puccini, and Rossini roles. She retired in 1933, and taught in Germany, one of her pupils being Elisabeth Schwarzkopf. Her first 25

IVOGÜN, MARIA

records were for Odeon, in Berlin, during 1916–1919; the earliest was “Der holle Rache” from *Zauberflöte* (#76970). From 1924 to 1925 she was with DGG in Berlin, for 14 sides, and from 1923 to 1926 she recorded in Chicago for Brunswick (12 items, including some Lieder). There were also six 1932 electrics made for Electrola (HMV), including

perhaps her finest record: Zerbinetta’s aria from *Ariadne*. Other important discs were a duet with her husband, tenor Karl Erb, from *Don Pasquale* (Odeon 76972, reissued by IRCC 3081) and “O zittre nicht” from *Zauberflöte* (Polydor 85310; reissued by Club 99 — with “Der holle Rache” — as #99–20; 1962). [Frankenstein 1972.]



J

JACKSON, ALAN (17 OCT 1958–)

Born Alan Eugene Jackson in Newnan, Georgia, Jackson is one of the best of the new-country performers. He is a talented songwriter as well as a performer in the George Jones school of honky-tonks and heartaches. Jackson began songwriting and performing as a teenager, but initially worked as a forklift driver while waiting for his big break. He moved to Nashville with his wife in search of fame and fortune. A chance meeting with Glen Campbell at the Nashville airport led to a job as a songwriter with Campbell's publisher; the company later sponsored his first tour. In 1989, he released his first album on Arista (8623), featuring nine of his original songs, including his first hit, "Here in the Real World," that gave the album its name. He scored his first number one hit in 1990 with a track from this album, the ballad "I'd Love You All Over Again." The year 1991 brought his spunky "Don't Rock the Jukebox," a rockabilly-flavored number declaring Jackson's allegiance to traditional country sounds.

Jackson's biggest success came with his 1992 album, *A Lot about Livin' (And A Little About Love)* (Arista 18711). Three of the album's songs hit number one on the country charts ("Love's Got a Hold On You," "She's Got the Rhythm (And I Got the Blues)," and "Chattahoochee"), and two others made it to the Top 5, an incredible feat.

Unlike other early 1990s stars who have faded from the scene, Jackson has managed to continue to produce hits, without changing his style much. Although he did not record between 1997 and 1999, he remained active on the road, and his earlier hits continued to be

aired on radio and country TV. In 2000, he had a major hit with his duet with George Strait on the traditionalist country anthem, "Murder on Music Row," which created some controversy among country deejays because of its criticism of the Nashville music industry. Jackson returned on his own to the charts with the appealing "It's Alright to Be a Redneck," accompanied by a clever video.

Jackson scored a major hit in late 2001 with his song "Where Were You (When the World Stop Turning)," hastily written and recorded following the attacks on the World Trade Center and Pentagon. Propelled by the song's success, his 2002 album, *Drive* (Arista 67039), debuted at the top of both *Billboard's Hot 200* and country charts, a career first for Jackson. This success was undoubtedly fueled by the patriotic mood of the song. In 2002, he won five Country Music Association awards, including male vocalist of the year (an award that he had been nominated for 11 times but never before received). That same year, he was given ASCAP's Golden Note award for achievements as a songwriter, performer, and entertainer, as well as being named songwriter-artist of the year.

CARL BENSON

JACKSON, JANET (16 MAY 1966–)

Although Janet Jackson's musical identity owes much to the slick funk-pop production work of ex-the Time members, Jimmy Jam and Terry Lewis, her photogenic good looks and well-choreographed dancing skills

JACKSON, MAHALIA

have also been key ingredients in her commercial success. Now entering her third decade as a major recording artist, she has become an industry institution much like her older brother, Michael.

Born in Gary, Indiana, Janet started out singing with the Jackson Five on their television variety show in the 1970s before garnering roles on programs like "Good Times," "Diff'rent Strokes," and "Fame." She achieved marginal success with her first two albums, *Janet Jackson* (A&M 4907; 1982; #63), and *Dream Street* (A&M 4962; 1984). However, the next LP — *Control* (A&M 5106; 1986; #1) — driven by several Jam and Lewis-penned hit singles — "What Have You Done For Me Lately" (A&M 2812; 1986; #4), "Nasty" (A&M 2830; 1986; #3), "When I Think Of You" (A&M 2855; #1), and "Control" (A&M 2877; 1986; #5) — and the accompanying high-energy video clips that appeared in heavy rotation on MTV, BET, and other cable TV stations made her a star.

With Jackson now sharing songwriting responsibilities and projecting a more mature sexuality, follow-up recordings — the albums *Janet Jackson's Rhythm Nation 1814* (A&M 3920; 1989; #1), *Janet* (Virgin 87825; 1993; #1), *The Velvet Rope* (Virgin 44762; 1997; #1), and *All for You* (Virgin 10144; 2001; #1) as well as a string of number one singles: "Miss You Much" (A&M 1445; 1989), "Escapade" (A&M 1490; 1990), "Black Cat" (A&M 1477; 1990), "Love Will Never Do (Without You)" (A&M 1538; 1990), "That's the Way Love Goes" (Virgin 12650; 1993), "Again" (Virgin 38404; 1993), and "Together Again" (Virgin 38623; 1997) — have cemented her place in the pop music pantheon. With the fashion spreads and glitzy dance routines are now balanced with lyrics addressing racism, inequality, and other forms of social consciousness, Jackson seems intent on maximizing her core audience. In anticipation of a new album release after several years out of the studios, Jackson performed at the Super Bowl halftime show in 2004; her "accidental" exposure of her breast at the end of a routine performed with Justin Timberlake ignited a firestorm of controversy for the singer. It's not yet clear whether this "exposure" will help or hurt her future career.

FRANK HOFFMANN

JACKSON, MAHALIA (26 OCT 1911–27 JAN 1972)

American gospel and soul singer, born in New Orleans. She went to Chicago in 1927 and was engaged in menial employment while singing in Baptist churches and then for conventions and meetings as a member of the Johnson Brothers group. She

left the group in the mid-1930s to perform as a solo gospel performer, while also opening her own beauty salon. In 1937, she signed with Decca Records, but was mostly successful as a performing artist. In 1946, she signed with the small Apollo label, and earned quick success with her own composition, "Move on Up a Little Higher" (164; 1947). "Silent Night" was another hit disc (Apollo 235; 1950). She moved to major label Columbia in 1954, at the same time hosting her own radio show on CBS, the first national program featuring pure gospel. A successful appearance at the 1958 Newport Jazz Festival further propelled her career forward, and Jackson went on to international tours, gaining recognition as the world's premier gospel singer. However, her albums from this period were often marred by intrusive string arrangements in the then-popular Percy Faith style. Nonetheless, three of her albums (1961, 1962, 1976) won Grammys. She appeared in the film *St. Louis Blues* in 1958. In her late career she added popular songs to her repertoire. She made her last appearance in Germany during a European tour in 1971. She died in Evergreen Park, a Chicago suburb.

A selection of her 1930s recordings are available on *In My Home Over There* (MCA 11851). Her complete Apollo recordings are available on the three-CD set, *How I Got Over* (West Side 303), and selections from these recordings also appear on various budget and European CD labels. For her later repertoire, there are several "best of" collections, notably Columbia's two-CD set, *Gospels, Spirituals, and Hymns* (65594), collecting recordings from 1954 to 1969, and many of Jackson's original Columbia albums are available on CD. Radio interviews and singing from the 1950s are collected on *I Sing Because I'm Happy* (Smithsonian/Folkways 90002).

JACKSON, MICHAEL (29 AUG 1958–)

It appears more and more likely, with each passing year, that Michael Jackson's career will fall short of the expectations of music industry experts. By the mid-1980s, he was the most popular recording artist worldwide — his *Thriller* (Epic 38112; 1982; #1), was the top-selling album of all time — and on the cutting edge of the rapidly expanding video medium. However, a steady barrage of bad publicity surrounding his plastic surgeries, sexual behavior, and other eccentric activities have substantially eroded his following over the years.

Raised in Gary, Indiana, as part of a family of child prodigies, Michael became lead vocalist for the Jackson Five, comprised of brothers Jackie, Tito, Jermaine, and Marlon. Following the release of a couple of singles for the local Steeltown label, the group

signed with Motown in 1969. The group made an immediate splash when its first four singles for the label — “I Want You Back” (Motown 1157; 1969), “ABC” (Motown 1163; 1970), “The Love You Save” (Motown 1166), and “I’ll Be There” (Motown 1171; 1970) — all reached the number one position. Their early album releases — *Diana Ross Presents the Jackson 5* (Motown 700; 1970; #5), *ABC* (Motown 709; 1970; #4), *The Third Album* (Motown 718; 1970; #4), and *Maybe Tomorrow* (Motown 735; 1971; #11) — also sold extraordinarily well for a Black act at the time, due largely to an engaging, effervescent sound that incorporated elements of soul, pop, and bubblegum.

If was clear out of the box, however, that Michael’s impassioned singing and showmanship was the most important ingredient behind the Jacksons’ success. As a result, Motown decided to issue solo material by Michael alongside group releases beginning in October 1971. Among his more notable early singles were a dynamic remake of Bobby Day’s 1958 hit, “Rockin’ Robin” (Motown 1197; 1972; #2), and the bizarre “Ben” (Motown 1207; 1972; #1), the sentimental tribute to a pet rat. He continued recording and performing with his brothers, who — by now writing much of their own material — returned to top form with a proto-disco single, “Dancing Machine” (Motown 1286; 1974; #2). However, the group’s fortunes would fluctuate wildly in the future as Michael would take frequent sabbaticals to pursue his solo career.

With the assistance producer/arranger Quincy Jones, Michael hit the big time with *Off the Wall* (Epic 35745; 1979; #3), powered by four Top 19 singles: the pulsating “Don’t Stop ‘Til You Get Enough” (Epic 50654; 1979; #1), the scintillating “Rock with You” (Epic 50797; 1979; #1), the sentimental “She’s Out Of My Life” (Epic 50871; 1980; #10), and the title track (Epic 50838; 1980; #10). Despite this precedent, the unprecedented quality — and commercial staying power — of the next LP, *Thriller*, caught the industry by surprise. The record gathered momentum slowly, first making an impact in the Black market, before the heavy MTV rotation of “Billie Jean” (Epic 03509; 1983; #1), and “Beat It” (Epic 03759; 1983; #1) propelled it to a 37 week stretch at the top of the pop album charts; eventually, seven of its nine tracks would reach the Top 10.

Following his participation in the highly publicized *Victory* (Epic 38946; 1984; #4) album and tour with his brothers (the last time he’d work with them as a group), Michael again collaborated with Jones on *Bad* (Epic 40600; 1987; #1), which also spawned seven hit singles, five of which — “I Just Can’t Stop Loving You” (Epic 07253; 1987; with Siedah Garrett), “Bad”

(Epic 07418; 1987), “The Way You Make Me Feel” (Epic 07645; 1987), “Man in the Mirror” (Epic 07668), and “Dirty Diana” (Epic 07739; 1987) — reached number one. Despite their relative popularity, subsequent releases — including *Dangerous* (Epic 45400; 1991; #1), the partial retrospective *HIStory: Past, Present and Future – Book 1* (Epic 59000; 1995; #1; double set), and a string of dance-oriented singles — have been poorly received by critics who consider anything falling short of his 1980s classics to be a letdown.

FRANK HOFFMANN

JACKSON, MILT[ON]

(1 JAN 1923–9 OCT 1999)

American jazz vibraphonist, born in Detroit. He played various instruments and sang in gospel groups, then played vibraphone with Detroit bands in the 1940s. In New York, teaming with Dizzy Gillespie, he helped to shape the cool jazz movement. As a sideman, Jackson recorded “Anthropology” with Gillespie (Victor 40-0132; 1946), and “Misterioso” with Thelonious Monk (Banner #60; 1948), among others. As members of the Gillespie band, Jackson, pianist John Lewis, bassist Percy Heath, and drummer Kenny Clarke began performing as a quartet during breaks in the larger band’s concerts; in 1952, the group became the Modern Jazz Quartet (MJQ), with Clarke replaced in 1955 by Connie Kay. Jackson became the group’s leader, and it achieved great success through the 1950s and 1960s. In 1974, the group split up, and Jackson signed with Norman Granz’s Pablo label, recording in various settings. In 1981 the MJQ reformed to perform for regular “reunion” tours and recordings, and Jackson also continued to work on his own until his death. Jackson died of liver cancer in New York.

Jackson recorded as a leader (sometimes credited to Jackson but featuring the same lineup as the MJQ) for a variety of labels, primarily Blue Note, Savoy, and Prestige (prior to the MJQ), Atlantic (mid-1950s through early 1960s), Impulse! (1962–1969), Verve (1964–1968), CTI (early 1970s), Pablo (1975–1983), and finally Qwest/Warners (1995–1997). Many of his original albums have been reissued on CD. There are also several retrospective collections. *Wizard of the Vibes* (Blue Note 32140) is drawn from a 1948 session with Thelonious Monk and a later 1952 session with an early form of the MJQ, while early 1950s sessions for Savoy are collected on *Early Modern* (17066). *To Bags with Love* (Pablo 2310967) collects recordings from 1954 to 1983 recorded for Prestige, Riverside, and Pablo. *Jazz ‘Round Midnight* (Verve 533826) collects 16 tracks recorded for that label in the 1960s.

JACKSON, STONEWALL (6 NOV 1932–)

American country singer, guitarist, and songwriter, born in Tabor City, North Carolina. He taught himself guitar, and after leaving naval service in 1954 began to save money for a trip to Nashville; he secured an audition there and was signed by Columbia. He made a quick success with "Life to Go" (41257; 1958), which was followed by a string of 47 chart singles, most of them for Columbia. His last great hit was on the Little Darlin' label: "My Favorite Sin" (7806; 1978).

JACKSON, WANDA (20 OCT 1937–)

American country singer, guitarist, pianist, songwriter, born in Maud, Oklahoma. Her family moved to California, where she learned guitar and piano; then they settled again in Oklahoma. Jackson won first place in a radio talent contest and was invited to record with Hank Thompson. "You Can't Have My Love" became a hit on the Decca label. She toured with Elvis Presley, and signed a contract with Capitol Records; Las Vegas became her favored venue. Among her own songs to reach the charts was "Right or Wrong" (Capitol 4553; 1961). She made national and European tours in the 1960s. Jackson had 33 chart singles, and numerous successful LP albums.

JAEGER, HENRY

A German-born flutist with the U.S. Marine Band in the 1890s, the first Columbia recording artist to be identified by name. He made Columbia cylinders from 1890 to 1894. Jaeger is not listed among the Edison artists of the period, nor among the Victor or Columbia disc performers. [Brooks 1979.]

JAFFE, CHRISTOPHER (4 OCT 1927–)

A noted leader in the field of architectural acoustics, Jaffe graduated from the school of engineering at Rensselaer Polytechnic Institute in 1949 and then went on to complete his graduate studies at Columbia University. He has been the consultant for more than 250 concert halls, opera houses, theaters, and music pavilions in the United States, Mexico, and the Far East. His company, Jaffe Holden Acoustics, designed the Sala Nezahualc6yotl in Mexico City and the Boettcher Concert Hall in Denver, the first surround concert halls built in North America. Among his other completed works are the Bass Performance Hall in Fort Worth, the renovation of the Kennedy Center Concert Hall and Severance Hall, home of the Cleveland Orchestra, and the four performance spaces at the Tokyo International Forum. No other acoustical

consultant has worked with as many professional symphony orchestras, opera companies, dance groups and theater companies. Jaffe has presented more than 100 papers to professional societies and has received nine patents. He is a fellow of the Acoustical Society of America, the Audio Engineering Society, and the Institute of Acoustics, United Kingdom, and has held professorships at the Juilliard School, Rensselaer, and the City University of New York. Most recently, Jaffe received the Year 2000 honor for collaborative achievement award from the American Institute of Architects.

HOWARD FERSTLER

**JAM, JIMMY (6 JUNE 1959–), AND
TERRY LEWIS (21 NOV 1956–)**

Minneapolis native Jimmy Jam (James Harris, III), and Terry Lewis, born in Omaha, first gained attention as members of the Time, headed by Morris Day. Following the release of the group's debut funk-punk LP, *The Time* (Warner Bros. 3598; 1981; #50; gold record), produced by Prince, Jam and Lewis formed Flyte Time Productions. Their first success as producer-arrangers came with tracks from the S.O.S. Band's *On the Rise* (Tabu 38697; 1983; #47), most notably the hit "Just Be Good To Me" (Tabu 03955; 1983; 1983; #2 R&B, #55 pop).

Fired from The Time by Prince, Jam and Lewis achieved further success in the mid-1980s working with R&B artists such as Patti Austin, Thelma Houston, Gladys Knight, and Klymaxx. Their trademark sound — richly scored yet streamlined, street-smart yet sophisticated — attracted the handlers of the then relatively unknown Janet Jackson. The collaboration yielded a long string of successes, including *Control* (A&M 5106; 1986; #1; 5 million + sales), which earned the duo a Grammy as producers of the year, *Rhythm Nation 1814* (A&M 3920; 1989; #1; 6 million + sales), *Janet* (A&M; 1993), and *The Velvet Rope* (A&M; 1997).

By the mid-1980s, the producing team was in great demand. Jam and Lewis also worked on the Human League's "Human" (A&M 2861; 1986; #3 R&B, #1 pop), Force M.D.'s "Tender Love" (Warner Bros. 28818; 1985; #4 R&B, #10 pop), Herb Alpert's "Keep Your Eye on Me" (A&M 2915; 1987; #3 R&B, #46 pop; vocals by Lewis and Lisa Keith), The New Edition's *Heart Break* (MCA 42207; 1988; #12; platinum record), Johnny Gill's eponymous debut album (Motown 6283; 1990; #8; platinum record), Ralph Tresvant's *Ralph Tresvant* (MCA 10116; 1990; #17; platinum record), and Karyn White's *Ritual of Love* (Warner Bros. 26320; 1991; #53; gold record). In

1991, they founded the A&M-backed label, Perspective; its first release, The Sounds of Blackness's *The Evolution of Gospel* (Perspective 1000; 1991; #176), won a Grammy. The team continued to freelance, working in the 1990s with the likes of Michael Jackson, Boyz II Men, Mary J. Blige, and Vanessa Williams.

FRANK HOFFMANN

JAMES, HARRY (15 MAR 1916–5 JULY 1983)

American jazz trumpeter and big band leader, born in Albany, Georgia. He learned to play from his father, a circus bandmaster; and he worked with groups in Texas and New Orleans. His first important affiliation was with Ben Pollack in 1935–1936, after which he joined the Benny Goodman orchestra, and became a principal soloist. In 1938 he formed his own big band, signing with Columbia, and the band became one of the most popular of the next 30 years. Although he was a fine improviser, he was most famous as a soloist for virtuoso pieces like "Flight of the Bumble Bee" (Variety 8298; 1940), and for tender ballads like "Sleepy Lagoon" (Columbia 36549; 1942). James briefly left Columbia in 1940–early 1941 to record for Variety, and then returned to Columbia, scoring his first Top 10 hits in mid-1941. The recording ban in 1942 ended new releases, but nonetheless Columbia was able to draw from its stockpile of James's recordings to keep him on the charts over the next few years. The James band, with vocalists Frank Sinatra, Dick Haymes, Kitty Kallen, and Helen Forrest, was at its peak in the 1940s, appearing on radio and in 10 films, then on television from 1952. Among the artists with James at one time or another were Buck Clayton and Ziggy Elman (trumpet), Jess Stacy (piano), Dave Tough, Jo Jones, and Buddy Rich (drums). In 1950–1951, Columbia successfully teamed singer Doris Day with the James band. James remained with Columbia until 1955, and then moved to Capitol, remaining there for three years, and then moved to MGM. After MGM dropped the band in 1965, they recorded sporadically, mostly working as a touring group rather than relying on recorded hits. Harry James's recordings have been reissued in many different formats by a variety of labels.

JAMES, LEWIS LYMAN (29 JULY 1892–19 FEB 1959)

American tenor, born in Dexter, Michigan. He gave up a naval career, leaving Annapolis to be a professional singer, and became one of the most prolific

recording artists. His approximately 3,000 records — about half of them solos — were made for various labels. The first was "I Know I Got More than My Share" (Columbia #2108; 1916), which happened to be coupled with Vernon Dalhart's debut recording. In May 1918 he made his first Victor: "All Aboard for Home Sweet Home" with the Shannon Four (#18441). On Pathé the first was "Sometime You'll Remember" (#20193). The earliest of his 42 Edison Diamond Discs was "Why Did You Come into My Life?" (#50577; 1919). From these titles it will be noted that the James repertoire was popular songs. James sang with the Knickerbocker Quartet (using the name Robert Lewis), with the Crescent Trio, and with the Revelers. Other pseudonyms included Robert Bruce, Harold Harvey, Bruce Wallace, and — on some children's records — Uncle Lewis. James toured Europe five times and sang for British royalty. He gave up singing for health reasons in 1940, and became program director for WGN radio in Chicago until his retirement in 1957. He died in Chicago. [Walsh 1955/10.]

JAMES, SONNY (1 MAY 1929–)

Born into a show business family, Sonny James (real name Jimmy Loden) began performing at the age of four with his four sisters. He had his own radio show in Birmingham, Alabama, while still a teenager. While in the service during the early 1950s, he performed in the films, *Second Fiddle to a Steel Guitar*, *Nashville Rebel*, *Las Vegas Hillbillies*, and *Hillbilly in a Haunted House*.

Following military service, James signed with Capitol Records. Although a country artist by temperament, his rich baritone voice was well suited to the mainstream pop market. During the late 1950s, the country charts were overwhelmed by rock 'n' roll material recorded by artists such as Elvis Presley, Jerry Lee Lewis, and the Everly Brothers. Like Johnny Cash, Marty Robbins, Johnny Horton, Jim Reeves, and other country performers, James was encouraged to record teen-oriented songs. His sixth country hit, "Young Love" (Capitol 3602; 1956) also reached number one on the pop music charts, eventually selling more than a million copies. However, the pop-country hits had stopped coming by mid-1960.

In 1963, the process had reversed itself and country material was regularly crossing over to the pop charts. James's middle-of-the-road sensibilities were suddenly back in vogue. As a result, he enjoyed a string of recorded successes — often songs that had previously been pop hits by other artists — rarely equaled in country music history. Between 1964 and 1975, 22 of his singles (at one point, 16 in a row) reached number

JAMES, TOMMY

one on the country charts: "You're the Only World I Know" (Capitol 5280; 1964), "'Behind the Tear" (Capitol 5454; 1965), "Take Good Care of Her" (Capitol 5612; 1966), "Need You" (Capitol 5833; 1967), "I'll Never Find Another You" (Capitol 5914; 1967), "It's the Little Things" (Capitol 5987; 1967), "A World of Our Own" (Capitol 2067; 1968), "Heaven Says Hello" (Capitol 2155; 1968), "Born To Be with You" (Capitol 2271; 1968), "Only the Lonely" (Capitol 2370; 1969), "Running Bear" (Capitol 2486; 1969), "Since I Met You, Baby" (Capitol 2595; 1969), "It's Just a Matter Of Time" (Capitol 2700; 1970), "My Love" (Capitol 2782; 1970), "Don't Keep Me Hangin' On" (Capitol 2834; 1970), "Endlessly" (Capitol 2914; 1970), "Empty Arms" (Capitol 3015; 1971), "Bright Lights, Big City" (Capitol 3114; 1971), "Here Comes Honey Again" (Capitol 3174; 1971), "That's Why I Love You Like I Do" (Capitol 3322; 1972), "When the Snow Is on the Roses" (Columbia 45644; 1972), and "Is It Wrong" (Columbia 46003; 1974).

His popularity dropped off somewhat when he switched to the Columbia label. As proponents of harder forms of country (e.g., the "Outlaw" movement, the New Traditionalist) supplanted established acts, shifts to the Monument label (late 1970s), and Dimension (early 1980s) did not reverse the trend. Nevertheless, James continued to perform and record through the 1990s. [Dellar 1987.]

FRANK HOFFMANN

JAMES, TOMMY (29 APR 1947–)

A Dayton, Ohio, native, Tommy James began performing with his group, the Shondells, at school dances, auditoriums, and other area venues at the age of 12. The group would occasionally cut records for small companies, including a song called "Hanky Panky" for the Snap label in 1960 (sources differ regarding this date, some placing it as late as 1963). More than five years later, a KDKA, Pittsburgh, disc jockey played the record on his program; it quickly became the most requested single in that radio market. Roulette Records acquired the rights to "Hanky Panky" (Roulette 4686), and it reached number one on the *Billboard Hot 100* in July 1966.

James would go on to record 30 charting singles (many cowritten by him and friend Bob King) — both with the Shondells and as a solo artist — though early 1973. His Top 10 releases included "I Think We're Alone Now" (Roulette 4720; 1967), "Mirage" (Roulette 4736; 1967), "Mony Mony" (Roulette 7008; 1968), "Crimson and Clover" (Roulette 7028; 1968–1969), "Sweet Cherry Wine" (Roulette 7039;

1969), "Crystal Blue Persuasion" (Roulette 7050; 1969), and "Draggin' the Line" (Roulette 7103; 1971). His combination of romantic innocence, catchy melodies, and hook-laden refrains provided the model for the late 1960s bubblegum genre.

The unrelenting succession of one-night stands and drug abuse led to a breakdown in 1970. After his recovery, changing public tastes made the hits harder to come by. During a brief career revival in 1980, it was estimated that he had sold more than 30 million records. The 1980s also brought success for his classic songs as covered by other artists, most notably "Crimson and Clover" (#7, Joan Jett, Boardwalk 144; 1982), "I Think We're Alone Now" (#1, Tiffany, MCA 33147; 1987), and "Mony Mony" (#1, Billy Idol, Chrysalis 43181; 1987). [Stambler 1989.]

FRANK HOFFMANN

JAN AND DEAN

Jan Berry (born 3 Apr 1941, Los Angeles) and Dean Torrence (born 10 Mar 1941, Los Angeles) became friends at Emerson Junior High, forming a group, the Barons, with future stars Sandy Nelson ("Teen Beat," Original Sound 5; 1959), and Beach Boys-member Bruce Johnston. Jan, Dean, and another friend, Arnie Ginsburg, recorded a tribute to a local stripper, "Jennie Lee" (Arwin 108); the single reached number eight on the *Billboard Hot 100* in spring of 1958. Because Torrence was serving in the National Guard when the contracts were signed, the recording was credited to "Jan and Arnie."

Within a year Ginsburg had joined the army, and Torrence — once again a civilian — resumed his partnership with Berry. Herb Alpert and Lou Adler took on management of the duo, producing the Top 10 hit, "Baby Talk" (Dore 522; 1959) for their own label. Jan and Dean's releases charted with greater consistency after the duo signed with Liberty in 1961. With Berry exhibiting a genuine talent for songwriting and record production, the twosome's hits — most notably "Surf City" (Liberty 55580; 1963), "Honolulu Lulu" (Liberty 55613; 1963), "Drag City" (Liberty 55641; 1963–1964), "Dead Man's Curve" (Liberty 55672; 1964), "The Little Old Lady from Pasadena" (Liberty 55704; 1964), and "Ride the Wild Surf" (Liberty 55724; 1964) — provided succinct, often humorous, commentaries on youthful California obsessions such as surfing, fast cars, and popular culture. Jan and Dean formed a close working relationship with the Beach Boys; Brian Wilson supplied them with their only number one recording, "Surf City," while Torrence, uncredited sang lead on the Beach Boys's "Barbara Ann" (Capitol 5561; 1966). Members of the two

aggregates frequently appeared on each other's recordings until their labels objected.

The duo's successful run came to a sudden end when Berry's Corvette crashed into a parked truck at 65 mph. near Los Angeles's fabled Dead Man's Curve. Still partially paralyzed and suffering from speech difficulties, he continues to record and perform live (sometimes with Torrence). Torrence has focused his energies on album cover design as head of Kitty Hawk Graphics; his clients have included the Beach Boys, Steve Martin, Nilsson, the Nitty Gritty Dirt Band, and Linda Ronstadt. Interest in the duo was revived by the television film bio, *Dead Man's Curve* (ABC, 1978), the release of the album *One Summer Night — Live* (1982), and their involvement with the *Back to the Beach* soundtrack (Columbia 40892; 1987).

FRANK HOFFMANN

JANSZEN, ARTHUR A. (1908–16 OCT 1992)

A leading proponent and designer of electrostatic loudspeaker systems, Janszen was a native of Yoakum, Texas, and graduated from the University of Texas in 1943. Shortly later, he joined the staff of the Underwater Sound Laboratory at Harvard University, working to conceptualize sonar-guided torpedoes for the war effort. His war-work experience and his interest in audio allowed him to develop an interest in electrostatic loudspeaker technology, which had been developed in the 1920s, but which had also been dismissed as impractical. However, using thin-film plastics technology, he introduced an electrostatic tweeter in 1952 (patented in 1953) that not only worked, but was considered by many to be the best tweeter of that era. In 1954, he started his own company, Janszen Laboratory, Inc., and produced electrostatic tweeters for use with existing full-range systems having limited treble abilities. In 1959, he sold his company to KLH, in Cambridge, Massachusetts, became a vice president of that company, and produced the legendary KLH Model 9 system. In 1960, he left KLH, joined Acoustech (also in Cambridge), and produced the also legendary Acoustech 10 speaker system. From the early 1970s until his death, he was a freelance consultant to various speaker manufacturers.

See also **Loudspeaker**

HOWARD FERSTLER

JAPANESE VICTOR CO. (JVC)

A firm established in 1927 as a subsidiary of the Victor Talking Machine Co.; it manufactured records and

record players. From 1929, when Mitsubishi and Sumitomo acquired substantial shares of the company, it was operated as an American-Japanese venture. Products were labeled Victor in Japan and JVC elsewhere until 1989, when the single label Victor/JVC was adopted for worldwide use. Matsushita now owns a majority of the stock in the firm.

Research at JVC has resulted in the "45–45" stereo phonograph (1957); a color video tape recorder (1958), the VHS ("video home system," 1976), and various other audio devices. A recent product is the K2 Interface, a component designed to eliminate distortions in compact disc (CD) recording prior to the analog processing step. Another is the CD+G/M player, which adds still-picture graphics to the basic CD format.

In 1986 JVC America was established as a subsidiary, and in 1989 Nippon Victor (Europe) GmbH, was organized in Germany. [Borwick 1989/10.]

JARRETT, KEITH (8 MAY 1945–)

Keith Jarrett's career as a recording artist spans the full spectrum of contemporary jazz styles. The composer/pianist's eclectic approach was influenced by Eastern exotica, the Native American folk tradition, the late 1960s fusion and New York-based jazz avant-garde movements, and stints with Art Blakey (1965), Charles Lloyd (1966), and Miles Davis (1970–1971).

Born in Allentown, Pennsylvania, his early work with Atlantic and ABC/Impulse reflects the attempt to synthesize these influences; the more popular titles included *El Juicio* (Atlantic 1673; 1975; #160), *Mysteries* (ABC/Impulse 9315; 1976; #184), *Shades* (ABC/Impulse 9322; 1977; #174), and *Byablue* (ABC/Impulse 9331; 1977; #117). While continuing to record for these mainstream labels, he signed with the Munich-based experimental label, ECM, in 1971. *Luminessence* (ECM/Polydor 1049; 1974) featured ambient pieces for string orchestra and saxophone (played by Jan Garnarek), whereas *Belonging* (ECM/Polydor 1050; 1974) utilized quartet improvisations. *The Koln Concert* (ECM/Polydor 1064–1065; 1975), a double-disc set culled from Jarrett solo piano concert at Cologne's Opera House in January 1975, melded country, blues, gospel, funk, ragtime, and Terry Riley-influenced trance music within an impressionistic framework reminiscent of Debussy. It was a pivotal work, helping expand ECM's industry influence as well as creating a new audience for ambient, minimalist jazz.

Jarrett's prolific recorded output has remained impossible to categorize. The orchestral suite in *Arbour Zena* (ECM 1070; 1976; #179) anticipated his interpretations of the European art music repertoire in

the 1980s and 1990s, from Bach to Shostakovich. The epic scope of the 20-album set of acoustic piano pieces, *The Sun Bear Concerts* (ECM import; 1977), was followed by *Sacred Hymns* (ECM; 1980), comprised of compositions by Armenian mystic Gurdjieff, and a series of reinventions of classic jazz material, beginning with *Standards* (ECM). Although reportedly suffering from the fatigue syndrome ME by the late 1990s, Jarrett retains the capacity to surprise with each new release.

FRANK HOFFMANN

JARVIS, HAROLD
(27 DEC 1864–1 APR 1924)

Canadian church and concert tenor, born in Toronto. At age 14 he went to sea, and eventually became a naval officer, but also took up singing. He left the naval service to study in London, then made concert appearances in Britain and America, settling in Detroit, Michigan. Jarvis recorded Scottish dialect songs and popular ballads for Victor in 1908–1909, for Columbia in 1912, and for Edison in 1914; he also made a Vitaphone of “Beautiful Isle of Somewhere” (10026; 1914). “Beautiful Isle” was his best-selling number; it appeared on Victor 16008; 1909), and Columbia A1121; 1912), and remained in the Victor catalog for 15 years. Jarvis died in Detroit. [Moogk 1975; Walsh 1961/5–6–7.]

JAZZ RECORDINGS

Although jazz is a term often applied to a variety of related music styles, such as blues, R&B, boogie-woogie, and ragtime, this article is concerned only with the tradition of American music that developed from the music of African Americans in and around New Orleans at the turn of the 20th century.

The earliest jazz derived from the idiom of the New Orleans dance band — a group typically consisting of violin, cornet, clarinet, trombone, drums, bass, and guitar or banjo. Violin and cornet were the lead instruments. The jazz band also gave the lead to a cornet, with clarinet and trombone in direct response to it, and other winds doing variations. The performances of these groups displayed fairly standard characteristics: they began with a standard melody and its harmony (usually a familiar song), and then played variants with counterpoints supported by a strong march-derived beat in the bass and percussion. Later, rhythmic accompaniments became smoothed out into a “four beat” feel, and lead instruments tugged against the steady beat in a rhythmic approach known as “swing.” The piano became a part of the ensemble, and

played the chord progression (often with a guitar or banjo), repeating this as needed, and contributing further melodic decorations. Instruments capable of pitch inflection produced lowered fifths and other bent tones in the blues manner.

This was the style represented on the first true jazz recordings to be released, by the Original Dixieland Jazz (or Jass) Band (ODJB). “Livery Stable Blues” and “Dixie Jass Band One-Step” (Victor #18255; recorded 26 Feb 1917 and released 7 Mar 1917). Columbia recorded the same group doing “Darktown Strutters’ Ball” and “Indiana” (Columbia A-2297; 31 May 1917). RCA CD #61098, *75th Anniversary*, is a two-disc set covering much of the ODJB’s career. Although early jazz was developed primarily by African-American musicians, this “Original” group was white; they recorded extensively until 1938. Famous Black musicians from early New Orleans included Louis Armstrong, Sidney Bechet, Johnny Dodds, Kid Ory, and King Oliver.

The great success of the ODJB — Victor reported that a million copies of that first recording were sold in eight years — brought jazz to the attention of an international audience with remarkable speed. Other ensembles came to the fore, such as the Original Memphis Five, which recorded from April 1922 for Arto, and also for Paramount, Pathé, Banner, Vocalion, and others, continuing to 1931. Trumpeter Phil Napoleon led the Five. Folkways #RBF26, *Original Memphis Five*, is an LP of their work from 1922 to 1924. It should be mentioned that Edison recorded a jazz group in 1917, the Frisco Jazz Band (membership not known); they did “Canary Cottage” and “Johnson `Jass’ Blues” on two Diamond Discs (#50440, #50470; 10 May 1917).

Trombonist Kid Ory, having gone to Los Angeles, recorded two sides for Nordskog (#3009) with a sextet in June 1922. The group made the earliest jazz record by Black artists: “Ory’s Creole Trombone” and “Society Blues” (#3009).

Chicago was a second center of early jazz activity and recording. Like several other artists from New Orleans, the Original Dixieland Jazz Band found early success there, playing in clubs in 1916, before they took the ODJB name and went on to New York. One Black band of importance from New Orleans was playing in Chicago in the early 1920s — the Creole Jazz Band led by King Oliver. When Louis Armstrong joined the group in 1922 they made up the principal Black jazz ensemble of the day. “Canal Street Blues” (Gennett #5133; 6 Apr 1923), and Armstrong’s first solo disc, “Chimes Blues” (Gennett #5135; 6 Apr 1923), typify the Dixieland tradition. The Oliver discs, 39 sides made for Gennett, Okeh, and Columbia, were the first significant body of Black jazz on record. In

addition to Armstrong, Johnny Dodds and Lil Hardin (Armstrong) were heard in this ensemble. Hardin was the first female jazz performer to record. A CD issued by Milestone, *Louis Armstrong and King Oliver* (#47017), covers the Oliver sessions of 1923.

The Wolverines, a group centered on cornetist Bix Beiderbecke, recorded for Gennett from February 1924, making hits such as "Fidgety Feet" (Gennett #5408; 18 Feb 1924 — their first recording), and "Copenhagen" (Gennett #5453; 6 May 1924). A Milestone CD, *Bix Beiderbecke and the Chicago Cornets* (#47019), offers Wolverine material from February 1924 to December 1924. Chicago-style jazz differed from New Orleans in offering a more complex string bass beat, a lighter sound (sometimes without trombones), smoother melodic lines, overlapping solos, shifting accents, and other little variations. It was mainly a province of white musicians. Red McKenzie and Condon's Chicagoans recorded for Okeh in 1927–1928, with an all-star cast consisting of Jimmy McPartland, Frank Teschmacher, Bud Freeman, Joe Sullivan, Eddie Condon, Jim Lannigan, and Gene Krupa, beginning with "Sugar" and "China Boy" (Okeh 41011; 8 Dec 1927). These pieces are on the Golden Sounds two-CD set #772, *Selections of the Original Sound of Chicago*, along with other Chicago style jazz from the 1920s.

Many of the most significant musicians on the Chicago scene, including McPartland, Freeman, and Frank Teschenmacher, attended Austin High School in the 1920s and came to be known informally as the Austin High Gang. Freeman recorded in December 1928 with his "orchestra" for Okeh, making "Craze-O-Logy" and "Can't Help Lovin' Dat Man" (#41168; both on the ASV Living Era CD *Swingin' with the Eel*, #5280); Krupa and McKenzie were in the group.

Red Nichols and Miff Mole performed in Red and Miff's Stompers, making first an Edison Diamond Disc, "Alabama Stomp" (#51854; 13 Oct 1926); Jimmy Dorsey was their clarinetist and alto saxophonist. Nichols then assembled his famous Five Pennies, featuring Pee Wee Russell on clarinet, and achieved great success in America and Europe. EPM Musique CD #157452, *1923–1931*, presents much of their work.

The premiere recordings of the decade were made under the leadership of Louis Armstrong in ensembles assembled for the studio and marketed as Louis Armstrong's Hot Five and Hot Seven. The musicians included Kid Ory, Dodds, Lil Hardin (Armstrong), and drummer Johnny St. Cyr. The 60 sides they recorded for Okeh in 1925–1928, beginning with "My Heart" on 12 Nov 1925 (#8320), are landmarks in jazz history. A set of four CDs by JSP (#100) covers the complete recordings of *The Hot Fives and Sevens*.

In Kansas City, jazz musicians were developing another style of the 1920s: a riff-based, robust idiom well represented by Bennie Moten's orchestra; that group was first recorded by Okeh in September 1923, performing "Elephant's Wobble" and "Crawdada Blues" (#8100). Moten was with Okeh for two years, then went to Victor in December 1926, staying with that label until 1932. Perhaps his finest record came on 13 Dec 1932, the final Victor session: "Toby" (#23384), with solos by Count Basie (piano), Hot Lips Page (trumpet), and Ben Webster (tenor saxophone). Moten's work of 1930–1932 is sampled on Melodie Jazz Classic CD #591, *1930–32*.

Basie carried on with a modified Kansas City style in his own big band of 1936. Two Melodie Jazz Classic CDs (#503 and 517), present the Basie orchestra of 1936–1939.

Many European classical composers and Tin Pan Alley songwriters felt an attraction to jazz, and several attempts were made to "soften" jazz for white audiences. Paul Whiteman was the most successful of those large, smooth ensembles to capture the American fancy. He made more than 200 records between 1920 and 1924, including "hot" numbers like "Wang-Wang Blues" (Victor #18694; 9 Aug 1920), and "San" (Victor #19381; 9 June 1924). Whiteman's orchestra was all white; it included performers like Henry Busse and Matty Malneck, as well as some of the best white jazz musicians like Beiderbecke, Eddie Lang, and Joe Venuti. The orchestra also featured a young Bing Crosby in 1926.

From the beginnings of jazz, solo pianists were developing their own performance style with their own canon of great musicians. Count Basie, Duke Ellington (recording from 1924, famous from 1927 at the New York Cotton Club), Earl Hines (who started with Louis Armstrong in 1927 and recorded from 1928), James P. Johnson (recording from 1921), and Fats Waller (recording from 1922) played sophisticated variations on 32-bar popular songs; while Jelly Roll Morton kept a New Orleans foundation to his complex renditions (recording from 1923; first jazz artist on electrical recordings, 1924). Johnson, one of the seminal "stride" pianists, was earliest of this group to record, making piano rolls in 1918, and "Harlem Strut" on Brunswick #2026 in 1921; he then made a few more discs for Okeh, Arto, Columbia, and Victor by 1923. Another archetypal stride pianist was Waller, who made two sides for Okeh in 1922: "Muscle Shoals Blues" and "Birmingham Blues" (#4757), then was out of the recording studio until 1926 when he signed with Victor.

In the 1930s Art Tatum became recognized as the leading jazz piano virtuoso. His first record was an astonishing rendition of "Tea for Two" (Brunswick

#6553; 21 Mar 1933). *Classic Piano Solos (1934–1937)* (GRP #607) is a good collection of some of his early recordings. Teddy Wilson was another prominent pianist, playing with Benny Goodman and on his own, with major recordings from 1935.

The character of the typical swinging big band was established by Fletcher Henderson, whose arranger was Don Redman in 1923–1927. Generally, big bands were composed of sections of multiple trumpets, trombones, and saxophones that interacted over a rhythm section of piano, bass, guitar, and drums, while soloists would improvise over the textures set up by the rest of the band. *A Study in Frustration* (Sony #57596) is an excellent collection of Henderson recordings.

Benny Goodman was among the most successful of big band leaders, earning the title “King of Swing.” His band included trumpeter Bunny Berigan and drummer Gene Krupa, with arrangements by Fletcher Henderson. “King Porter Stomp” was an early triumph (Victor #25090; 1935). Goodman also led various small groups, beginning with a trio that included Krupa and Teddy Wilson; their series of hit records began with “After You’ve Gone” (Victor #25115; 1935). Of the myriad CD reissues of Goodman’s recordings, *Sing Sing Sing* (Bluebird/RCA #5630) stands out as an excellent introduction. At the end of the 1940s, jazz and the “swing music” that was often identified with it, was the predominant American style. *Down Beat* magazine, established in 1934, became the most successful and recognizable magazine devoted to jazz.

Imaginative orchestrations characterized the bands of the 1930s, with brilliant improvised choruses by pianists or instrumentalists who were often the band-leaders. The great jazz orchestras included those of Tommy Dorsey, Ellington, Lionel Hampton, Harry James, Glenn Miller, and Artie Shaw. Vocalists with the bands were mostly smooth ballad singers, but some entered the arena of jazz, notably Ella Fitzgerald, Billie Holiday, and in the late 1940s, Sarah Vaughan.

Leading jazz figures on various instruments in the 1930s included Roy Eldridge (trumpet), Benny Carter (alto saxophone), Charlie Christian (guitar), Gene Krupa (drums), and Lester Young and Coleman Hawkins (tenor saxophone).

European tours of major artists — such as those of Armstrong in 1932, Ellington in 1933, and Hawkins 1934–1939 (he stayed for five years) — served to engender international interest in jazz, notably in Britain, France, and Scandinavia. A French critic, Charles Delaunay, prepared one of the early jazz discographies in 1936. European performers did not generally find success in the United States, but Django

Reinhardt and Stéphane Grappelli — members of the quintet of the Hot Club of France — became internationally recognized. A Pearl CD, *Django Reinhardt and Stephane Grapelli: The Quintet of the Hot Club of France* (#9738) presents good examples of the Quintet’s exciting performances. The popular British bandleader Jack Hylton made a number of jazz records with small groups. Good British artists contributed significant jazz work in the 1930s, illustrated on the Avid CD #632 *Very Best of British Dance Bands*.

Personnel from the big bands frequently played in small ensembles in the 1930s and 1940s in jazz clubs, and as big bands were becoming financially unfeasible, smaller groups became the predominant employment opportunity for the jazz musician. From such little groups a new style emerged in New York in the 1940s, bebop. Its progenitors were Charlie Parker, Bud Powell, Thelonious Monk, and Dizzy Gillespie. Perhaps the greatest series of bebop records were made by Gillespie and Parker in 1945 and 1946. They included “Billie’s Bounce” (Savoy #MG 12079), and “Salt Peanuts” (Manor #5000; 1945). These recordings, along with much of Parker’s best work, are available on *The Complete Savoy and Dial Studio Recordings 1944–1948* (Savoy #92911).

Cool jazz developed in response to bebop in the 1940s, led by Lennie Tristano, Lee Konitz, Miles Davis, Gerry Mulligan, Dave Brubeck, and Paul Desmond. Harmonic and rhythmic subtleties marked the work of Brubeck, as well as the Modern Jazz Quartet (MJQ), headed by John Lewis (from 1952), and Stan Kenton’s band of 1947. A blending of Western art music with jazz, so-called third stream music, was popular, and further style mixtures (hard bop, gospel music) were initiated by Charles Mingus, Art Blakey, and others in the late 1950s.

Prominent artists in the 1960s included pianist Bill Evans and saxophonist John Coltrane. Pianist Cecil Taylor had begun stretching the formal and harmonic foundations of jazz to their limits as early as 1955. His first LP, *Jazz Advance* (Blue Note #CDP 7 84462), is a fine early example. Around the same time, similar advances were being made along more accessible aesthetic lines by alto saxophonist Ornette Coleman, paving the way for free jazz. Miles Davis and others brought rock music and free jazz together in “fusion” during the 1970s and 1980s — Davis’s landmark LP *Bitches Brew* (Columbia #65774) was a landmark of early fusion and one of only a handful of jazz albums to make it onto pop charts after the swing era. Keyboard players Chick Corea and Keith Jarrett were prominent in the fusion movement, as were guitarists John McLaughlin and John Scofield.

In response to the increasing stylistic fragmentation of the 1970s, several young jazz musicians, led by

New Orleans-born trumpeter Wynton Marsalis, achieved great success returning to older styles. At the same time, the scene surrounding the New York nightclub, The Knitting Factory, was combining jazz with rock, country, classical, and almost every other musical style, often during the same tune. The first album by Naked City, *Torture Garden* (Tzadik #7312), features two of the figureheads of the downtown scene, alto saxophonist John Zorn and guitarist Bill Frisell. Among musicians who made an impact in the 1990s, Steve Coleman (alto saxophone), Cassandra Wilson (voice), Tim Berne (alto and baritone saxophones), and Dave Douglas (trumpet) are notable.

Significant recordings by individual artists are cited in the separate articles about them. [Bruyninckx 1980; Harrison 1984; Jepsen 1963; Rust 1970; Schuller 1968; Schuller 1989.]

REV. CHRISTOPHER MEEDER

JEFFERSON, BLIND LEMON (CA. JULY 1897–DEC 1929)

American blues singer, born in Couchman, Texas. He lost his sight as a child, and lived by singing in the streets. In 1917 he moved to Dallas, sang with Leadbelly (Huddie Ledbetter), sang in several southern states, then located in Chicago. There he became famous and influential, singing mostly his own compositions, accompanying himself on the guitar. Around 1925 he signed with Paramount and soon became one of the most popular blues singers on record. Among



Paramount label for one of Blind Lemon Jefferson's recordings. Courtesy BenCar Archives

his biggest hit discs were "Long Lonesome Blues" (Paramount 12354; 1926), "Black Snake Moan," and "Match Box Blues" (Okeh 8455; 1927). He died in Chicago during a snowstorm; the exact circumstances of his death are unknown. His 78-rpm recordings have been reissued many times on LP and CD; Document Records has reissued his complete work on a series of CDs, and selections are available on Yazoo, Milestone/Riverside, Biograph, and many other domestic and European labels.

JEFFERSON AIRPLANE/STARSHIP

American rock group formed in 1965, originally consisting of Marty Balin, Signe Anderson (replaced by Grace Slick), Paul Kantner, Jorma Kaukonen, Bob Harvey (replaced by Jack Casady), and Jerry Pelequin (replaced by Spencer Dryden). The group became successful when vocalist Grace Slick joined it in 1966 and they became one of the leaders in the San Francisco/psychedelic scene. They initially had major hits with "Somebody to Love" (#5 pop; RCA 9140), and "White Rabbit" (#8 pop; RCA 9248), both from their gold album, *Surrealistic Pillow* (RCA 3766; 1967). Their follow-up album, *After Bathing at Baxter's* (RCA 1511; 1967), did not match its success, but they came back with *Crown of Creation* in 1968 (RCA 3797), which reached number six on the album charts. The band began to fall apart as Balin and Slick feuded; by 1970, Dryden had left, Slick was pregnant, and Kaukonen and Casady had formed their own sideband, the blues-jam band Hot Tuna, to keep themselves busy. In 1970, Kantner and Slick released the science-fiction themed *Blows Against the Empire* (RCA 4448), crediting it to Jefferson Starship (the first use of this name), which featured numerous musicians from the San Francisco scene, including Jerry Garcia and David Crosby. Meanwhile, the Airplane itself released the album *Volunteers* (RCA 4238), a social-protest work that had some FM play.

In 1971, the Airplane formed Grunt Records, distributed by RCA, for band and side projects. Two more Airplane albums appeared, including the number eleven album, *Bark* (Grunt 1001). Various personnel came and went through 1974, when a newly reinvigorated band was launched, under the leadership of Kantner and Slick, now calling itself Jefferson Starship. They released one album, with a "guest appearance" on one track by vocalist Marty Balin, who then officially rejoined the group in January 1995. The result was *Red Octopus* (Grunt 0999; 1975), a major hit for the new ensemble, with the single "Miracle" (Grunt 10367; 1975). Other chart singles followed, including "With Your Love" (Grunt 10745; 1976), and "Runaway" (Grunt 11274; 1978).



The Jefferson Airplane in the publicity shot for their *Surrealistic Pillow* album, 1967. Courtesy RCA Records

However, soon after this final hit, Slick and Balin left the band, and it looked like the end of its success.

Kantner nonetheless persevered, recruiting Mickey Thomas as a new lead vocalist in 1979. Slick guested on the new lineup's second album in 1980, and then returned full-time a year later. A few Top 40 singles followed, but then, objecting to the group's increasing pop-rock sound, Kantner left in 1984. Because he held the rights to the "Jefferson" prefix, the group now became simply Starship. Once again, surprising everyone, they released a platinum-selling album, *Knee Deep in the Hoopla* (Grunt 5488), in 1986, featuring the number one hits "We Built this City" (Grunt 14170), and "Sara" (Grunt 14253). The group had two further hits, 1987's number one "Nothing's Gonna Stop Us Now" (Grunt 5109), and the number nine "It's Not Over ('Til It's Over)" (Grunt 5225). Slick left the group in 1989, and Thomas managed to keep it going for another year before Starship finally died.

In 1989, the "original" band of Kantner, Slick, Balin, Casady, and Kaukonen reunited for a new album and tour. Kantner then reclaimed the Jefferson Starship name, and under the "Next Generation" moniker, led a band that included, at times, Slick and Casady (among others) through the early 1990s.

CARL BENSON

JEM (LABEL)

The Jem label was established in 1970 by Marty Scott, Edward J. Grossi, and Jeffrey C. Tenebaum. The firm started out selling British imported discs from a van on college campuses, and went on to great success as an importer/distributor. Jem brought Elton John and Genesis to the American market, and had a hit with the soundtrack of *The Rocky Horror Picture Show*. It launched subsidiary labels Passport, Passport Jazz, and Audion. In 1985 Jem encountered legal problems in the form of a suit for copyright infringement, brought by T.B. Harms, an American music publisher. A federal court ruled that importers like Jem would have to pay royalties to publishers. Jem filed for bankruptcy in August 1988.

JENNINGS, WAYLON

(15 JUNE 1937–13 FEB 2002)

American country singer, guitarist, and disk jockey, born in Littlefield, Texas. He learned to play guitar as a young child, and was engaged as a disk jockey at age 12 on a local station. Moving to Lubbock, he worked as a deejay and also performed with Buddy Holly. He formed his own group in Phoenix, Arizona, in the early 1960s, was heard by Chet Atkins and signed to a contract with RCA. Soon he was on national tours and *Grand Ole Opry*. "Stop the World" was an early hit (8652; 1965), followed by "Anita, You're Dreaming" (8729; 1966). In 1976, RCA released an anthology album featuring Jennings and his wife Jessi Colter along with Willie Nelson and Tompall Glaser called *The Outlaws* (RCA 1321), which became the definitive collection for this new style of music. In 1978, he recorded a classic album of duets with Nelson called *Waylon and Willie* (RCA 2686). By 1982 Jennings had posted 52 singles on the country charts. Although Jennings continued to produce hits well into the 1980s, he was starting to sound like a parody of himself. In the mid-1980s, he joined with Kris Kristofferson, Johnny Cash, and Nelson for the concept LP, *The Highwaymen* (Columbia 40056; 1985); there would be more albums and various tours through the early 1990s for the quartet. Jennings left RCA for MCA in the late 1980s, but the quality of his recordings continued to drop. In 1995, he signed with the small Justice label, releasing two albums by the end of the decade. In 2001, Jennings was inducted into the Country Music Hall of Fame. Later that fall, suffering from diabetes, he underwent surgery for the amputation of his foot. In February 2002, Jennings passed away in his home in Chandler, Arizona, from complications of the disease.

REV. CARL BENSON

JENKINS, GORDON
(12 MAY 1910–24 APR 1984)

American songwriter, record producer, and arranger, born in Webster Groves, Missouri, although raised in Chicago, where his father worked as a movie theater organist. He moved to St. Louis in the early 1930s where he worked as a radio announcer and freelance pianist, and then in 1936 became arranger for the popular Isham Jones band; he later arranged for other big bands as well. He worked on Broadway and in Hollywood, and then served as music director for radio station NBC in its Hollywood studios from 1939 to 1944. In 1945, he joined Decca Records as their house conductor. He conducted the orchestra on many Decca releases, including popular recordings by Louis Armstrong, Peggy Lee, and the folk group the Weavers, including their number one hit recording of "Goodnight Irene" in 1950 (Decca 27077). He also had his own hits with his orchestra between 1942 and 1953. From the mid-1950s, Jenkins joined the staff of Capitol Records. He worked as arranger-conductor for several vocalists in the 1950s and early 1960s, including Judy Garland and Nat "King" Cole, and won a Grammy for his arrangements for Frank Sinatra's album *September of My Years* (1965; Reprise 1014). Jenkins died in Malibu, California.

CARL BENSON

JENSEN CORPORATION

SEE *NHT CORP.*; *ACOUSTIC RESEARCH (AR)*; *JENSEN CORPORATION*

JENSEN, PETER LAURITS (1886–1961)

Born in Denmark, and sometimes called the Danish Edison, Jensen began working in the laboratory of Valdemar Poulsen soon after Poulsen's public demonstration of the telegraphone at the 1900 Paris Exhibition. Jensen helped Poulsen develop a continuous wave arc transmitter that made voice transmissions from a radio station at Lyngby near Copenhagen in 1905. Jensen came to America in 1909 to help develop products for the Poulsen Wireless Telephone and Telegraph Company, then financed by Pal Alto investor Cyril Elwell. The idea was to compete with General Electric's system, which was based on Reginald Fessenden's patent. While building a radio station in Sacramento, he met Edwin Pridham, who had an electrical engineering degree from Stanford and was working for the Elwell company.

Pridham helped Jensen learn English and American history. When the Elwell company was reorganized

into Poulsen Wireless and Federal Telegraph, Pridham and Jensen left and joined the new Commercial Wireless and Development Company. In 1911, Jensen and Pridham moved to Napa, California, and began a small research laboratory. They experimented with Poulsen's arc radio transmitter, adding thicker wires connected to a diaphragm, and putting a coil of copper wire between magnets. In 1915, they made a working model of what they called the "electro-dynamic principle" for voice reproduction. They incorporated a gooseneck horn from an Edison phonograph on their device, called it a "Magnavox," and sold it as a public address system.

In 1917, Jensen and Pridham merged with the Sonora Phonograph Corp. and formed the Magnavox Company in San Francisco. In 1919, they provided loudspeakers for a speech by Woodrow Wilson in San Diego, and Magnavox gained national attention. Its speakers were used in the 1920 political conventions by the campaigns of James Cox and Warren Harding, and at the 4 Mar 1921, Harding inauguration. However, AT&T dominated public address system technology, especially after the 1921 Armistice Day demonstration, and Magnavox shifted its focus to radio and phonographs.

Jensen left the company in 1925 and founded the Jensen Radio Manufacturing Co. in 1927, moved it to Chicago, and made improved loudspeakers with the help of engineer Hugh Knowles. In 1930, his company produced the first permanent-magnet loudspeaker system and also the first compression-driven horn tweeter. In 1936 it produced the first bass-reflex speaker enclosure, and in 1942 it introduced the first commercial coaxial two-way loudspeaker. Jensen resigned from the company in 1943 because of disputes with his backers, and later founded Jensen. (*The Magnavox company* continued to operate, eventually becoming part of Philips Electronics in the late 1980s, which continues to market home electronic items under this name.) In 1956, the king of Denmark knighted Jensen, and he was made an honorary member of the Audio Engineering Society in that same year. In 2001, he was inducted into the Consumer Electronics Hall of Fame.

HOWARD FERSTLER

JESSEL, GEORGE
(3 APR 1898–23 MAY 1981)

American singer and vaudeville artist, born in New York. At age nine he was already on stage; he appeared in London in 1914. His greatest stage success was in *The Jazz Singer* (1925). Jessel was a film actor from 1927, and after he retired from singing he became a

JETHRO TULL

motion picture producer. The first (released) records by Jessel were for Pathé: "Marcelle" (68587), and "Dolls" (68588), made in the summer of 1920. He then made "Jing-a-Bula-Jing-Jing-Jing" for Emerson later that year (10264). "My Mother's Eyes" from the film *Lucky Boy* was his biggest hit disc (Victor 21852; 1929). His repertoire included Jewish dialect material, humorous monologs, and sentimental songs. He died of a heart attack in Beverly Hills, California.

JETHRO TULL

Jethro Tull was one of the classic British progressive rock bands of the 1970s, notable for its use of extended song forms and eclectic mix of musical styles. Lead vocalist/flutist Ian Anderson not only wrote most of the band's material, but supplied their visual image with his fevered flute playing (often while hopping around on one leg), and medieval peasant costumes.

London-based Jethro Tull originated in late 1967 when fellow Scots Anderson and Glenn Cornick (bass), formerly of John Evans's Smash, recruited guitarist/vocalist Mick Abrahams and drummer Clive Bunker. Adopting the name of an 18th-century farmer/inventor, they issued one unsuccessful English single for MGM (which mistakenly credited it to "Jethro Toe" on the label) before signing with Island in mid-1968. Their debut LP, *This Was* (Reprise 9336; 1968; #62 US, #10 UK), exhibited a strong blues-rock orientation. However, the departure of Abrahams to form Blodwyn Pig (he was replaced by guitar Martin Barrie) resulted in a shift toward progressive rock. Two rather pastoral releases — *Stand Up* (Reprise 6360; 1969; #20 US, #1 UK), and *Benefit* (Reprise 6400; 1970; #11 US, #3 UK) — were followed by the extremely popular concept albums, *Aqualung* (Reprise 2035; 1971; #7 US, #4 UK), and *Thick as a Brick* (Reprise 2071; 1972; #1 US, #5 UK), featuring a more propulsive thrust and Anderson's biting diatribes against organized religion, government, and other institutions of the Establishment.

Beset by extensive press criticism over self-indulgent lyrics and extensive personnel changes, the group treaded water with *Living in the Past* (Reprise 2106; 1972; #3 US, #8 UK), a double-disc set divided between live recordings and older studio material. As Jethro Tull's timeworn formula wore thin, the band abruptly jumped from one quick fix to another, reverting to concise song structures on *War Child* (Chrysalis 1067; 1974; #2), and *Minstrel in the Gallery* (Chrysalis 1082; 1975; #7), trying a folk-oriented approach for *Songs from the Wood* (Chrysalis 1132; 1977; #8) and *Heavy Horses* (Chrysalis 1175; 1978; #19), and adopting the trappings of techno-pop in *Walk Into Light* (Chrysalis 1443; 1983; #78 UK;

Anderson's initial solo venture, assisted by Tull keyboard player Peter Vitesse), and *Under Wraps* (Chrysalis 1461; 1984; #76).

Following a three-year hiatus due to throat problems, Anderson reassembled the group in 1987. The next couple of albums — *Crest of a Knave* (Chrysalis 1590; 1987; #32), and *Rock Island* (Chrysalis 21708; 1989; #56) — were closer to the prevailing AOR (album oriented rock) ethic than anything Tull had released since the early 1970s. The former LP won the first Grammy for the category of best hard rock/metal performance, a choice that led to widespread criticism of NARAS. Jethro Tull continues to tour and record, although anthologies of their classic tracks have outsold the new material since the 1980s.

FRANK HOFFMANN

JEWEL (B. JEWEL KILCHER) (23 MAY 1974–)

Born in Payson, Utah, Kilcher was raised by her father in rural Alaska. After attending Michigan's Interlochen Fine Arts Academy, she relocated to Southern California to live with her mother, where she pursued a career as a singer-songwriter. She began playing in local coffeehouses, which brought her to the attention of Atlantic Records, which signed her in 1995. Her first album, *Pieces of You* (East West/Atlantic 82700), initially saw meager sales, until 14 months after its release the song "Who Will Save Your Soul?" became a major chart hit. Other hits, notably "You Were Meant for Me," followed in a similar soft-rock vein. Jewel published collections of her own poetry along with several followup albums, but had only one further hit, "Hands," in 1998. Then, in 2003, the singer tried to remake her image as a more sexy siren on the album *0304* (Atlantic 83638), a collection of dance-pop songs. It produced a hit with the song "Intuition."

JEWEL

A diamond, ruby, or sapphire stylus for pickups, soundboxes, and reproducers on acoustic machines.

JEWEL (LABEL) (I)

A record issued in 1920–1923, apparently a Grey Gull subsidiary.

JEWEL (LABEL) (II)

One of the Plaza group of labels, released from 1927 to 1932. It had no important material, and sold for a low price, perhaps \$.15. [Rust 1978.]



Jewel was a budget label operated by Plaza in the late '20s/early '30s. Courtesy Kurt Nauck/Nauck's Vintage Records

JEWEL PHONOGRAPH CO., INC.

A Chicago firm, established in 1916 and incorporated in 1919. A specialty product was the Blood Tone Arm, named for its inventor, first advertised in January 1921. This device was compatible with lateral-cut or vertical-cut discs. It had a tapering design. Three months later the tone arm was renamed the Jewel (but in March 1923 the firm advertised in *TMW* that there were illegal imitators of the Blood Tone Arm being sold). It seems that the name of the company also changed in 1921, to the Jewel Phonoparts Co. The final Chicago directory listing for Jewel was in 1929. At that time William T. Urles was president, and A.H. Davis was vice president.

JEWETT RADIO AND PHONOGRAPH CO.

A Detroit firm, the earliest to advertise in *TMW* a radio-phonograph combination (August 1922). In April 1923 a *TMW* story related the acquisition by Jewett of DeForest Radio, Telephone, and Telegraph, including the Audion patent and 180 other patents. Radio station WJR in Detroit belonged to Jewett; it began broadcasting in September 1925.

JEWISH MUSIC RECORDINGS

With the dawn of commercial recording at the beginning of the 20th century, record companies saw the

influx of millions of émigrés as perfect markets for music from the countries they had just left. Among the most popular were those records made by and for the Yiddish-speaking community. From 1895 and 1942, labels like Victor and Columbia issued some 5,000 Jewish records in the U.S. (While most companies were not exclusively Jewish, one early exception was New York's short-lived United Hebrew Disc and Cylinder Record Company in 1903.)

The timing couldn't be better for these records. Yiddish popular culture had just exploded across Europe, spreading here with the new émigrés. Yiddish theater, founded in Rumania, blossomed on American shores where, at its peak, it claimed more than one-third of all playhouses in New York. Composers by the score, like Joseph Rumshinsky, Alexander Olshanetsky, and Sholom Secunda turned out reams of music for stars like Aaron Lebedeff, Nellie Casman, Gus Goldstein, and Molly Picon.

The stage was not the only source for recording. This was the golden age of cantors like Gershon Sirota, Yoselle Rosenblatt, and Berele Chagy who, with their booming and nuanced voices, brought the power and pathos of the synagogue into the homes of their congregants. Even the once lowly klezmer, the traditional wedding musician, found a ready record audience thanks to giants such as Abe Schwartz, Naftule Brandwein, and Dave Tarras.

With the Depression, the bottom fell out of commercial recording, but with Jewish records even more so. Their production would not resume until 1939, only to be scuttled again with the recording ban of 1942.

The postwar years saw Jewish music slip from major to minor labels. Some, like Banner, founded by Yiddish theater heartthrob Seymour Rechtzeit, were all Jewish, while others like Apollo, Laff, and Savoy, were more like the old majors issuing everything from bebop, country, and "party records," in addition to Jewish material.

By the 1960s, LPs of Jewish music were being issued by penny ante companies like Tikvah and Aderet whose budgets—and quality—were dependably low. Exceptions were Moe Asch's Folkways, which issued traditional Yiddish folk music, and Ben Stambler's Collector's Guild with high-quality 78-rpm reissues and modern Hasidic music.

By the 1970s, the mantle of producing Jewish records passed to traditional music labels such as Arhoolie, Rounder, Flying Fish, and Shanachie, thanks to the meteoric rise of klezmer artists Andy Statman, the Klezmerim, Kapelye, and the Klezmer Conservatory Band. The rise of "radical Jewish music" in the 1980s inspired by artists like the Klezmatics, resulted in labels like John Zorn's JM and

JIVE (LABEL)

the eponymous Knitting Factory label. However, it is Jewish records from the Orthodox/Hasidic communities, featuring singers like Avrom Fried and Mordechai Ben-David, that sell many thousands more copies than even the most popular klezmer band.

And finally, as if to mimic their start in the 20th century, the majors reprised their Jewish issues. In 2002, Sony — the parent company of the former Columbia — reissued an unprecedented four CD series of Yiddish music masterworks on their Legacy label.

HENRY SAPOZNIK

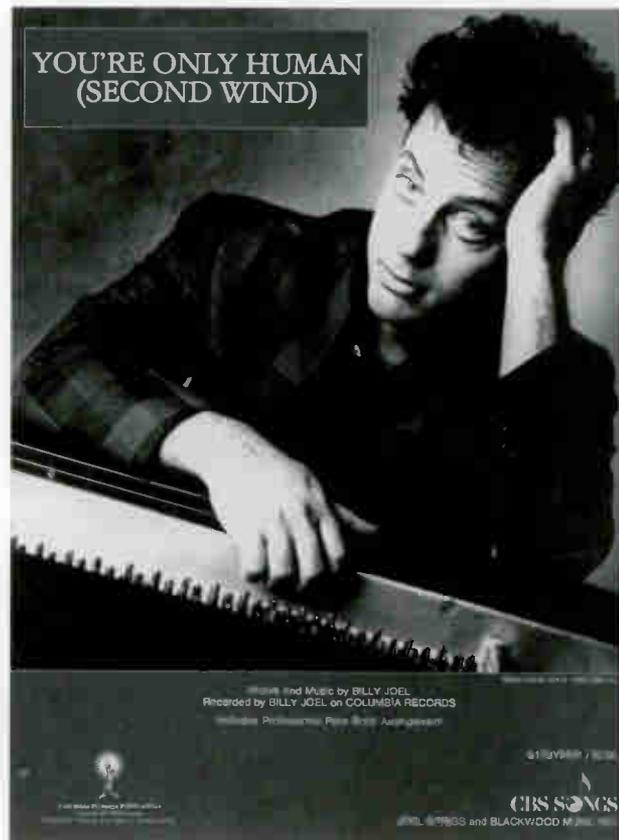
JIVE (LABEL)

Founded in England in 1981 as a division of the Zomba group by Clive Calder, the label has become a leading purveyor through its U.S. division of rap music. Early success in the rap world came with Kool Moe Dee, A Tribe Called Quest, and Wee Girl Papa Rappers, but commercial success really came with the crossover success of DJ Jazzy Jeff and the Fresh Prince (Will Smith). In 1988, the duo won the first rap Grammy for “Parents Just Don’t Understand” (#12 pop, Jive 1099). In the 1990s, the label expanded into teen pop with successful recordings by the Backstreet Boys and Britney Spears. In 2002, Zomba and its labels was purchased by the Bertelsmann Music Group. [Website: www.jiverecords.com.]

JOEL, BILLY (9 MAY 1949–)

Joel’s refined sense of songcraft places him squarely within the classic Tin Pan Alley mold; as a result, some pop journalists have questioned the legitimacy of his rock-styled compositions. In point of fact, he has always been more an interpreter of past traditions — his eclectic reach has encompassed light classical pastiches, boogie-woogie, doo-wop, soul, protest rock, punk, and a sometimes unwieldy blend of singer/songwriter intimacy and cabaret flash — than a musical innovator. Although an accomplished singer/pianist and dynamic performer, Joel’s songwriting remains the most notable feature of his extensive body of recorded work.

Born William Martin Joel in Hicksville, Long Island, he began performing in a rock vein as a member of the Echoes in 1965. He recorded a couple of albums with the Hassles in the late 1960s, followed by an eponymous LP (Epic 30030; 1970) with the hard rock duo, Attila. Signing a solo contract with Family Productions’ Artie Ripp in 1971, he produced *Cold Spring Harbour* (Family 2700; 1971), marred by a mixing fault that placed his voice in a much higher than customary register (the problem would be corrected when reissued on Columbia 32400 in 1984).



Billy Joel in the mid-'80s at the height of his fame. Courtesy David A. Jasen

Relocating to Los Angeles, Joel signed with Columbia Records. His first LP with label, *Piano Man* (Columbia 32544; 1975; #27), proved to be a career breakthrough, driven by extensive FM play for “Captain Jack” and the title track (Columbia 45963; 1974; #25). The follow-up albums, *Streetlife Serenade* (Columbia 33146; 1974), and *Turnstiles* (Columbia 33848; 1976) — while enhancing his artistic reputation — failed to build on his earlier commercial success. He emerged as a superstar, however, with *The Stranger* (Columbia 34987; 1977; #2), which featured four hit singles: “Just the Way You Are” (Columbia 10646; 1977; #3), “Movin’ Out (Anthony’s Song)” (Columbia 10708; 1978; #17), “Only the Good Die Young” (Columbia 10750; 1978; #24), and “She’s Always a Woman” (Columbia 10788; 1978; #17).

However calculated ensuing releases might appear to be, Joel has continued to experiment stylistically although never straying at any point in time beyond the boundaries of the pop mainstream. *52nd Street* (Columbia 35609; 1978; #1) was defiantly pitched to AOR (album oriented rock) sensibilities, while *Glass Houses* (Columbia 36384; 1980; #1) — which included his first chart-topping single, the retro rocker “It’s

Still Rock 'n' Roll To Me" (Columbia 11276; 1980) — attempted to appropriate a measure of the punk energy then gaining widespread consumer acceptance. Between a couple of perfunctory live affairs — *Songs in the Attic* (Columbia 37461; 1981; #8), and ...*Live in Leningrad* (Columbia 40996; 1987; #38) — he ranged from the impassioned social commentary of *The Nylon Curtain* (Columbia 38200; 1982; #7), to the more carefree exuberance of the Brill Building-tinged *An Innocent Man* (Columbia 38837; 1983; #4) and *The Bridge* (Columbia 40402; 1986; #7).

From the mid-1980s onward, greatest hits collections (on a wide range of audio and video formats) have outnumbered releases devoted to new material. Nevertheless, Joel remains a musical chameleon, moving from energetic arena rock of *Storm Front* (Columbia 44366; 1989; #1), which included the tongue-twisting recitative, "We Didn't Start the Fire" (Columbia 73021; 1989; #1), to elegiac *River of Dreams* (Columbia 53003; 1993; #1). With only one nonretrospective album appearing since then — and another concert release, *2000 Years: The Millennium Concert* (Columbia; 2000) — his years as a pop hit-maker may be behind him. Since his "retirement" from pop songwriting, Joel has composed piano music in a classical-influenced style that has been recorded and performed to some success. Joel's back catalog was given a considerable boost thanks to its use as the score for Twyla Tharp's Broadway dance-musical, *Moving Out*, in 2002, a major hit.

FRANK HOFFMANN

**JOBIM, ANTÔNIO CARLOS
BRASILEIRO DE ALMEIDA ("TOM")
(25 JAN 1927–8 DEC 1994)**

Antônio Carlos Jobim was born in Rio de Janeiro and became Brazil's most famous musician and one of the great songwriters of the 20th century. His first success in the United States was "Desafinado" from the *Jazz Samba* album recorded by Stan Getz and Charlie Byrd (Verve 68432; 1962). It was quickly followed by the even more popular album *Getz/Gilberto* (Verve 68545; 1963), which featured "The Girl from Ipanema" (Gârota De Ipanema). These and other songs such as "Triste," "No More Blues" (Chega de Saudade), "Quiet Nights of Quiet Stars" (Corcovado), "Dindi," "How Insensitive" (Insensatez), and "Wave" became standards, and are among the most recorded music of all time.

Jobim benefited from a classical music education and considered his masters to be Chopin, Debussy, Stravinsky, and Villa-Lobos. His popular music influences included samba, American music, and cool jazz

players such as Gerry Mulligan and Chet Baker. While principally a pianist, he was sometimes called on to play guitar and sing, as on his first album with Frank Sinatra, *Francis A. Sinatra and Antonio C. Jobim* (Reprise FS1021). It was awarded the Grammy for best album in 1967, the year in which sales of his records were second only to the Beatles's *Sgt. Pepper's Lonely Hearts Club Band*. He became identified internationally with the bossa nova style — a delicate way of playing the samba that emerged among the cultural elite in Brazil during the late 1950s. Bossa nova came together there first in the recordings of João Gilberto, whose new style of singing and guitar playing complemented Jobim's syncopated melodies and rich harmony.

Jobim visited the United States for the first time in 1962 as a performer in a concert of Brazilian music presented at Carnegie Hall, and sold the rights to "Meditation," "One Note Samba," and "Girl from Ipanema" to MCA for \$1,200 in order to be able to afford to stay through the winter. He later spent months at a time in New York and Los Angeles supervising the translation, arrangement, and recording of his work.

The majority of his work is not known in the United States — only a small number of his songs have been given English lyrics, and it is usually the same classic ones that get played. Outside of Brazil he is remembered for his bossa novas, but of the hundreds of songs he wrote, 90 percent are in other styles, such as samba, modinha, waltz, choro, baião, toada, bolero, and chamber music.

ROBERT WILLEY

JOHN BULL (LABEL)

A British label sold by various companies in Britain from 1909 to 1914. The earliest firm to handle the label was the English Record Co., Ltd. In 1913 the record passed to Schallplatten-Masse-Fabrik, and in December 1913 to Albion Record Co., Ltd. An unusual distribution method was used for these discs: they were sold on contract to individual buyers, requiring an initial purchase of eight discs, and then another 52 of them to qualify for a free gramophone. Matrices came from several labels: Beka, Favorite, Dacapo, and Bel Canto. The material was popular in nature: dances, instrumentals, concert songs, and marches. [Andrews 1973.]

JOHN, ELTON (25 MAR 1947–)

The most popular recording artist in the U.S. between 1970 and 1975, Elton John has become an entertainment

JOHN GABEL'S AUTOMATIC ENTERTAINER

institution, appearing on Disney film soundtracks, collaborating with stage composer Tim Rice, establishing an AIDS foundation in 1992 supported in part by royalties from his recording, and reviving his 1973 composition, "Candle in the Wind," at Princess Diana's funeral. His middle-of-the-road sensibilities of recent decades obscure the fact that his ambitious early work helped cast the musical fashions of the 1970s.

Born Reginald Kenneth Dwight in Pinner, Middlesex, England, he joined the group Bluesology as a vocalist/pianist in the early 1960s. The band would go on to release several singles during the 1965–1967 period before Dwight opted for a solo career (augmented by lyricist Bernie Taupin), taking his performing name from Bluesology members Elton Dean and Long John Baldry. Following a string of unsuccessful singles and the rather bland *Empty Sky* (Uni 2130; 1969), John made a major splash on both sides of the Atlantic with *Elton John* (Uni 73090; 1970; #4 US, #11 UK), the first of many recordings to be produced by Gus Dudgeon. Although that album's delicate textures seemed to place it squarely within the singer-songwriter movement then in vogue, follow-up releases — most notably *Honky Chateau* (Uni 93135; 1972; #1), *Don't Shoot Me I'm Only the Piano Player* (MCA 2100; 1973; #1), *Goodbye Yellow Brick Road* (MCA 10003; 1973; #1; double-disc set), *Caribou* (MCA 2116; 1974; #1), the loosely structured concept LP, *Captain Fantastic and the Brown Dirt Cowboy* (MCA 2142; 1975; #1), and *Rock of the Westies* (MCA 2163; 1975; #1) — veered in the direction of album oriented rock (AOR), ideally suited as the soundtrack to his outrageously theatrical live performances. The double-LP, *Blue Moves* (MCA 11004; 1976; #3), removed much of the energy and spirited humor of John's best work, evoking instead a prevailing sense of Gothic despair.

Following a brief retirement in the late 1970s, John (sans Taupin until they reunited in 1983) experimented with a variety of styles in an attempt to return to public favor. Over the next two decades, John made numerous "comebacks," and although he has never equaled his earlier creativity, he has scored major hits. He enjoyed his first career revival from 1983 to 1988, beginning with the hit "I'm Still Standing," and continuing through 1988's "I Don't Want to Go On with You Like That." A period of inactivity followed while John battled heavy drug use and other personal problems. John returned to mainstream success with his double-platinum, Top 10 album, *The One* (MCA 10614), in 1992. Two years later, he collaborated with lyricist Tim Rice on the score for Disney's animated film, *The Lion King*, an enormous success that later was transferred to the Broadway stage. "Can You Feel the Love Tonight," the big ballad from the film, won

an Academy Award for best original song and a Grammy for best male pop vocal performance. John continued to produce strong-selling albums through the mid-1990s. A close friend of Britain's Princess Diana, he was deeply affected by her death in 1997; he and Taupin reworked their earlier hit "Candle in the Wind," which he performed at her funeral. Released as a benefit single to help Diana's favorite charity, eliminating land mines, it became the fastest selling single ever, selling more than 3 million copies in its first week of release, and becoming John's biggest seller. In 1998, John reunited with Rice to create a modern version of Verdi's *Aida* for the Broadway stage. He has also become a perennial touring favorite, and an elder statesman/icon of the popular music world.

FRANK HOFFMANN

JOHN GABEL'S AUTOMATIC ENTERTAINER

A disc coin-op produced in 1906 by the Automatic Machine and Tool Co. This early jukebox held 24 10-inch records, and allowed the user to choose any one by turning a knob. It operated with a hand-wound spring motor, installed in a glass-sided cabinet five feet high that permitted viewing of the mechanism. A needle-changing device provided a fresh needle for each playing. The Entertainer even had a magnetic coin detector to defeat the use of slugs in place of official coinage. The machine was shown at the Panama Pacific Exposition of 1915.

JOHNS, GLYN (15 FEB 1942–)

Born in Epsom, England, Johns is a noted recording engineer and producer who worked with several major rock acts of the 1970s and 1980s. He began his career as a would-be rock star in the early 1960s, but after failing to achieve much success, apprenticed with pop producer Shel Talmy. He began working with the Rolling Stones in 1965, with engineering credits on the group's *Their Satanic Majesties Request* (1968), and *Beggars Banquet* (1969). In 1968, he began working with the Steve Miller Band, producing, engineering, and performing as a backup musician on their landmark *Brave New World* album a year later. Johns did his most famous work in the early 1970s, producing and engineering all of the Who's albums from the 1970s and 1982's *It's Hard*, engineering for the Rolling Stones (*Sticky Fingers*, 1971; *Exile on Main Street*, 1972), producing the Faces (*A Nod Is as Good as a Wink to a Blind Horse*), and producing and engineering the Eagles's first two albums (their self-titled debut and the hit album *Desperado*). Later in the

decade he worked with Eric Clapton, notably on his *Slowhand* album in 1977. Johns has continued to produce through the 1980s and 1990s, working with lesser-known artists including Nanci Griffith, Belly, and John Hiatt, among many others.

CARL BENSON

JOHNSON, ELDRIDGE REEVES (6 FEB 1867–14 NOV 1945)

American recording engineer and industry executive, born in Wilmington, Delaware. He worked as a machinist in Philadelphia, then managed a small machine shop owned by Andrew Scull in Camden, New Jersey. Johnson became Scull's partner in 1891, and bought the business from him in 1894. He built the spring motor for the Berliner gramophone, and in 1896 got the contract to supply them. In 1897 he and Alfred C. Clark developed the "improved gramophone" with a better motor and sound box (U.S. patent #601,198; filed 19 Aug 1897; granted 22 Mar 1898). This is the machine immortalized in the Nipper painting. He also devised the method of recording on wax blanks, which were then covered with gold leaf; this led to a master that produced stampers and finally a pressing of a new, smooth, relatively quiet surface. The records were the seven-inch "Improved Gram-O-Phone Records" that set the industry standard. The first 10-inch disc is also credited to Johnson, who reasoned that with a larger turntable and stronger motor the enhanced record size would be feasible. It sold as the Victor Monarch, following a favorable court decision in litigation brought by Frank Seaman. Johnson sold British rights to the wax process and the paper label to the Gramophone Co., which became the Victor partner in Europe. (In 1907 an agreement between the firms divided the world market between them.)

Johnson went on to receive 53 other patents, most of them in his own name alone. He developed the famous and frequently litigated tapering tone arm design "which would dominate the industry through the acoustical period" (Koenigsberg), and gained U.S. patent #814,786 (filed 12 Feb 1903; granted 13 March 1906). On 8 Aug 1900 he filed to patent a disc with a slightly recessed center area to allow placement of a paper label (U.S. #739,318; granted 22 Sept 1903). He developed a cabinet for a table model record player with all movable parts enclosed, for enhanced appearance, although the horn was still exposed during operation (U.S. patent #774,435; filed 19 Nov 1902; granted 8 Nov 1904); it was a step toward the Victrola — the fully enclosed record player, also patented by Johnson (U.S. #856,704; filed 8 Dec 1904; granted 11 June 1907).



Early record released by Eldridge Johnson's Victor company. Courtesy Kurt Nauck/Nauck's Vintage Records

Johnson established the Consolidated Talking Machine Co. in 1900, and made both discs and players with the Nipper trademark; this firm merged with Berliner to become the Victor Talking Machine Co. (incorporated on 3 Oct 1901), with Johnson as president. Victor acquired the Berliner patents and took the lead in the development of the phonograph industry.

The success of Victor was in large part due to the unprecedented promotional campaign directed by Eldridge Johnson and Leon Douglass, Victor vice president. The firm advertised in newspapers and periodicals, presenting the public with an image of quality and sophistication that no rival was able to match. In 1903 Johnson initiated the Red Seal series (based on the Red Label celebrity records of G&T in the U.K.) in a special recording studio in Carnegie Hall. The Red Seals presented Metropolitan Opera stars and other great artists, some on 10-inch discs, and others on the new 12-inch discs.

Among Johnson's other contributions to the industry was the exclusive artist contract, which captured Enrico Caruso in 1904 and many other international artists. He continued to experiment with improvements in equipment, and made an experimental model of a record changer in 1920; this was developed into a marketable Victor machine in 1927.

In December 1926 Johnson sold 245,000 shares of Victor stock for \$28,175,000 and retired. Control of the firm passed to a pair of New York bankers, Speyer and Co. and J.W. Seligman and Co., and thence to the Radio Corporation of America in 1929. Eldridge Johnson died in Moorestown, New Jersey. [Koenigsberg 1989.]

JOHNSON, GEORGE W.
(CA. 1846–CA. 1914)

American comedian and whistler, born in slavery; the first Black to become widely known as a recording artist. Johnson had a small repertoire that he performed and recorded extensively in the 1890s. Five pieces were recorded, beginning in 1892 for New Jersey Phonograph Co. "The Whistling Coon" (Edison 4012, etc.), "The Laughing Song" (Edison 4004, etc.), "Laughing Coon" (Edison 4005, etc.), and "Whistling Girl" (Edison 4013, etc.), constituted his principal menu. They were made over and over again, for Berliner, Bettini, Columbia, Kansas City Talking Machine Co., Chicago Talking Machine Co., U-S Everlasting, Zonophone, Victor, and others. A fifth number, recorded only for Berliner (#403), was "The Mocking Bird." The story that Johnson had been hanged for murdering his wife was disproved by Walsh, who documented that Johnson had been acquitted of that charge. [Brooks 1979; Koenigsberg 1987; Walsh 1944/9 and 1971/1–2.]

JOHNSON, JAMES P.
(1 FEB 1894–17 NOV 1955)

American jazz pianist, born in New Brunswick, New Jersey. In 1908 his family moved to New York, where he studied piano, and had some guidance from Eubie Blake. He played in New York Black clubs, and became known for a driving style and "shout" pieces. As early as 1917 Johnson made some piano rolls, and in 1921 he was on disc in "Harlem Strut" (Black Swan 2026; 1921), and "Keep Off the Grass" with "Carolina Shout" (Okeh 4495; 1921). These were his own compositions, among the more than 200 he wrote and performed. He also composed large works, including "Yamecrow" for piano and orchestra, performed in Carnegie Hall by Fats Waller in 1927.

It was as a jazz pianist that Johnson made his great contributions. He was one of the finest stride pianists, introducing many subtleties to the technique. He was influential in the development of Fats Waller and many later keyboard giants. He also had a fine jazz band, which included J.C. Higginbotham on trombone and Sid Catlett on drums, that recorded notable numbers like "Harlem Woogie" (Vocalion 4768; 1939). During the 1940s he recorded for the small Asch/Disc label in New York, as well as other small labels. Johnson suffered a stroke in October 1946 and then a more damaging one in 1951; he was unable to play after the second stroke. Johnson's 1920s–1930s-era recordings have been reissued on LP and CD on a variety of labels; the British Collectors label has begun a CD series to reissue them all in chronological order. Decca

recordings from 1930 and 1944 are collected on GRP 604, *Snowy Morning Blues*. Sixteen of his Asch recordings are collected on *The Original* (Smithsonian/Folkways 40812). Johnson died in New York. [Brown, S. 1986.]

JOHNSON, KEITH O. (29 MAR 1938–)

A noted recording engineer, Johnson graduated from Stanford University in 1960 with a B.S. degree in electrical engineering and minors in music and physics. He then went on to do graduate work in mathematics and circuit theory. From 1955 to 1963 he worked for Ampex Corporation, first as a technician and later on as an engineer working in the company's advanced technology group. In 1963–1964, he worked for Winston Research Corporation as a designer of instrumentation recorders. Between 1965 and 1973, he worked for Gauss Electrophysics, MCA, and Cetec Corporation, helping to pioneer several recording technologies, including endless-loop duplicating, RF bias, real-time log-sweep alignment techniques, and high-speed servo transports.

From 1974 to date he has been self-employed and has helped to design or consulted on the design of loudspeakers, music synthesizers, laser projectors, servo motors for recorders, and multichannel optical reproducing systems, among other things. He has also been, and continues to be, the technical director and recording engineer for Reference Recordings, where his classical music recording techniques have become industry standards. He holds several design patents, and has published numerous articles in the *Audio Engineering Society Journal*, *Radio-Electronics*, and the *Journal of the Society of Motion Picture and Television Engineers*.

HOWARD FERSTLER

JOHNSON, LONNIE
(8 FEB 1889–16 JUNE 1970)

Alonzo "Lonnie" Johnson's accomplishments are legion. He was widely acknowledged to be the creator of the guitar solo played note for note with a pick, now a standard device in blues, country, jazz, rock, and other popular music styles. He inspired many 20th-century innovators — including jazz guitar creators Django Reinhardt and Charlie Christian, modern blues pioneers T-Bone Walker and B.B. King — as well as many other musicians who copied his style (e.g., the St. Louis school of blues musicians exemplified by Henry Townsend and Clifford Gibson) and repertoire (most notably Skip James's rendition of "I'm So Glad").

Born and raised in New Orleans (he worked the Storyville district from 1910 to 1917), Johnson traveled from his teen years to St. Louis, Texas, New York, and Chicago while performing in theaters and on riverboats, strongly influencing the musicians based in each of these areas. He was very active recording during the first wave of blues recording, producing 130 sides between 1925 and 1932 as a session player for Okeh, including collaborations with Louis Armstrong ("Hotter than That"; Okeh 8535; 1928) and Duke Ellington. He also accompanied many of the "classic" female blues singers of the day, including Victoria Spivey (with whom he would work again in the late 1950s and early 1960s), as well as more countrified artists like Texas Alexander. Johnson also "broke the color barrier" when he recorded a series of jazz duets with guitarist Eddie Lang (who was billed as "Blind Willie Dunn," perhaps to avoid any controversy). On his solo recordings, Johnson projected a sophisticated but somewhat menacing character. His reedy vocals were complemented by his spare, single-string guitar work.

A conflict with powerful Chicago producer Lester Melrose temporarily halted his studio work, but he became active again between 1937 and 1942 for Columbia, Decca, Bluebird, Disc, and various other labels. Following World War II, he revived his career with a series of hits featuring his electric guitar playing, including "Tomorrow Night" (King 4201; 1948; #1 R&B, #19 pop), "Pleasing You" (King 4245; 1948; #2 R&B), "So Tired" (King 4263; 1949; #9 R&B), and "Confused" (King 4336; 1950; #11 R&B).

Dropping out of sight in the early 1950s, Johnson was rediscovered at the beginning of the blues-folk revival in 1959, working as a porter in a Philadelphia hotel. Although consistently touring during the 1960s, his artistic and commercial impact did not approach that of many of his peers, primarily because his sophisticated, urban-based style — rooted in 1930s popular music — did not translated well with an audience most interested in the ethnic roots of the blues. Nevertheless, compact disc (CD) reissues of his work are widely available, including reissues of his later 1950s/early 1960s recordings *Blues by Lonnie Johnson* (Prestige Bluesville 502-2; 1991), *Blues and Ballads* (Prestige Bluesville 531-2; 1990), *Another Night to Cry* (Prestige Bluesville 550-2; 1992), *Stompin' at the Penny* (Columbia Legacy CK 57829; 1994), and *The Complete Folkways Recordings* (Smithsonian Folkways 40067; 1993), as well as a collection of his recordings from the 1920s, *Steppin' on the Blues* (CBS/Sony 467252-2). [Herzhaft 1997.]

FRANK HOFFMANN

JOHNSON, PETE

(25 MAR 1904–23 MAR 1967)

American jazz pianist. He was an early specialist in blues piano, making solo records and duets with Albert Ammons in 1938–1939, then with his own group through 1940. In 1941 he teamed with Ammons in a major series of Victor discs that exemplify the boogie-woogie style. "Boogie-Woogie Man" (27505; 1941) was the first of these; "Movin' the Boogie" was the final issue (27507; 1941). He was less active in the 1950s, and then a stroke in 1958 pretty much ended his career. The Classics label has reissued his complete recordings on a series of CDs in chronological order; Document has reissued radio broadcast and other material.

JOHNSON, ROBERT

(8 MAY 1911–16 AUG 1938)

Born in Hazelhurst, Mississippi, Johnson's recordings have made him famous in traditional blues circles. Johnson's early life is shrouded in mystery, but he was active performing around his hometown area from at least the late 1920s. Johnson recorded three sessions for Vocalion, beginning on 23 Nov 1936. His first release, "Terraplane Blues," was a major hit, and he went on to record several more blues classics, including "I Believe I'll Dust My Broom," "Sweet Home Chicago," "Hellhound on My Trail," and "Love in Vain." Johnson was killed while performing at a roadhouse in Greenwood, Mississippi, in 1938, the victim of a poisoned bottle of wine proffered to him by a jealous lover. Beginning with a landmark LP reissue of his recordings in 1961, *King of the Delta Blues Singers* (Columbia 1654), Johnson's music has enjoyed great popularity among rock-blues revivalists. Johnson's recordings have been covered by many rock artists, from the Rolling Stones to Eric Clapton. The 1990 boxed set of his *Complete Recordings* (Columbia 46222) sold more than a half-million copies, going platinum, and won a Grammy for best historical recording.

CARL BENSON

JOHNSTON C. R.

British recording expert, known as Johnnie Johnston. He worked with Colonel George E. Gouraud's Edison Phonograph Co. in London, then with Edison Bell, Clarion, Pathé, and Marathon records. He recorded various notable persons for Gouraud, including Alfred, Lord Tennyson, Florence Nightingale, and explorer Henry M. Stanley. He was with the Orchestrelle Co., Ltd., in London in 1917. During 1918 he was in New

JOHNSTON, JAMES

York, working in the recording laboratory of the Aeolian Co. Johnston was the recording expert for Chicago's Rodeheaver Record Co. in 1921, and in 1922 he was director of recording and then vice president of Bell Recording Laboratories.

JOHNSTON, JAMES (1953–)

Born in northeastern Ohio, Johnson received his B.S.E.E. and M.S.E.E. from Carnegie-Mellon University in 1975 and 1976. He is employed by AT&T Bell Laboratories, and has worked in the company's acoustics research department, signal processing research department, and in the newly formed AT&T Labs - Research. During this time he has worked on speech, image, and audio coding for transmission and storage, and also coined the field of perceptual audio coding. He is a fellow of the Audio Engineering Society and senior member of the Institute of Electrical and Electronics Engineers. In 1998, he received an AT&T technology medal and AT&T standards award, and in February 2001 he received a New Jersey inventor of the year award for his contributions to MP3 and audio coding in general. Recently, Johnston has been working on perceptual soundfield reconstruction (PSR) for accurate reproduction of live music on high-fidelity sound systems, as well as on issues related to audio coding and image and auditory perception.

HOWARD FERSTLER

JOLSON, AL (26 MAY 1886–23 OCT 1950)

American popular singer, born Asa Yoelson in Srednike, Lithuania. He immigrated to the U.S. with his father in 1890, settling in Washington, D.C., and worked in vaudeville as a boy soprano, whistler, and finally a baritone, achieving great success in blackface roles. After a 1909 success in a New York show he was signed by Victor and soon produced a million-selling record in the new ragtime idiom: "Ragging the Baby to Sleep" (#17081; 1912). The 1917 Victor catalog had nine items, showing him primarily in his comic mode; for example, "Movin' Man, Don't Take My Baby Grand" (#17081; 1912). In 1913 he began to work for Columbia, starting with "Pullman Porters' Parade" and a hit from the film *Honeymoon Express*, "You Made Me Love You" (Columbia A-1374). Jolson's outstanding discs were his "Rock-a-Bye Your Baby with a Dixie Melody" (Columbia A-2560; 1918), "April Showers" (Columbia A-3500; 1921), and "Toot, Toot, Tootsie, Goo'bye" (Columbia A-3705; 1922). For Brunswick he did "California, Here I Come" (Brunswick 2569, with Isham Jones's orchestra; 1924),



Irving Berlin (left) and Al Jolson on the links, c. mid-1920s. Courtesy David A. Jasen

the famous blackface rendition of "To My Mammy" sung in the film *Mammy* (Brunswick 3912; 1928), and "Sonny Boy" (Brunswick 4033; 1928). After a long absence from the studio, Jolson made V-Discs for American troops during World War II, including his old favorites and a recording of "Rosie, You Are My Posie" made with the Tommy Dorsey orchestra (V-Disc 306). Jolson had a notable screen career, beginning with the first feature talking picture, *The Jazz Singer* (1927). A film about his life, *The Jolson Story* (1946) had him singing behind the scenes as Larry Parks acted out the part. He died in San Francisco.

Jolson's recordings have been reissued on numerous CDs, primarily from budget/nostalgia and foreign labels. Twenty-four of his Columbia recordings from 1913 through the late 1920s are anthologized on *You Ain't Heard Nothin' Yet* (53419). *Stage Highlights, Vol. 1 1911–25* (Pearl Flapper 9748), covers a similar period, focusing on songs from his many starring Broadway roles. *Let Me Sing and I'm Happy: At Warner Bros. 1926–1936* collects soundtrack recordings from Jolson's heyday as a film star (Rhino 72544). In 2000, MCA issued a budget, 12-song compilation from recordings made in 1950 as *The Millennium Collection* (112692). [Kiner 1983.]

JONES, ADA (1 JUNE 1873–2 MAY 1922)

Soprano and comic singer, "probably the most popular phonograph singer in the world" around 1906 (Walsh).



Ada Jones in a catalog photograph. Library of Congress Collections

She began recording around 1894, making two brown wax cylinders: "Sweet Marie" and "The Volunteer Organist." In 1905 she commenced regular recording for Edison, with "My Carolina Lady" (#8948), and made 69 other solo cylinders by 1912, specializing in Negro and other dialect pieces. She was also working for Columbia from 1905, recording the same repertoire. Jones was heard as soloist on six Edison Diamond Discs in 1916–1921, in addition to various duets. Her first Victor disc was "Mandy Will You Be My Lady Love?" (#4231). She had 17 solos and 50 duets in the Victor 1917 catalog. Jones made many duet records on various labels, including songs with

Billy Murray and with Len Spencer. The Murray duets were extremely popular, beginning with "Will You Be My Teddy Bear?" (Edison #9659; 1907). Her studio work tapered off after 1917, and she made her final records in 1921. She died suddenly after performing in Rocky Mount, North Carolina. [Corenthal 1984 lists her dialect records; Walsh 1946/6–12, 1947/1, 1972/6.]

JONES, BILLY

(15 MAR 1889–23 NOV 1940)

American tenor and vaudeville artist, born William Reese Jones in New York. He made records for Victor in 1920, beginning with "My Sahara Rose" (#18670), then for Edison in 1921 (singing "Casey Jones" on Diamond Disc #50747), and Columbia. His career was transformed when he began to do duets with Ernest Hare in 1920, in a team that became famous as the Happiness Boys. They recorded together until 1930, then appeared on radio in the 1930s.

JONES, GEORGE (12 SEP 1931–)

American country singer and guitarist, born in Saratoga, Texas. After serving in the U.S. Marines during the Korean War, Jones played and sang at local events, was noticed by Harold "Pappy" Daily, a Houston record executive, and signed to a contract with the Starday label. After some success with that firm he signed with Mercury and had a national hit in "Treasure of Love" (#71373; 1958). A year later he had another chart number with "White Lightning" (Mercury 71406; 1959), and in 1961 he did "Window Up Above" (Mercury 71700), which rode the charts for 36 weeks. During the 1960s he worked for the United Artists label, making many successful discs, such as "We Must Have Been Out of Our Minds" with Melba Montgomery (#575; 1963).

Jones married Tammy Wynette in 1969, and moved to her label, Epic, in 1971, hooking up with producer Billy Sherrill. There he recorded a series of hugely successful duets with his then-wife, beginning with 1973's "We're Gonna Hold On," and continuing even after their divorce through the 1970s. He also recorded a number of solo hits, all custom tailored to his legendary status as a heart-broken, heavy drinker: most notably 1981's "If Drinking Don't Kill Me (Her Memory Will)," and 1986's "The One I Loved Back Then." The revival of the honky-tonk sound among the mid-1980s "New Nashville" vocalists is largely credited to the influence of Jones. In 1992, Jones was elected to the Country Music Hall of Fame. In 1993, he made yet another comeback (although he had never

JONES, GRANDPA

really gone away) with "I Don't Need Your Rockin' Chair," a good-natured but defiant statement of where this old fella's coming from! In 1995, Jones reunited with ex-wife and duet partner, Tammy Wynette, for the *One* album and tour; Wynette was very ill by this time, but nonetheless, the reunion brought new attention to Jones. In 2001, he released a new album, *The Rock: Stone Cold Country 2001*, which included a duet with Garth Brooks on "Beer Run (B Double E Double Are You In?)."

FRANK HOFFMANN AND CARL BENSON

JONES, GRANDPA (20 OCT 1913–19 FEB 1998)

Born Louis Marshall Jones in Niagara, Kentucky, Grandpa Jones was a beloved country comedian and banjo player. The youngest of 10 children of a rural farming family, Jones was already performing locally for dances and get-togethers before his 15th birthday. When his family settled in Akron, Ohio, in 1928, he partnered with a harmonica player named Joe Troyan and the duo began performing on local radio; Jones was billed as "The Young Singer of Old Songs." From there, they moved to Cleveland where they were heard by talent scouts for the country-themed radio serial, "Lum and Abner," broadcast out of Boston. They were hired to be staff musicians for the show, where Marshall linked up with country balladeer Bradley Kincaid.

Although he was only 22 at the time, the gruff-voiced Jones already sounded like an elderly backwoodsman. Kincaid renamed him "Grandpa" Jones, and Jones began performing comic monologues and banjo songs. After touring with Kincaid, Jones had radio jobs on a number of West Virginia-based stations. In 1942, he signed on with the *Boone County Jamboree*, broadcast out of Cincinnati, where he met the Delmore Brothers and Merle Travis; the four formed the Brown's Ferry Four, which also sometimes featured Red Foley. Jones also hooked up with Syd Nathan, a local record-shop owner who later formed King Records, where Jones made his first recordings.

After serving in World War II, Jones returned briefly to Cincinnati, but felt his talents were not appreciated enough by the radio station there. In 1947 he joined the *Grand Ole Opry*, remaining a favorite performer there for decades. Through the 1950s and 1960s he toured with Opry package shows, often accompanied by his wife Ramona. In 1969, Jones signed on with *Hee Haw*, and his old-time, cornball humor became a permanent feature of this ever-popular TV program. His autobiography, *Everybody's Grandpa*, appeared in 1984. During the later 1980s

and 1990s, Jones was less active as a performer, due to declining health. He died in 1998 in his Nashville home.

CARL BENSON

JONES, ISHAM (31 JAN 1894–19 OCT 1956)

American saxophonist, songwriter, and big band leader, born Jonathan Jones in Coalton, Ohio, on 31 Jan 1894. He played in groups in Chicago from 1915, and had his own band there in the 1920s, heard most often at the Hotel Sherman. Gordon Jenkins was one of the arrangers who gave the Jones band a sophisticated sound. Pee Wee Erwin and Woody Herman were among the band members. Jones's most successful composition, "It Had to Be You," was recorded, like most of his discs in 1920–1932, for Brunswick (#2614; 1924). "Stardust" (Brunswick #4856; 1931) was one of the most successful later discs. In 1932 he moved to Victor, and made some of the early experimental long-playing (LP) records there. When the band broke up in 1936, Woody Herman brought many of the players into his own new group. Jones continued performing with various groups and vocalists into the 1950s. He died in Hollywood, Florida. CD reissues include *1922–26* (Timeless 67), featuring some of his earliest recordings that were enlivened by trumpeter Louis Panico. His later band recordings are highlighted on *Plays His Own Compositions* (Swing Time 2011), featuring Jenkins's arrangements.

JONES, JO (7 OCT 1911–3 SEP 1985)

American jazz drummer, born Jonathan Jones in Chicago. He played several instruments in various groups, Bennie Moten's band among them. He joined Count Basie as drummer in 1935, remaining intermittently to 1948. He then played with Lester Young and other bebop artists, and appeared with Jazz at the Philharmonic. In 1957 he toured in Europe with Ella Fitzgerald and Oscar Peterson. He remained freelance, working with groups in various styles. He died in New York.

Jones transformed the jazz drumming style from the early two-beat on the bass drum to a light four-beat on the hi-hat cymbal, punctuated by irregular accents and sudden "bombs." This technique, coupled with a novel use of brushes, influenced artists like Kenny Clarke and others of the bebop and later schools.

Jones was featured on the Basie records of "One O'Clock Jump" (Decca 1363; 1937), "Swinging the Blues" (Decca 1880; 1938), "Stampede in G Minor" (Okeh 5987; 1940), and many others. He recorded also

with the Benny Goodman sextet, the Goodman orchestra ("I Found a Million Dollar Baby" — Columbia 36136; 1941), Billie Holiday, Lionel Hampton, and Teddy Wilson. His work can be heard on various CD reissues by these and other jazz artists.

JONES, JONAH

(31 DEC 1908–30 APR 2000)

American jazz trumpeter, born Robert Elliott Jones in Louisville, Kentucky. He played on a Mississippi riverboat, and with various groups, and joined the Stuff Smith combo in 1932. He recorded on Vocalion with Smith, and on Okeh with Cab Calloway, a partner for 10 years (e.g., "Jonah Joins the Cab," #6109; 1941). He was a sensation in Europe in 1954, and made a fine recording of "Chinatown" with a group that included Sidney Bechet. Jones gained great success when he formed his own quartet in 1955 and performed at the Embers in New York. "Rose Room" (Capitol F3747; 1957) was a major hit. Jones remained with Capitol through 1963, churning out popular recordings, and then recorded for Decca from 1965 to 1967. Jones later had a quintet; he was on television and toured abroad from the 1960s through the 1980s. He died in New York City. Jones's early recordings are available on *1936–1945* (Classics 972); and his Capitol era hits are anthologized on *I Dig Jonah* (Collectors Choice 108).

JONES, JOSEPH W. (CA. 1876–?)

American inventor. As a youthful employee of Emile Berliner, he worked a summer at age 17 in the Washington, D.C., laboratory and closely observed the recording process (which employed acid-etched zinc matrices). Jones devised a method of cutting a wax disc with a lateral groove, similar to the method of Eldridge Johnson, and applied for a patent on the process in November 1897, receiving it on 10 Dec 1901 (U.S. #688,739). His success was in part due to the clever adjustments in the application (at first rejected) by Philip Mauro of American Graphophone Co. That firm then bought the patent for \$25,000 and hired Jones as a research engineer, gaining an entry into the disc business in 1901. Upheld at first, the Jones patent was finally invalidated after litigation brought by the Victor Company against American Graphophone (1911). Jones had already gone to Europe by then, to make Vitaphone records. And Columbia had taken over American Graphophone and made an agreement with Victor in 1903 for cross-licensing, so the final court decision had no effect on anyone. Jones received 10 other patents in the sound recording field. [Koenigsberg 1990.]

JONES, QUINCY DELIGHT, JR.

(14 MAR 1933–)

American trumpeter, pianist, conductor, composer, arranger, and music industry executive; born in Chicago. Jones began his career as a musician but has become most important as a producer for hit pop acts, notably overseeing Michael Jackson's tremendous 1980s-era success.

Jones began his career as a trumpeter/arranger. He studied at the Berklee School of Music and then, in 1951, joined Lionel Hampton's big band. By the mid-1950s, he was much in demand as a freelance arranger, writing material for Count Basie (notably for the albums, including *One More Time*, and *Li'l Ol' Groovemaker...Basie*), Tommy Dorsey, and Dizzy Gillespie (the acclaimed *World Statesman* album), as well as singers including Frank Sinatra, Dinah Washington (*The Swingin' Miss 'D'*), Johnny Mathis, and Ray Charles. He also worked as a producer for Mercury's Barclay division from 1957 to 1961 in Paris, and then moved to the New York office to work as an A&R man; by 1964, he rose to vice president, the first African American to hold that title at a major label. Throughout this period, he issued recordings of jazz and pop material leading a studio band. During the mid-1960s, he moved into film and TV soundtrack work, famously writing the scores for *In Cold Blood*, *In the Heat of the Night* (1967), and the TV miniseries, *Roots*. In 1980, Warner Bros. label head Mo Ostin invited Jones to start his own label, Qwest Records, which has specialized in pop-jazz and funk/hip-hop releases.

Jones's career hit its zenith in the early 1980s when he produced Michael Jackson's breakthrough albums, *Off the Wall* and its incredibly successful follow-up, *Thriller*. He also produced the number one single, "We Are the World," in 1985, one of the first celebrity-rock fundraisers. In the 1990s, he moved into television production (*Fresh Prince of Bel Air*), as well as launching a new music magazine, *Vibe*. He published his autobiography, *Q*, in 2001, along with a career-retrospective, four-CD boxed set issued by Rhino Records (74363). To date, Jones has won 29 Grammy awards, including a legend award in 1991.

CARL BENSON

JONES, SISSIARETTA JOYNER

(5 JAN 1868–24 JUNE 1933)

American soprano, one of the first Black artists to gain recognition in opera and concert. She appeared successfully in major cities, and gave a recital in 1893 at the World's Columbian Exposition in Chicago. In 1894–1895 she toured Europe, making a special

JONES, SPIKE

triumph at Covent Garden. Although the record label Black Patti was named for her, she herself is not known to have made any records. [Henriksen 1979.]

JONES, SPIKE

(14 DEC 1911–1 MAY 1965)

American drummer, big band leader, and musical satirist, born Lindley Armstrong Jones in Long Beach, California. After a career as a drummer with radio orchestras, he began to do humorous sound effects, then used them in his own band, the City Slickers (1942), and scored an early success with a World War II novelty record of his composition, “Der Fuehrer’s Face” (Bluebird 11586; 1942). He then made many popular recordings utilizing bizarre sounds such as pistols, whistles, bells, or the hiccups in his greatest hit, “Cocktails for Two” (Victor 20–1628; 1944). Jones died in Los Angeles. There are numerous CD reissues of Jones’s official recordings and radio transcriptions on a variety of labels, domestic and European. [Young, J. 1984.]

JONES, W. BARTLETT

SEE STEREOPHONIC RECORDING

JOPLIN, JANIS

(19 JAN 1943–4 OCT 1970)

Just as she had defied social conformity while growing up in Port Arthur, Texas, Janis Joplin paid little attention to musical conventions. The agonizingly insecure young white women, having grown up in a seemingly normal middle-class environment, sang the blues with an emotional intensity and straightforward honesty rarely equaled before or after her brief, meteoric career. While few female singers can hope to match the depth of feeling communicated in her comparatively small body of work, many have been influenced by the sheer exuberance she brought to every song she sang — both live and in the studio.

Leaving home at 17, Joplin first tried singing professionally at country and western venues in the Houston area. Within a few years she had moved out to California, alternating between attending various colleges while performing folksinging gigs around San Francisco. Making little headway there in 1965 and early 1966, she opted for a job singing with a Texas country act. Shortly thereafter, however, she was encouraged to return to the Bay Area by Chet Helm, who told her of a promising new group that needed a female vocalist, Big Brother and the Holding



Janis Joplin record sleeve. Courtesy Frank Hoffmann

Company. Almost immediately upon joining the band in June 1966, word of her extraordinary talent spread through the local music scene. Big Brother’s electrifying performance at the Monterey Pop Festival in the summer of 1967 captured the attention of the entire record industry. The band was signed by Mainstream Records, and an album, *Big Brother and the Holding Company* (Mainstream 6099; 1967), was released in late 1967.

The group’s first appearance on the East Coast, at New York’s Anderson Theater in February 1968, led to a contract with Columbia Records. The ensuing LP, *Cheap Thrills* (Columbia 9700; 1968), was both an artistic and commercial tour de force, reaching number one on the pop album charts. As the dominant force within Big Brother, it was inevitable that Joplin would strike out on her own, citing the band members’ limitations as musicians. Her first solo release, *I Got Dem Ol’ Kozmic Blues Again Mama!* (Columbia 9913; 1969), was indeed more accomplished, the wide range of material all tied together by Joplin’s raw delivery. She was at work on her next album, the country-inflected *Pearl* (Columbia 30322; 1970), when she was discovered dead of a heroin overdose at Hollywood’s Landmark Hotel. A single from the posthumously released LP, “Me and Bobby McGee” (Columbia 45314; 1971), topped the *Billboard Hot 100*.

Much like her deceased peers, Jimi Hendrix and Jim Morrison, Joplin has remained an important force within the rock scene. A seemingly endless flood of magazine articles, books, and films (both documentaries and fictionalized accounts) discussing her

life and music have appeared on the marketplace. Columbia has continued to issue recordings culled from studio outtakes, live performances, and previously released material, most notably *Joplin in Concert* (Columbia 31160; 1972), *Janis Joplin's Greatest Hits* (Columbia 32168; 1973), *Janis* (Columbia 33345; 1975), *Farewell Song* (Columbia 37569; 1982), *Janis* (three CDs: Columbia 48845; 1993), and *Box of Pearls: The Janis Joplin Collection* (five CDs; Columbia 65937; 1999).

FRANK HOFFMANN

JOPLIN, SCOTT

(24 NOV 1868–1 APR 1917)

American pianist and ragtime composer, born in Texarkana, Arkansas. He was the son of a former slave. Joplin learned to play piano and guitar, and sang with a quartet. He traveled as a musician, playing where he could, reaching Chicago in 1893. He led a band at the World's Columbian Exposition, playing cornet, and began to publish songs two years later. Then he settled in Sedalia, Missouri, directed a band and continued composing in the new ragtime style, with which his name has become indelibly associated. "Maple Leaf Rag" — named for a club in Sedalia — was his first great success (1899); "The Entertainer" was written in 1902. He performed in vaudeville in New York, and continued composing there until his death. Joplin made no cylinder or disc recordings but did cut some piano rolls in 1916, which have subsequently been reissued on CD and LP by various labels. However, these rolls may have been "doctored" (i.e., extra notes added), and also were made when Joplin was past his prime as a performing pianist. A Nonesuch LP (1970; 71248) offers modern renditions of the Joplin rags by pianist Joshua Rifkin, which helped launch a major Joplin revival. Many recent CD versions of the Joplin pieces are available, performed by a variety of instruments and groupings; for example, "The Entertainer" by Izthak Perlman and André Previn, and the same work by the Budapest Brass Quartet. The 1974 motion picture *The Sting* featured Joplin rags and brought them fresh popularity.

See also **Ragtime Recordings**

JORDAN, LOUIS

(8 JULY 1908–4 FEB 1975)

Louis Jordan proved more successful than any other Black artist in crossing over to the pop charts in the 1940s. Equally adept at jazz, blues, R&B, and pop music, his experiments in melding these styles played a major role in the emergence of rock 'n' roll.

Mastering the saxophone during his formative years in rural Arkansas, he went on to accompany Ida Cox, Ma Rainey, Bessie Smith, and other major blues singers as a member of the legendary Rabbit Foot Minstrels revue. Jordan first recorded with the Jungle Band for Brunswick in 1929, then moved to New York to play with Clarence Williams, among others, in the early 1930s. Joining Chick Webb's swing band on alto sax in 1936, he would also contribute vocals on blues and novelty material.

In 1938 Jordan struck out on his own, forming the Elks Rendez-Vous Band. Inking a record contract with Decca the following year, he changed the group's name to the Tympany Five. Mining the jump style of R&B, Jordan's sassy humor, punning, and driving rhythmic approach (further accentuated by his word-play) were responsible for a long string of hits, including the R&B chart toppers: "What's the Use of Getting Sober" (Decca 8645; 1942), "Ration Blues" (Decca 8654; 1943), "G.I. Jive" (Decca 8659; 1944; #1 pop), "Mop Mop" (Decca 8668; 1945), "Caldonia" (Decca 8670; 1945; #6 pop), "Buzz Me"/"Don't Worry 'Bout that Mule" (Decca 18734; 1946; #9 pop), "Stone Cold Dead in the Market" (Decca 23546; #7 pop), "Choo Choo Ch'Boogie" (Decca 23610; 1946; #7 pop), "Ain't that Just Like a Woman" (Decca 23669; 1946), "Ain't Nobody Here But Us Chickens" (Decca 23741; 1946; #6 pop), "Texas and Pacific" (Decca 23810; 1947), "Jack, You're Dead" (Decca 23901; 1947), "Boogie Woogie Blue Plate" (Decca 24104; 1947), "Run, Joe" (Decca 24448; 1948), "Beans and Corn Bread" (Decca 24673; 1949), and "Saturday Night Fish Fry (Part 1)" (Decca 24725; 1949).

The rise of rock 'n' roll rendered his sound passé. Although no longer an important recording artist, he was still actively performing — particularly around his home base of Los Angeles — until suffering a fatal heart attack. His classic recorded work remains widely available today, most notably the monumental box set, *Louis Jordan: Let the Good Times Roll (1938–1954)* (Bear Family 15557). Jordan's signature sound and style has often been copied by contemporary neo-swing bands, ranging from Dan Hicks and His Hot Licks to the Squirrel Nut Zippers, as well as pop performers like Joe Jackson.

FRANK HOFFMANN

JORDAN, MARY

(27 NOV 1879–15 MAY 1961)

Welsh/American contralto and dramatic soprano, born in Cardiff. She lived nearly all her life in the U.S., performing as a church soloist and with major orchestras. Her opera debut was as Amneris with the Boston

JOSE, RICHARD JAMES

Opera on 28 Mar 1911. That role and Azucena became associated with her. She sang around the world, and was twice invited to sing in the White House, first by President Woodrow Wilson and then by President Calvin Coolidge. Jordan was among the first singers on radio, from her home city of San Antonio, Texas.

She recorded first in March 1911, an Edison cylinder with the Metropolitan Quartet: "Barcarolle." Then she made a duet, "Ai nostri monti," with Harry Anthony (Amberol 652), and many more cylinders with other artists. Her first solo record was "My Heart at Thy Sweet Voice" ("Mon coeur s'ouvre a ta voix" — 2158; 1910). Jordan sang on two Edison Diamond discs in 1915. She died in San Antonio, Texas.

JOSE, RICHARD JAMES (5 JUNE 1862–20 OCT 1941)

English/American ballad singer, born in Cornwall. His surname — Cornish, not Spanish — is pronounced as one syllable, to rhyme with rose. When his father died, Jose was sent to America to stay with an uncle in Nevada; he was shipwrecked in the crossing, but eventually arrived in Nevada, only to find there was no uncle there. He apprenticed to a blacksmith, but also studied singing. An opportunity to sing with Reed's Minstrels in San Francisco created a great sensation. He then sang with Lew Dockstader's company, and in the New York play *The Old Homestead* during 1887–1895. Victor signed him in 1903, and he made a best-selling disc in October, "Silver Threads among the Gold" (2556). Another popular disc, "Abide with Me" (16660), remained in the catalog until 1923. Jose was the first singer identified on record as a "countertenor." Soon he was described as the best-paid ballad singer in the world. However, after an on-stage accident in 1905 he made no more records. He was seen, not heard, in the film, *Silver Threads among the Gold* in 1915. Jose retired from public performance in 1920 and became a civil servant in California; he then returned to sing on radio from 1931 until his death in San Francisco a decade later. [Walsh 1950/3–4–5.]

JOURNET, MARCEL (15 JULY 1867–5 SEP 1933)

French bass, born in Grasse. He studied at the Paris Conservatory, and made his operatic debut at Bezières in *Favorite* in 1891, after which he appeared at Covent Garden during 1893–1900, and Brussels in 1894–1900. Journet made his American debut at the Metropolitan Opera in 1900 and stayed with the company until 1908, when he returned to Europe until 1914. During World War I he was with the Chicago Opera, then he returned to France. He died in Vittel.

Journet's roles included 100 operas from the French, Italian, and Wagner repertoires. He was most famous as Leporello, Escamillo, Mephistopheles, and Colline. He was recorded on Mapleson cylinders in 1902–1903, doing the *Faust* final trio with Emma Calvé and Andreas Dippel, the *Aida* Nile Scene, and two other numbers. He recorded for Columbia in 1905, beginning with "Infelice" from *Ernani* (#3109), then for Victor in 1905–1922. The 1917 Victor catalog carried 60 solo records and many duets and ensemble contributions. He was heard in the *Lucia* Sextet with Amelita Galli-Curci, Minnie Egner, Enrico Caruso, Giuseppe De Luca, and Angelo Bada (Victor 95212); and he was heard in the outstanding complete *Faust* (HMV 2122–2141). HMV recorded him from 1925 to 1932. Eight of his records were still in the Victor catalog in 1940. Many of Journet's recordings were reissued by the various clubs; IRCC released two numbers from *Faust* and one from *Aida*. His solo Gramophone recordings made between 1909 and 1933 are available on a two-CD set from Marston, and Victor recordings from the period of 1905–1924 are available on Nimbus 7894.

JOYCE, THOMAS F. (8 AUG 1904–8 SEP 1996)

American record and television industry executive. A vice president at Victor in the late 1930s, he established the Victor Record Society in 1937. Society members were entitled to buy an inexpensive (\$14.95) record player, developed by Joyce, that would play through a radio. It was said that 150,000 of these machines were sold within a year. After World War II Joyce became recognized for his enthusiastic promotion of television, and in 1952 he left RCA to become president of Raymond Rosen and Co., a leading distributor of television sets and other appliances. He died in Philadelphia.

JUBILEE/JOSIE (LABEL)

Jubilee was originally founded in May 1946 by producer Herb Abramson; he sold it to Jerry Blaine in September 1947 when he partnered with Ahmet Ertegun in the nascent Atlantic label. The company scored its major single hits with doo-wop groups, beginning in 1953 with "Crying in the Chapel" by the Orioles (Jubilee 5122); other doo-wop hits followed in the mid-1950s on the subsidiary Josie label, including the Cadillacs's "Speedo" (#17 pop, 1956; Josie 785) and the teen-pop classic "Do You Wanna Dance?" by Bobby Freeman (#5, 1958; Josie 835). On LPs, the company specialized in slightly risqué "party records,"

issued on both Josie and Jubilee and also on the related Gross label (whose sole artist was the aptly named Doug Clark and the Hot Nuts). Other Josie/Jubilee artists included Brill Building stalwarts Jeff Barry and Ellie Greenwich, who issued one LP as performers on the label, and the New Orleans band the Meters featuring Art Neville. One of Jubilee's last releases was the first album by a young folksinger named Emmy Lou Harris called *Gliding Bird* (Jubilee 8031). The labels were sold to Morris Levy at Roulette in 1970, who subsequently sold his holdings to Rhino Records shortly before his death.

CARL BENSON

JUDAS PRIEST

Although formed in 1969 by guitarist K.K. Downing and bassist Ian Hill, Judas Priest did not sign a record contract until its creative nucleus — including lead vocalist Rob Halford and guitarist Glenn Tipton — was assembled in 1974. Featuring a twin lead guitar attack and concise, hook-laden songs within a traditional heavy metal framework, the group anticipated the more pop-oriented groups of the late 1970s such as AC/DC, Def Leppard, and Van Halen. Due largely to their extravagant live shows, highlighted by the leather-clad Halford roaring onstage on a Harley Davidson motorcycle, and MTV friendly videos, album releases — most notably *Stained Glass* (Columbia 35296; 1978), *Hell Bent for Leather* (Columbia 35706; 1979), *Unleashed in the East* (Columbia 36179; 1979), *British Steel* (Columbia 36443; 1980), *Point of Entry* (Columbia 37052; 1981), *Screaming for Vengeance* (Columbia 38160; 1982), *Defenders of the Faith* (Columbia 39219; 1984), *Turbo* (Columbia 40158; 1986) — sold in increasingly higher quantities into the mid-1980s.

Momentum was slowed when parents of two Reno, Nevada, teenagers sued the group and Columbia Records for \$6.2 million, arguing a song on *Stained Glass* contained subliminal messages causing the boys to shoot themselves in 1985. The charges were dismissed in 1990, but Halford and Scott Travis (Priest's drummer at the time) left to form the band Fight. Following the release of a greatest hits album and video compilation, remaining members continued to release new albums, albeit with lessened commercial impact.

FRANK HOFFMANN

JUDDS, THE

The top selling country music duo in recording history, the Judds were a Nashville institution by the time

mother Naomi (born Diana Judd, 11 Jan 1946, in Ashland, Kentucky) retired from the entertainment business in 1991 due to chronic hepatitis. Their pure, unadorned harmonies, acoustic guitar-dominated arrangements, and old-fashioned song lyrics placed them in the vanguard of the New Traditionalists, a new wave of 1980s artists dedicated to reviving the aesthetic of post-World War II hard country music.

Naomi married at 17; on 30 May 1964 she gave birth to Christina Cininella, who would later change her name to Wynonna. Following her divorce, she moved to Los Angeles in 1968 with her two daughters, earning a living by modeling and performing secretarial work, among various other positions. In 1976, they relocated to Morrill, Kentucky, a rural area where many nights were spent listening to country radio stations. Following the example of many local musicians, the family began singing to Wynonna's guitar. Naomi finished nursing studies during a brief interlude in northern California before settling in Nashville in 1979 to attempt to establish a music career.

Taking advantage of performing opportunities, most notably appearances on Ralph Emery's early morning radio program, the duo secured a contract with RCA in 1983. On the strength of Wynonna's distinctive lead vocals and Naomi's gentle harmonizing, the Judds placed one song after another into the upper reaches of the country charts during the 1980s, including the number one hits "Mama He's Crazy" (RCA 13772; 1984), "Why Not Me" (RCA 13923; 1984), "Girls Night Out" (RCA 13991; 1985), "Love Is Alive" (RCA 14093; 1985), "Have Mercy" (RCA 14193; 1985), "Grandpa" (RCA 14290; 1986), "Rockin' with the Rhythm of the Rain" (RCA 14362; 1986), "Cry Myself to Sleep" (RCA 5000; 1986), "I Know Where I'm Going" (RCA 5164; 1987), "Maybe Your Baby's Got the Blues" (RCA 5255; 1987), "Turn It Loose" (RCA 5329; 1988), and "Change of Heart" (RCA 8715; 1988). Albums such as *Why Not Me* (RCA 5319; 1984), *Rockin' with the Rhythm* (RCA 7042; 1985), *Heartland* (RCA 5916; 1987), and *Greatest Hits* (RCA 8318; 1988), proved even more successful, achieving platinum status on the pop album charts.

Although the act remained on top until disbanding in 1991, Wynonna initially had doubts about continuing as a solo artist. Encouraged by her mother, Wynonna released five platinum LPs through 2000 — *Wynonna* (Curb 10529; 1992; #4), *Tell Me Why* (Curb 10822; 1993), *Revelations* (Curb 11090; 1996), *The Other Side* (MCA 53061; 1997), and *New Day Dawning* (MCA 170103; 2000) — all of which have featured a wider range of styles (including folk, pop, and rock) than that characterized by the Judds. In the meantime, the duo reunited for a New Year's Eve,

JUKEBOX

1999, concert — released in spring 2000 as *The Judds Reunion: Live* (MCA 170134) — and released a newly-recorded single, “Stuck in Love,” available only on a bonus disc within the limited-edition version of *New Day Dawning* (MCA 541067).

FRANK HOFFMANN

JUKEBOX

A coin-operated record player, originating with the coin-op of 1889. The name “juke” is probably related to an old southern U.S. word of African origins, “jook,” meaning to dance. When coin-ops went out of favor around 1910, as a result of the thriving home phonograph industry and the competition in public places of the player piano and nickelodeon, the concept was dormant for many years. With the development of electric amplification after 1925, there was a revival of interest in the record machines. In 1927 a model made by the Automatic Musical Instrument Co. of Grand Rapids, Michigan, was able to play either side of 10 discs; about 12,000 of them were on location by 1930. Other manufacturers taking part in the jukebox golden age of the 1930s and 1940s included the J.P. Seeburg Co., Capehart Co., Rock-Ola, AMI, and, most prominently, the Wurlitzer Co. It is estimated that there were 25,000 jukeboxes in operation in America by 1934; 225,000 by 1938; 300,000 by 1939 (making use of 30 million 78-rpm discs per year). Indeed, jukebox sales were significant in keeping the record industry afloat during the Depression.

An important contribution of the jukebox to American musical culture was the exposure it gave, from around 1935, to country and western music. It should be noted that all jukeboxes were devoted to pop music, suitable to the preferences of patrons in the places where they were installed: saloons, pool halls, drug stores, ice cream parlors, inexpensive restaurants, and roadhouses. The jukebox era came to a close in the late 1970s, following the passage of a new copyright law in the U.S. that required licensing and compensation to the record labels. There had also been a decline in the production of single 45-rpm records as opposed to LP albums. And, of course, television had become the source of background noise in drinking places, while Muzak or radio music seemed to serve the needs of restaurants.

By the turn of the 21st century, antique jukeboxes, particularly fancy Wurlitzer models, had become high-priced collectibles. Many bars and clubs seeking to enliven their decors installed reproductions or originals of elaborate jukeboxes. Meanwhile, the jukebox format was imitated in multiple-disc CD changers as well as in electronic “virtual” jukeboxes, designed to

hold large numbers of recordings that could be easily accessed. [Hoover 1971 provides good illustrations, pp. 107–113; Kirvine 1977.]

JUMBO RECORD (LABEL)

A German disc made by the Jumbo-Record Fabrik — a subsidiary of International Talking Machine Co. mbH, which was owned by Fonotipia, Ltd. The office was located in Berlin from 1908; the factory was in Frankfurt-am-Oder. The British records were controlled in the U.K. by Fonotipia, Ltd., and pressed in both Britain and Germany, with British and European artists. They were marketed in Britain by Barnett Samuel and Sons, Ltd., from September 1908 to January 1914 or later. One Jumbo had a reading of Queen Alexandra’s speech marking the death of King Edward VII (1910); another had the queen’s speech in observation of the accession of George V. The speeches were read by an actress, not by Queen Alexandra (who made no records herself). In August 1910 the cheaper Jumbola record was sold in Germany and elsewhere, but not in Britain.

Jumbo became part of Carl Lindström in Europe in 1911, but Fonotipia, Ltd., continued to control British issues. Up to the outbreak of World War I in 1914, an Odeon/Fonotipia matrix system was in use, then the matrices used in Britain were those recorded by Carl Lindström (London), Ltd., at its Beka Records studios, and used by all Lindström labels in Britain: Beka, Coliseum, Favorite, and Scala, as well as their cheaper counterparts Albion, Arrow, Lyceum, and Silvertone.

During the war the British Board of Trade ordered a closing down of Lindström, and the Jumbo label passed in 1917 to a new firm, Heriford Record Co., Ltd., which business went to the Columbia Graphophone Co., Ltd., in June 1919—the Jumbo Record having become “Venus Record” about a month earlier. Venus was a Columbia trademark, and under Columbia’s control. [Andrews 1971/1.]

FRANK ANDREWS

JUMP

SEE BUMP

JUNO AWARDS

The Canadian Academy of Recording Arts and Sciences (CARAS) sponsors these annual awards, the Canadian version of the Grammy awards. [Website: www.juno-awards.ca.]

JUNO PHONOGRAPH MANUFACTURING CO.

A British firm, located in London, in 1900. It produced the Juno cylinder player, based on British Patent #7594, accepted 23 June 1900. The reproducer was a tubular piece of glass with a leather cushion between the stylus and the celluloid horn. It was a very inexpensive machine, with no frills. To change cylinders the user had to detach the drive belt and remove both the record and its carrying spool. The Juno was available "absolutely free" to agents who could sell nine pieces of jewelry provided by the British Premium Syndicate. [TMR #72 (April 1987) reproduces an undated advertisement, p. 2073.]

JURGENS, DICK (9 JAN 1910–5 OCT 1995)

American big band leader and trumpeter, born in Sacramento, California. He organized his first orchestra in 1928 and achieved renown in San Francisco, then moved to the Aragon Ballroom in Chicago where he was a fixture during the 1930s. His group had a sweet, mellow sound, graced by fine vocalists Eddy Howard, Ronnie Kemper, Harry Cool, and Buddy Moreno. The band was popular until World War II.

Jurgens began recording in 1934 for Decca, but his important output was for Vocalion from 1938 to 1940, and for Okeh from 1940 to 1942. His biggest hits were the songs cowritten by him: "It's a Hundred to One" (Vocalion 5063; 1939), "If I Knew Then" (Vocalion 5074; 1939), and "Careless" (Vocalion 5235; 1939), all with Eddy Howard singing; "Cecilia," sung by Ronnie Kemper (Vocalion 5405; 1940); "A Million Dreams Ago," sung by Harry Cool (Okeh 5628; 1940);

and "One Dozen Roses" (Okeh 6636; 1942). He died in Sacramento, California. Collectors Choice music has collected key recordings on *Here's that Band Again* (#91), and live radio broadcasts from 1937 to 1939 (#19).

JURINAC, SENA (24 OCT 1921–)

Yugoslavian soprano, born Srebenka Jurinac in Tavnik. She studied in Zagreb and made her debut there as Mimi in 1942. Then she sang with the Vienna State Opera (1945), and went on to Salzburg, London, La Scala, and an American debut in San Francisco (1959). Although her repertoire covered Wagner, Puccini, Richard Strauss, Berg, and other modern works, Jurinac was particularly distinguished in Mozartean roles, from which most of the recordings were drawn. She was Donna Elvira in the complete *Don Giovanni* on Philips (00280–82), and also in the LP on Decca (#302); the Countess in one *Nozze di Figaro* (Philips complete recording 00357–59), and Cherubino in another (Columbia 410–425). She also did a *Nozze* for Epic LP (6022). With Fritz Busch at Glyndebourne, Jurinac created remarkable performances as Ilia in *Idomeneo* and Fiordiligi in *Così fan tutte*; these are sampled in an EMI Références CD (763199–2; 1990), which also offers Jurinac's fine rendition of Richard Strauss's four last songs, and works by Smetana and Tchaikovsky. There are many other CD reissues of her recordings available on a number of domestic and foreign labels.

JVC

SEE JAPANESE VICTOR CO. (JVC)



K

KALAMAZOO NOVELTY CO.

A firm located in Kalamazoo, Michigan, in 1906. It made the Duplexophone for the Duplex Phonograph Co.

KALLIOPE MUSIKWERKE AG.

A German manufacturer of records, players, motors, and audio components, located in Leipzig. In the early years of the 20th century the firm had branch factories in

Dresden, Austria, Hungary, and Russia. They moved into the British market in 1912 under arrangements with Blum and Co., Ltd., of London. Stella was the record label used in the U.K., commencing in the summer of 1912; however, a prior use of that name, by Pathé in the U.K., required Blum to change the label name to Victory. In December 1912 Blum applied to have the trademark Kalliope registered for records, and on 2 Jan 1913 Kalliope, Ltd., was created, with the address 220 Old Street, London. A suit was brought by Blum against Kalliope Musikwerke for breach of contract, with the result that Kalliope opened its own London office in competition with Blum; both firms were then selling the same products, but at different prices. In time, Blum was enjoined against trading under the name Kalliope Co., Ltd. Thus Blum's headquarters, which had been called Kalliope House, was renamed Diploma House, and the Victory label was changed to Diploma in 1913. In addition to the Kalliope label, Kalliope Musikwerke used a label in Britain called Our Flag.

In Germany, Kalliope merged with Anker Phonogram GmbH in March 1913. The Anker name, anglicized to Anchor Gramophone Co., was successful in London selling 10-inch double-sided Kalliope label discs at one shilling. However, the Kalliope firm became insolvent in 1913, although its associate, Anker, remained in business and continued to sell the Kalliope products. Then, in 1916, the Anker business was bought by one Menzenhauer, who renamed the firm Kalliope, Menzenhauer, and Schmidt. The Kalliope label remained in the German market until 1931, though it disappeared from Britain with the outbreak of World War I, except for some postwar imports. [Andrews 1988/10.]



Label of the Kalamazoo Novelty Co., c. 1906. Courtesy Kurt Nauck/Nauck's Vintage Records

KALTENBORN STRING QUARTET

KALTENBORN STRING QUARTET

An ensemble that made Edison cylinders in ca. 1912. The members were Frank Kaltenborn and Herman Kuhn, violins; Max Barr, viola; and Max Droge, cello.

KAMA SUTRA (LABEL)

SEE BUDDAH (RECORDS)

KANSAS CITY SIX

A group of jazz musicians from the Count Basie band who made an important set of discs for Commodore on 8 Sep 1938. The artists were Buck Clayton, trumpet; Eddie Durham, trombone and electric guitar; Freddy Greene, guitar; Walter Page, string bass; Jo Jones, drums; and Lester Young. Young played a metal clarinet on most of these discs, rather than his usual tenor saxophone, showing remarkable inventiveness and facility on his second instrument. This session was also noted as the first to feature the electric guitar. The five works recorded were "Way Down Yonder in New Orleans" and "Pagin' the Devil" (featuring Page; 512), "Countless Blues" (referring to the absence of Basie, who could not play with the group for contractual reasons), and "I Want a Little Girl" (a particularly tender solo by Young; #509), and "Them There Eyes" (with a vocal by Greene; #511). There was also a Kansas City Five — the same musicians, minus Young, who did a Commodore session on 18 Mar 1938. A group of totally different membership was also called the Kansas City Five; they recorded for Pathé and Ajax in 1924 and 1925.

KANSAS PHONOGRAPH CO.

One of the firms affiliated with the North American Phonograph Co. from 1890 to 1893, located in Topeka, Kansas. George E. Tewksbury was president in 1890 and general manager in 1892–1893. S.S. Ott was president in 1891–1892, and general manager in 1892–1893. A.B. Poole was secretary-treasurer in 1892.

KANTOR, KEN (7 SEP 1956–)

One of America's preeminent speaker designers, Kantor earned an S.B.E.E. degree from MIT in 1979, with a thesis entitled "A Psychoacoustically Optimized Loudspeaker," and in 1982, he earned an M.S. from the same university, with a thesis entitled "Radio Frequency Performance."

After completing postgraduate work at MIT, he worked for Teledyne Acoustic Research from 1983

to 1986, as director of research and development (R&D), and was with NHT Loudspeakers from 1986 to 1990, as cofounder, chairman, and head of R&D. In 1990, NHT was purchased by International Jensen and from 1990 to 1997 Kantor remained with the company as vice president, technology, and chairman of the corporate technology department. From 1997 to 2000, he was with Vergence Technology, as cofounder, managing director, and chief technical officer. He has also had technology consulting and product development relationships with Boston Acoustics, NAD, Faroudja Laboratories, MultiVision Products, Denon, and Hewlett-Packard, among others. Current projects include research in acoustics toward the goal of improved loudspeaker performance.

His design accomplishments include a number of very highly regarded speakers from AR, NHT, and Vergence. He has had numerous articles published in consumer and trade journals, was elected to the administrative committee of the Institute of Electrical and Electronics Engineers Consumer Electronics Society for four years, and was also elected to the administrative committee of the Northern California chapter of the Audio Engineering Society. He has been awarded numerous patents, awards, and honors relating to audio technology and product design, and as of 2002, he was CTO and co-owner of Intelligent Audio Systems, and working on proprietary loudspeaker/electronics technology.

HOWARD FERSTLER

KAPP, DAVE (7 AUG 1904–1 MAR 1976)

Record producer and label owner Dave Kapp was the younger brother of another prominent record industry executive, Jack Kapp. He owned a music store in the family's hometown of Chicago until the early 1930s, and then in 1935 joined the fledgling U.S. Decca label, which his brother had established a year earlier. There, he was put in charge of recording country acts, producing records by Ernest Tubbs among many others through the early 1950s. In 1951, he joined RCA as an A&R man in their pop division, and then in 1954 founded his own label, Kapp Records. He served as president of the RIAA from 1966 to 1967, and then sold the Kapp label to MCA and retired from the business. He died in New York City.

KAPP, JACK (15 JUNE 1901–25 MAR 1949)

American recording industry executive, born in Chicago. His father was a salesman for Columbia records, and Kapp began to work for the firm as a

shipping clerk at age 14. He moved to Brunswick in 1926, in charge of the Vocalion label. In 1934 Kapp arranged with Edward R. Lewis, head of Decca Record Co., Ltd. (U.K.), to establish an American branch, and set up the Decca Record Co. on 4 Aug 1934 with himself as president; the new label became one of the best known and most profitable in the U.S. industry. Kapp was featured in a *Collier's* magazine story of 1947, titled "The Biggest Man in the Record Business." He died in New York. Kapp's brother, Dave, was the founder of Kapp Records.

KAPP RECORDS

Record executive Dave Kapp founded Kapp Records in 1954 after stints at Decca and RCA Victor. His major discovery and the label's flagship artist was Roger Williams, who charted on Kapp throughout its existence. Other notable Kapp artists included Bing Crosby, the Chad Mitchell Trio, Jack Jones, Louis Armstrong (the #1 hit "Hello, Dolly" [Kapp 573]), and Cher. During the mid-1960s, Kapp licensed material from the British Pye label, enjoying success with singles by the "British Invasion" group the Searchers. Dave Kapp sold Kapp Records to MCA in 1967. The label's last major hit came in 1971 with Cher's recording of "Gypsies, Tramps, and Thieves" (Kapp 2146). MCA discontinued it as an imprint in 1973.

WILLIAM RUHLMANN



Kapp Records label. Courtesy David A. Jasen

KARAJAN, HERBERT VON (5 APR 1908– 16 JULY 1989)

Austrian conductor, born in Salzburg. He studied piano at the Mozarteum in Salzburg, then conducted in Vienna, making his debut there on 17 Dec 1928. Engagements in Ulm and Aachen followed, then important performances at the Vienna State Opera (1936), and the Berlin State Opera — in particular an acclaimed *Tristan* in 1937. Karajan was at La Scala in 1938, and was on his way to international stardom. His rise was interrupted by cloudy wartime experiences and politics, but by 1948 he was safely on his way once more, appointed to the directorship of the Vienna Symphony Orchestra (where he worked to 1960). La Scala made him music director in 1950, and he also was music director of the Philharmonia Orchestra of London. His final great appointment came in 1954, as music director of the Berlin Philharmonic Orchestra, where he remained until the year of his death. He also conducted at the Metropolitan Opera (1967), and in most of the world's leading concert halls and opera houses, gaining recognition as one of the finest conductors of the century. He died in Anif, Austria.

Karajan's repertoire is well represented on records. He covered a vast range of symphonic and operatic literature, old and new. The composers with whom he became most closely identified were Verdi, Ravel, Beethoven, Bruckner, Mahler, Brahms, Wagner, and Shostakovich. A cross-section of his art was offered in new DGG compact discs (CDs) of 1989; *Ballo in maschera* with Placido Domingo and the Vienna Philharmonic Orchestra (DG 427635–2), the Bruckner Eighth Symphony with the Vienna Philharmonic (DG 427611–2), the four Brahms symphonies with the Berlin Philharmonic Orchestra (DG 427–602–2), and the nine Beethoven symphonies (DG 429036–2). He won three Grammy awards for his recordings.

KARLE, THEO

(30 JULY 1893–7 MAY 1972)

American concert and operatic tenor, born Theo Karle Johnston in Perry, Iowa. He made his debut in New York in 1916, and sang on tour with the New York Philharmonic and other orchestras. A Brunswick recording artist from 1920 to 1924, Karle made more records for that label than anyone else. Earlier he had made a few Victor records, in 1916–1917. During the late 1920s, he was active singing opera in Paris, Monte Carlo, and other European cities. He died in Seattle, Washington. [Walsh 1972/9.]

KASSEL, ART (18 JAN 1896–3 FEB 1965)

American big band leader and songwriter, performer on clarinet, alto saxophone, and violin; born in Chicago. After military service in World War I, he played with bands in Chicago and formed his own orchestra in 1924; one of the players for a time was Benny Goodman. He achieved success in a long run at the Bismarck Hotel in Chicago, and toured the Midwest. His band, known as Kassels in the Air, was a sweet dance ensemble. They recorded extensively, first for Victor in 1929 ("I Wish I Knew" #21885), then for Columbia from 1932 and Bluebird from 1934. His composition and theme song, "Hell's Bells," was given an enterprising jazz-like recording (Columbia 2682; 1932). Kassel was active into the 1960s, mostly in West Coast appearances. He died in Van Nuys, California.

KATZ, BOB (12 MAR 1949–)

A noted recording engineer and producer, and former technical director of Chesky Records, Katz earned a B.A. degree in communications and theater from the University of Hartford in 1972, and went on to private studies with Ray Rayburn and Al Grundy. From 1972 through 1977, he was audio supervisor of Connecticut Public Television (CPTV), and later on was an independent recording engineer and producer, with recordings and mastering work done for numerous labels, including BMG, Chesky, Sony, EMI, Virgin, and Sierra. He also has done extensive recording for radio and film, built several recording studios, and consults throughout the world on audio and computer topics. Among his many accomplishments in the recording business, Katz built the first working model of the Bob Adams 128X oversampling analog-to-digital converter, and also recorded the world's first compact disc (CD) using 20-bit 128x oversampling technology.

He has also recorded more than 100 audiophile-quality albums of popular and classical music, using minimalist miking techniques and custom-built equipment, and recorded the music used on the world's first 96 kHz/24-bit DVD release. Katz co-owns Digital Domain, a CD mastering house that masters music from audiophile classical to pop, rock, and rap, and also manufactures selected products used in the professional and consumer audio industry. He has published hundreds of articles since 1972 on recording and computer technology, in numerous magazines including *Byte*, *RE/P*, *dB*, *Pro Audio Review*, *Audio Media*, the *Journal of the Audio Engineering Society*, and is in the process of completing a textbook on digital and analog mastering.

Katz has recorded and/or mastered three Grammy winners, and has had his recordings named disc of the month more than 10 times in *Stereophile* magazine and numerous times in *Stereo Review*. He is a member of

the Audio Engineering Society, being chairman of the New York section committee, facilities chair of the AES Convention, workshops chair of the AES Convention, and has been chairman of several mastering and recording workshops at various AES Conventions.

HOWARD FERSTLER

KATZ, MICKEY

(15 JUNE 1909–30 APR 1985)

Mickey Katz's unique blend of Spike Jones, music, and Borscht Belt humor proved a successful formula for much of the space age pop era. Meyer Myron (Mickey) Katz, born in Cleveland, Ohio, was a clarinetist and musician. He first toured with Phil Spitalny, then played at Cleveland's Loew's State and Palace theaters with Phil's brother Maurice. Since studying the clarinet as a child, Katz became a proficient performer and was playing with local bands in his teens.

During World War II, Katz and his band, Mickey Katz and His Crazy Kittens, did USO tours with Betty Hutton through Europe. In 1946, he joined Spike Jones and His City Slickers but he left Jones in 1947 to perform his own comedy act in which he did Yiddish parodies of English songs and started making his own comedy records and albums. He can be heard on a number of classic Spike Jones recordings, most notably making the astounding polyglotal "glug-glug-glugs" on Jones's version of "Hawaiian War Chant." Katz mentioned to Jones's RCA producers that he had been working on his own parody tunes, combining popular tunes with Yiddish lyrics and instrumentation. RCA decided to record Katz and released his first single, "Haim Afn Range" (Home on the Range; 1940) backed with "Yiddish Square Dance." It proved a surprise hit, selling more than 30,000 copies in one month. This was followed by "Tico Tico" (Tickle Kitzel; 1940), backed by "Chloya" (Chloe), a takeoff of the Ink Spots. In 1948, Katz and Hal Zeiger produced the Borscht Capades, an English-Yiddish comedy revue, at the Wilshire Ebell Theater in Los Angeles, the first of a series of successful stage shows, that toured for several years. Katz appeared as headliner and master of ceremonies. Among the cast was Katz's son, better known as Joel Grey.

Katz switched to Capitol Records in the early 1950s; he remained with the label until he retired in the late 1960s. Most of his material remained the same throughout his albums, Yiddish interpretations of American tunes, rendered in Katz's heavily-inflected comic Jewish accent ("ecch-sent"). Katz reprised the Borscht Capades idea in the mid-1960s with a Broadway revue, *Hello, Solly* (Capitol 2731, 1967), but the show was short-lived. He published an

autobiography, *Papa, Play for Me* (1977). After his death, clarinetist Don Byron, who had learned klezmer music as a member of the Klezmer Conservatory in the mid-1980s, paid tribute to Katz's work by recording the well-received *Dan Byron Plays the Music of Mickey Katz* (Elektra — Morse Music CD P833 K2 2; 1993). In 2000, Koch International issued a "best of" collection of Katz's 1950s era Capitol Recordings on CD, *Greatest Shticks* (8059). Katz died in Los Angeles.

MARTIN J. MANNING

KAUFMAN, IRVING (8 FEB 1890–3 JAN 1976)

Russian/American tenor and vaudeville artist, born Isidore Kaufman. His family emigrated to the U.S. when he was a child, and he began his career singing in the streets of Syracuse, New York, and passing the hat. Then he and his brothers Phil and Jack formed a vaudeville trio. In 1914 he began to record, for Edison Blue Amberol cylinders, with "I Love the Ladies," and went on to a 17-year recording career with all the major labels. In addition to solo work, he was a member of the Avon Comedy Four, popular on stage and on records. The Victor 1917 catalog had 19 titles by him. During the period 1925–1930 Kaufman may have



Jack and Irving Kaufman. c. early '20s. Courtesy David A. Jasen

made more records than any other American singer, many under pseudonyms or anonymously. Among his best efforts were dance band vocals.

With the decline of the recording industry in the 1930s, Kaufman was occupied with radio broadcasts, including early singing commercials. Around 1950 he made Jewish dialect records, and in 1974 he recorded some songs in his home; but essentially he was in retirement from the mid-1940s, in California. He died in Indio, California. [Corenthal 1984 lists the Jewish dialect discs.]

KAUFMAN, LOUIS (10 MAY 1905–9 FEB 1994)

American violinist, born in Portland, Oregon. He was acclaimed for his performances of contemporary music, as well as for his efforts to present Baroque works in an authentic manner. He also played solo parts in numerous Hollywood films.

Kaufman recorded for many labels, especially for Capitol, Vox, Orion, and Concert Hall. He made one Edison Diamond Disc. His most important work was for Concert Hall LPs from 1949: the Violin Concerto of Khatchaturian (Concert Hall 126/9), and the Vivaldi 12 Concerti, opus 9 (Concert Hall set 1134). His interpretation of Torelli's 12 Concerti, opus 8, appeared on L'Oiseau Lyre LD 115/6. Orion cassettes issued good selections of his recordings in the 1980s, and Music and Arts/Harmonia Mundi offered a CD (#620) of 1954 recordings in 1990.

KAYE, SAMMY (13 MAR 1910–2 JUNE 1987)

American dance band leader, born in Rocky River, Ohio. Graduating from Ohio University in 1932, he formed a band and was successful in the Midwest, offering a notably sweet sound and the idea of "singing song titles" — announcements of the song name before the melody began. "Swing and Sway with Sammy Kaye" caught on as a slogan, and the band became one of the most popular for the longest time. A crisper sound emerged in the 1960s. Kaye's band continued to perform into the 1970s, after most of the big bands had long faded away. He died in Ridgewood, New Jersey.

Kaye composed the wartime hit "Remember Pearl Harbor" almost immediately after the attack, and put it out on record with remarkable alacrity (Victor 27738; 17 Dec 1941). He had several other popular wartime songs, including "White Cliffs of Dover" (Victor 27704; 1941), and "I Left My Heart at the Stagedoor Canteen," featuring the outstanding vocalist Don

KC AND THE SUNSHINE BAND

Cornell (Victor 27932; 1942). His earliest record label was Vocalion, which issued his first hit: "Rosalie" (Vocalion 3700; 1937). Among Kaye's many popular records were "Harbor Lights" (Columbia 38963; 1950), "Daddy" with vocal by the Kaye Choir (Victor 27391; 1941), and "There Will Never Be Another You" with vocal by Nancy Norman (Victor 27949; 1942). His best recordings for Victor are reissued on CD on *Swing and Sway with* (Collectors Choice 50).

KC AND THE SUNSHINE BAND

KC and the Sunshine Band epitomized the infectious, dance-floor disco/funk ascendant in the 1970s. Based in Miami, Florida, the group's punch pop sound represented a distillation post-1960s soul (devoid of the sociopolitical agenda characterizing leading purveyors of the genre such as Stevie Wonder, Sly Stone, and the O'Jays) tinged with lilting Caribbean rhythms known as junkanoo.

KC — an interracial aggregate consisting of seven to eleven members — was the brainchild of vocalist/key-boardist Harry Wayne Casey and bassist Richard Finch. Together, they developed a strong regional reputation as a songwriting/studio production team, most notably with George McCrae, whose "Rock Your Baby" (T.K. 1004; 1974; #1), was named the year's top single by *Rolling Stone*. The band released a string of top-selling hits during the later 1970s, including "Get Down Tonight" (T.K. 1009; 1975; #1), "That's the Way (I Like It)" (T.K. 1015; 1975; #1), "(Shake, Shake, Shake) Shake Your Booty" (T.K. 1019; 1976; #1), "I'm Your Boogie Man" (T.K. 1022; 1977; #1), "Keep It Comin' Love" (T.K. 1023; 1977; #2), and "Please Don't Go" (T.K. 1035; 1979; #1). Although not considered an album act, their long-playing catalog (as well as 12-inch singles) were solid sellers, particularly the debut, *KC and the Sunshine Band* (T.K. 603; 1975; #4), which remained on the *Billboard Top 200* for 47 weeks.

Casey's involvement in a serious car accident in the early 1980s resulted in the cessation of the group's chart run. He briefly returned to the public eye billed as "KC" with the release of *KC Ten* (Meca 8301; 1984; #93), featuring the post-disco single "Give It Up" (Meca 1001; 1984; #18), before fading back into obscurity.

FRANK HOFFMANN

KEELE D.B. (DON) JR. (2 NOV 1940—)

Born in Los Angeles, Keele has worked for a number of audio related companies in the area of loudspeaker R&D and measurement technology including Electrovoice, Klipsch, JBL, and Crown International. He holds three patents on "constant-directivity" loudspeaker horns and

is a fellow of the Audio Engineering Society (AES). For 11 years he wrote for *Audio Magazine* as a senior editor performing loudspeaker reviews. He recently joined Harman-Becker Automotive Systems as a principal engineer in the advanced development engineering group. He is currently doing loudspeaker reviews for *The Audio Critic* and *The Audiophile Voice* magazines.

Keele holds two B.S. degrees in electrical engineering and physics from a state college in California and an M.S.E.E. degree from Brigham Young University. He has presented and published a number of AES technical papers on loudspeaker design and measurement techniques and has also written many magazine articles. He is perhaps best known for his AES paper describing how loudspeaker low-frequency responses can be measured using near-field measurement techniques. Mr. Keele is a frequent speaker at AES section meetings and workshops, has chaired several AES technical paper sessions, and is a member of the AES review board. He is also a past member of the AES board of governors and is past vice president, central region USA/Canada of the AES. Keele recently received the 2001 TEF Richard C. Heyser award.

HOWARD FERSTLER

KEANE, BOB

SEE DEL-FI (LABEL)

KEEN (LABEL)

Los Angeles-based pop label most famous for issuing Sam Cooke's first solo hit recordings. The label was founded by John and Alex Siamas, who were successful businessmen and amateur music buffs. Founded in early 1957, the brothers employed musician Bob Keane (who may have given the label its name) briefly before Keane struck out on his own to found Del-Fi. Without a house producer, the label might have folded except for a lucky break. Producer Robert "Bumps" Blackwell arranged for the lead singer of the gospel group the Soul Stirrers, a young artist named Sam Cooke, to cut "You Send Me" in an attempt to reach the pop market. However, the Stirrers's label, Specialty, didn't want to risk offending the group's fans by issuing the recording, so Blackwell took it to the new Keen label and it was a tremendous hit, selling 1.7 million copies (#1 pop and R&B, 1957; Keen 34013). Cooke remained with Keen through 1960 before signing with RCA Victor. The label was unable to develop any further hit-making acts, and lived off of album reissues of Cooke's recordings through the early 1960s. Some Keen material was issued on related labels, An dex, Ensign, and Famous.

CARL BENSON



Philadelphia-based label issued c. 1913-14. Courtesy Kurt Nauck/Nauck's Vintage Records

KEEN-O-PHONE (LABEL)

A vertical-cut record issued by the Keen-O-Phone Co. of Philadelphia, from April 1913; it was a successor to the Boston Talking Machine Co. In September 1913, Fred Hager was in charge of the recording studios. The label was a successor to Phono-cut. In 1914 the label name was changed to Rex. The firm also made disc players, advertised in December 1911. Its machine was the feed-device type, which moved the turntable beneath the stylus. Keen-O-Phone was put into liquidation in 1914. [Blacker 1975.]

KEEPNEWS, ORRIN

SEE MILESTONE (LABEL); RIVERSIDE (LABEL)

KEF AUDIO

Founded in 1961 by electrical engineer Raymond Cooke, on the premises of a metalworking operation called Kent Engineering and Foundry (hence KEF), the company has long had a flair for the unusual and controversial in terms of loudspeaker engineering design and use of materials. Reestablishing a previous relationship with the BBC in 1966, Cooke was interested in adopting Neoprene (an artificial rubber) to help maintain sound quality in the midband by using it as the surround to the loudspeaker diaphragm, while using new materials for the diaphragm itself. During the 1960s KEF flourished, and by 1973 the company was

evolving the concept of computer assisted design at a time when even four-bit microprocessor technology was still in its infancy. Ten years of worldwide growth followed, peaking in 1985 with the setting up of KEF Electronics of America. Under new ownership in 1992, the company found itself equipped with new ideas, new personalities, and new products. Cooke died in 1995, but the company continues to follow his original precepts. [Website: www.kef.com.]

HOWARD FERSTLER

KEITH PROWSE (LABEL)

A record issued by the London music publishing firm, Keith Prowse and Co., Ltd., in 1927. There were just three issues, continuing a series sponsored by the firm but on the Parlophone label. The whole series was made up of jazz material from Okeh, Gennett, and Brunswick-Vocalion. The Black Bottom Stompers of Johnny Dodds, with Louis Armstrong and Earl Hines, are heard on two of the sides.

It is almost certain that the Prowse firm was the proprietor of the KP Music Recorded Library, a set of vinyl 78s made for use by the entertainment industry in the 1960s. [Rust 1978.]

FRANK ANDREWS

KELL, REGINALD

(8 JUNE 1906–5 AUG 1981)

English clarinetist, born in York. He played in silent movie theaters, and studied at the Royal Academy of Music in London, and later taught there. He was principal clarinetist for the Royal Philharmonic Orchestra, London Philharmonic, and London Symphony in the 1930s. He spent about 10 years in America before returning to London in 1958. He retired in 1966, and — having returned to the U.S. — died in Frankfort, Kentucky.

Kell was among the first virtuosos to record the clarinet works of the masters. He was heard with the Busch Quartet in the Brahms *Quintet in B Minor* (Victor M491), and with Elisabeth Schumann in Schubert's *Hirt auf dem Felsen* (Victor 14815); he did the Schubert number also with Margaret Ritchie (HMV C3688). His rendition of the Mozart Clarinet Quintet, with the Philharmonia Quartet (Columbia CM-702) was especially notable.

KELLER, ARTHUR CHARLES

(18 AUG 1901–25 AUG 1983)

A major pioneer in high-fidelity and stereophonic sound recording and reproduction, Keller spent his

KELLOG, EDWARD W.

entire career with the Bell System, beginning with his first job in 1918 as a laboratory assistant for the Western Electric Company. While employed at Bell, he completed his education, graduating from Cooper Union in 1923. He then went on to do graduate work at Yale and later Columbia, earning a master's degree.

Keller's early work at Bell Laboratories was in sound recording and reproduction under the direction of Henry Harrison. Keller was particularly interested in stereophonic recording, and in December 1931, working with Harvey Fletcher and Leopold Stokowski, Keller used improved electrical recording equipment installed at the Academy of Music in Philadelphia to record and transmit stereophonic sound.

Keller held 40 patents related to his work in sound recording and other areas, including one in the late 1930s that covered the basic principles of stereophonic recording, and his work with sound engineer Irad Rafuse led to the first single-groove stereophonic recordings. Their proposal for recording two sound channels onto a master disc eventually became the standard stereophonic recording technique. Interestingly, in one patent application, Keller described the 45/45 method that utilized the single groove. However, the application was not filed until 1936, because Bell did not see an immediate commercial use for the method. Keller was unaware of the stereo work of Blumlein, at least until the 1950s, when Keller's 45/45 system was independently reinvented by Westrex.

During World War II, Keller was involved in the development of four major sonar systems for the U.S. Navy, and for his services he received two navy citations. After the war, he continued his work with Bell Laboratories, which included the development of the wire spring relay and solderless wire wrapping. Keller retired from Bell in 1966 after a long and productive career. During that time, he authored 35 technical papers, and for his achievements, he received the Audio Engineering Society Emile Berliner award (now known as the silver medal) in 1962 and the society's gold medal in 1981. He died in Bronxville, New York.

HOWARD FERSTLER

KELLOG, EDWARD W. (1882–1960)

Kellog (some sources give name as Kellogg) was a pioneering researcher, who, along with Chester Rice, came up with the basic design of the modern, direct-radiator loudspeaker, which had a small coil-driven mass-controlled diaphragm in a baffle with a broad mid-frequency range and relatively uniform response. (Edward Wente at Bell Labs had independently discovered this same principle, and filed a patent for it in 1925, with the patent granted in 1931.) Kellog and

Rice worked for GE, and together they published their "hornless loudspeaker" design in 1925, after five years of work. The Rice-Kellogg paper also published an amplifier design that was important in boosting the power transmitted to loudspeakers. In 1926, RCA used this design in the Radiola line of AC powered radios. Kellogg also went on to independently design the first electrostatic loudspeaker system in 1929, with a patent being granted on the design in 1934.

HOWARD FERSTLER

See also Loudspeaker

KELLY, DAN (22 JAN 1842–1905)

American vaudeville and recording artist of the 1890s, specializing in Irish dialect material. He was in the catalogs of the Ohio Phonograph Co. and in the 1893 Columbia catalog. More than 5,000 of his cylinders were sold in 1890–1892, a very high sales figure for that time. Kelly's most popular titles were in the Pat Brady series — "Pat Brady's Plea in His Own Defense," and "Pat Brady before the Election." [Brooks 1979.]

KELSO, MAY (28 FEB 1867–5 JUNE 1946)

American actress, contralto, and vaudeville artist, born in Dayton (or perhaps Columbus), Ohio. Her first name is variously May, Mary, Maym, and Mayme. (The death certificate identified her as Mary L. Bent — Bent was her married name — "also known as Maym Kelso.") Her stage and screen career extended from 1912 to 1927. She then retired, and died in South Pasadena, California.

Kelso began to make Edison cylinders in 1899 with "Because" (#7176), singing a repertoire that included ballad and Negro dialect material. Her recording work ended in 1901, after 17 two-minute solo cylinders had been made, plus four duets with John Bieling. Later, she made nine concert-size cylinders, covering much the same repertoire. A few discs also appeared from National Gramophone Co. in 1899 (a seven-inch version of "Kentucky Babe," #9418), and Zonophone in 1901 ("Kentucky Babe" again, plus "Stay in Your Own Backyard," #9414; and "Florida Flo," #9415). She did not record thereafter. [Walsh 1980/12, 1981/1.]

KEMP, HAL (27 MAR 1905–21 DEC 1940)

American big band leader, born James Harold Kemp in Marion, Alabama. He organized a group while at the University of North Carolina, and then performed on ocean liners and in Britain. In 1927 he had a

New York engagement, followed by important runs in Miami and Chicago. John Scott Trotter, pianist and arranger, was one of the notables in the band, which also had drummer-vocalist Skinnay Ennis, vocalist Smith Ballew, and sometimes Bunny Berigan. The Carolina Club Orchestra was the most used of several names for the group.

Kemp recorded in London for Columbia in 1924, then moved to Pathé, Vocalion, and many other labels in the 1920s. Brunswick was his major affiliation in the early 1930s, and Victor thereafter. His most popular record was "Got A Date with an Angel" and "Lamplight," both sung by Ennis (Victor 25651; 1937). Kemp was on radio and in motion pictures, and was at the peak of stardom when he was killed in an auto accident near Madera, California. Twenty-four of his Brunswick recordings are reissued on the CD *The Best of* (Collectors Choice Music 125).

KEMPF, WILHELM (25 NOV 1895–23 MAY 1991)

German pianist, born in Jüterbog (Berlin). At age nine he was a student in the Berlin Hochschule für Musik; in 1916 he began to concertize. He performed with the Berlin Philharmonic Orchestra in 1918 — beginning a 60-year association — and toured Europe, Japan, and South America. His London debut was in 1951, his first appearance in America in 1964. Kempff specialized in Mozart, Beethoven, and Schubert. His Beethoven performances were widely regarded as definitive. He had a long career, appearing with the Berlin Philharmonic for the last time in 1979. His principal labels were Polydor, American Decca, and Deutsche Grammophon. He died in Positano, Italy. Kempff's recordings are reissued on numerous CDs, including *The Complete Beethoven Piano Sonatas* (Deutsche Grammophon 537242), and on three CDs as part of Phillips's *Great Pianists of the 20th Century* series (Vols. 55–57; Phillips 568622, 568652, 568682).

KENDZIORA, CARL JR. (1921–1986)

Historian of the record industry and discographer. He contributed regular columns, "Behind the Cobwebs," and articles to the journal *Record Research* from 1949 until he died. His major publications include a label list of Plaza (published 1961–1983 in *RR*), and "The Labels behind Black Swan" (*Record Changer* #14–1, 1955).

KENNEDY, NIGEL [PAUL] (28 DEC 1956–)

Born in Brighton, England, Kennedy studied at the Yehudi Menuhin School before moving to the Juilliard School of Music in New York to study under the

celebrated teacher Dorothy DeLay. He made his London concert debut (1977) with the London Philharmonic under Riccardo Muti, at the Royal Festival Hall followed by a 1980 debut with the Berlin Philharmonic. His first noteworthy recording was *Jules Massenet's 'Le Carillon: Ballet; Meditation: [from] Thais* (London, 410–189–4; 1984), with the National Philharmonic Orchestra; it was followed in 1987 by Kennedy's first appearance with the BBC Symphony Orchestra.

A major EMI artist since the start of his career, Kennedy's multi-award-winning discography is extensive. He has made two highly acclaimed recordings of Edward Elgar's "Violin Concerto" (EMI EMX 4120581; 1984, reissued 1986); the first, with the London Philharmonic and Vernon Handley, achieved gold disc status, was voted 1985 best classical record, British record industry awards, and record of the year by *Gramophone* magazine, selling in excess of 300,000 copies. The second version was in 1997, with the CBSO and Simon Rattle, alongside Vaughan Williams's "The Lark Ascending" (EMI Classics 7243–5–56413–2–8; 1997). One of Kennedy's landmark recordings is considered to be Antonio Vivaldi's *The Four Seasons*, with the English Chamber Orchestra (CD, EMI Classics CDC 7–49577–2; 1989), which earned him a place in the *Guinness Book of Records* as one of the biggest selling classical records of all time. The video (Pioneer Artists PA-90–316; 1990, reissued EMI Classics, 2001) included interviews with Kennedy. A change of pace was *Nigel Kennedy Plays Jazz* (Chandos CHAN 6513; 1990). Kennedy's *Always Playing* (New York: St. Martin's, 1992), a partial memoir, was published the same year he decided to withdraw from public performance.

Following a five-year sabbatical, in April 1997, Kennedy made a triumphant return to the international concert platform. Since then, Kennedy has been in constant demand on the international circuit. In 1998, he made a highly acclaimed North American tour, his first for more than five years, devoted a recording to the works of the great violinist and composer, Fritz Kreisler (EMI Classics 7243–5–56626–2–0; 1998), and released *Classic Kennedy* (EMI Classics 7243–5–56890–2–3; 1999), a collection of short pieces with the English Chamber Orchestra. The following year, Kennedy released a concerto based on the work of a rock band, *Riders in the Storm: The Doors Concerto* (Decca, 2000). In 2000, Kennedy released his first recording of works by Bach, *Kennedy Plays Bach with the Berlin Philharmonic* (EMI Classics, 2000), featuring four of the composer's best-known works; it was also the first recording collaboration between the violinist and the Berlin Philharmonic. Also in 2000, Kennedy was presented with an award for outstanding contribution to British music at the

KENNEDY, WILLIAM A.

U.K. Brit Awards, which took place at London's Royal Albert Hall; the following year, the same body awarded Kennedy the coveted male artist of the year. To celebrate his 25th anniversary with the label in 2002, EMI released *Kennedy's Greatest Hits* (two CDs: 5573992; one CD: 5573302). That September, Kennedy was appointed artistic director of the Polish Chamber Orchestra, a role that Kennedy's teacher and mentor, the late Yehudi Menuhin, once held.

MARTIN J. MANNING

KENNEDY, WILLIAM A. (CA. 1895–1958)

Irish/American tenor, popular recording artist of the mid-1920s. He worked for Columbia, doing such familiar songs as "My Wild Irish Rose" (#33015; 1926), and lesser known items like "Little Town in the Old County Down" (#33014; 1926).

KENTON, STAN

(15 DEC 1911–25 AUG 1979)

American jazz bandleader and pianist, born Stanley Newcomb Kenton in Wichita, Kansas. He grew up in Los Angeles, played and made arrangements for various groups there — Gus Arnheim's among them — in the 1930s. He formed his own big band in 1941, naming it the Artistry in Rhythm Orchestra. The group was quickly popular, making hit records like "And Her Tears Flowed Like Wine" (Capitol 166; 1944), and "Tampico" (Capitol 202; 1945). Kenton recorded for 25 years with Capitol, until 1968; in the 1970s, he formed his own Creative World label to reissue earlier recordings and current material. Popular vocalists who performed with his band included Anita O'Day, Gene Howard, and June Christy; star instrumentalists over the years included trombonist Kai Winding, alto saxophonists Art Pepper and Lee Konitz, tenor saxophonists Stan Getz and Zoot Sims, trumpeter Maynard Ferguson, and drummer Shelly Manne. Pete Rugolo joined Kenton as his arranger in 1945.

In 1949 Kenton performed in Carnegie Hall with a new orchestra, a 20-piece group he named Progressive Jazz — giving the name to the new jazz style. His largest orchestra was assembled in 1950, a 43-piece group he named Innovations in Modern Music Orchestra; it included strings (the orchestra's recordings are documented on a Capitol CD, 59965). Kenton was especially popular on college campuses in the 1960s. His albums *West Side Story* (Capitol 1609; 1961), and *Adventures in Jazz* (Capitol 1796; 1962), won Grammy awards. Mosaic has reissued Kenton's complete 1950–1963 Capitol recordings on a seven-CD set (4–136). Kenton died in Los Angeles. [Jepsen 1962.]

KENTUCKY PHONOGRAPH CO.

One of the affiliated firms of the North American Phonograph Co. from 1890 to 1893, based in Louisville, Kentucky. When North American ceased operations, the firm remained active, finally closing in October 1909. J.R. Kincaid was president in 1891, and R.C. Kincaid was president in 1892. George W. Grant was general manager and secretary/treasurer in 1891, and George W. Seymour was general manager in 1892.

KERNS, GRACE (1866–10 SEP 1936)

American concert soprano, born in Norfolk, Virginia. Her surname is also seen as Kearns; she used pseudonyms Katherine Clark and Miriam Clark. In addition to solo work, she sang with the Columbia Ladies Quartet. Her first record was "My Beautiful Lady" for Columbia in September 1911. "Chinatown," a duet with John Barnes Wells, was a popular disc of 1915. Kerns ended her concert career in 1918 and went abroad to "minister to the needs of service men"; she also ceased recording, except for a few discs in 1919 for minor labels. Her biggest selling record was "Whispering Hope" with Mildred Potter (Columbia #2842, issued November 1918). She died in Williamsburg, Virginia. [Brooks 1990; Walsh 1964/5–8.]

KERSHAW, DOUG (14 JAN 1936–)

Born Douglas James Kershaw in Tiel Ridge, Louisiana, Kershaw achieved success in the early 1970s on the country charts with his Cajun-flavored songs and fiddle playing. Kershaw's mother was a fiddler and guitarist, and she encouraged all of her children to play. At age 12, Doug and his brothers Nelson ("Pee Wee"), and Russell Lee ("Rusty"; 2 Feb 1938—23 Oct 2001), formed a band called the Continental Playboys; they performed over local Lake Charles TV and at bars and social clubs. By 1953, the band was down to a brother duo, with Rusty and Doug performing on the prestigious *Louisiana Hayride* radio program and recording for a local label.

In 1956, the duo moved to Nashville, where they were signed to Acuff-Rose's Hickory label. They made recordings in mainstream country, country boogie, early rockabilly, and Cajun styles, scoring their first hit with "Hey Sheriff" in 1958, followed by their biggest successes, 1960's "Louisiana Man," and "Diggy Diggy Lo" from the following year. However, the brothers' chart success was short-lived, and by 1964 they had split up.

Doug signed with Warner Brothers records in 1969, recording several albums that veered from country-rock fusions to Nashville-sound, string-laden productions. His most successful recording was 1976's *Ragin' Cajun* (Warner Bros. 2910), his most

roots-oriented outing. Doug's flamboyant performance style made him a favorite as an opening act on the rock circuit as well as on network TV.

Since the mid-1970s, Kershaw has continued to record and tour sporadically. He has made several "comebacks," scoring his last country hit in 1981 with "Hello Woman." In 1988, he cut a duet with Hank Williams, Jr., on the novelty "Cajun Baby," which reached the country Top 50. In the early 1990s, he made yet another comeback recording with Nashville session fiddler Mark O'Connor, and has recorded for smaller labels through the turn of the 21st century.

CARL BENSON

KEY (LABEL)

A British record sold by the Selfridge department store of London in 1933 and perhaps early 1934. About 30 releases are known, of dance and popular vocal material. Christopher Stone, the pioneer disc jockey, selected the works (from Panachord and Melotone catalogs) and was given credit on the labels. [Rust 1978.]

KEYNOTE RECORDS

Eric Bernay (nee Bernstein) (1906–1968), was the treasurer of the *New Masses* magazine in the 1930s, and owned a record shop, the Music Room, in New York City. He launched Keynote Records in 1940 with the reissue of the Soviet recordings, *Six Songs for Democracy*, songs of the Spanish Civil War,



Keynote label, c. mid-'40s. Courtesy Kurt Nauck/Nauck's Vintage Records

quickly followed by albums and single records by the Almanac Singers, including their controversial antiwar compilation *Songs for John Doe* and the influential *Talking Union*, Paul Robeson, Josh White's *Southern Exposure*, a few new songs from Harold Rome's *New Pins and Needles*, Mark Blitzstein's *No for an Answer*, and Earl Robinson. Beginning in 1943, under producer Harry Lim, the label began to release a number of significant jazz recordings by Lester Young, Coleman Hawkins, Red Norvo, Dinah Washington, Lennie Tristano, Benny Carter, and Bud Freeman. Mercury Records took over the bankrupt Keynote in 1948.

RONALD D. COHEN

KICKER, KATE

A pianist who recorded for Berliner (e.g., #2547 "Piano Solo," 18 Apr 1896). She was the first female pianist heard on disc records.

KICKING MULE RECORDS

Guitar-oriented label founded in 1974 by promoter/producer Ed Denson and guitarist/performer Stefan Grossman. The label originally had two separate offices, one in California where Denson worked and the other in London, where Grossman held forth. Originally, its recordings were pressed and distributed in Europe by the Swedish-based Sonet label. At first, Denson simply re-pressed albums here that were recorded in Europe; then he began signing his own artists. One selling point for the early records was that guitar tablature books were available for every record issued; in this way, listeners could learn the music more easily, reflecting Grossman's orientation toward teaching as well as performing. The label was most active during the late 1970s and early 1980s. Grossman's interest in acoustic guitar playing led to issuing albums by diverse guitarists, ranging from blues legend (and Grossman teacher) Rev. Gary Davis to young players like "Duck" Baker and Bob Brozman, a master of the steel guitar. The label also issued banjo recordings, primarily by revivalist Art Rosenbaum, and also the influential anthology *Melodic Clawhammer Banjo*, produced by Bob Carlin. Sometime in the early 1980s, the European branch was closed and Denson moved the business to his rural home. He continued to maintain the catalog in print, but issued only a few new records. In 1998, the rights to Kicking Mule's U.S. recordings were sold to Fantasy Records.

CARL BENSON

KIDDY RECORD (LABEL)

KIDDY RECORD (LABEL)

A Mother Goose series of six discs advertised in *TMW* in October 1912, recorded by the Waldorf-Astoria Orchestra, with Gilbert Girard and a Miss C.M. Burd. James W. Ogden was president of the company.

KID-KORD (LABEL)

A seven-inch record issued by British Homophone Co., Ltd., in 1932, carrying material for children, such as nursery rhymes and animal stories. The discs, which had picture labels, were sold at 4s 6d in albums of six. When British Homophone ceased domestic trade in 1935 the trademark passed to Decca. [Andrews 1988/4.]

KILDARE (LABEL)

An obscure record issued in Britain (or perhaps Australia), in 1927 or 1928, with the word Kildare pasted over the Vocalion name that had marked the original release. One item is known to have had the Kildare name printed, rather than pasted, on the label. It may be that Kildare was "a continuation of the yellow-label Vocalion B series, marketed briefly after Vocalion itself was abandoned" or that the "Kildare sticker was used to disguise and thus dispose of out-of-date stock" (Rust). [Rust 1978.]

FRANK ANDREWS

KIMMEL, JOHN J.

(13 DEC 1866–18 DEC 1942)

American accordionist, the first to record for a commercial label, born in Brooklyn; the name is also seen as Kimble and Kimble. His initial recording was Zonophone #5996, a 10-inch disc of "Bedelia" issued in 1904. He was the first to record his instrument for Edison, beginning with "American Cake Walk" (#9341) in 1906, and continued with that label until 1929. Victor also had many of his records, from 1907 to 1928; Columbia and Emerson also issued Kimmel performances. His recordings were issued under his own name and Joseph Kimmel, John Kimble, Edward McConnell, and Edward Kelly. Kimmel's recordings were very influential on an entire generation of Irish accordion players, although he himself was of German descent. Kimmel played a single-row accordion (known as a melodeon); his breathtaking speed and ability to play in a variety of keys belies the limitations of the instrument. Besides traditional Irish music, he also recorded popular marches and songs of the day. He died in Brooklyn, New York. Selections of Kimmel's 78-rpm recordings were reissued on two LPs, *Leader* (in 1977;

reissued on CD as LED 2060 in 1998), and *Folkways* RF 112 (in 1980; available on special order CD from Smithsonian/Folkways). [Walsh 1958/2.]

KINCAID, BRADLEY

(31 JULY 1895–29 SEP 1989)

Country performer, most notably from 1927 to the late 1940s on network radio programs such as WLS's *National Barn Dance* and WSM's *Grand Ole Opry*. Born William Bradley Kincaid in Point Leavall, Kentucky, Kincaid, widely known as the "Kentucky Mountain Boy," is perhaps best known for the publication of collections of Appalachian folk songs. His first recording session was for Gennett in 1928; he would also record for RCA Victor, Decca, Columbia, Capitol, and various independent labels like Royale. At the height of the post-World War II folk music boom, he rerecorded spare versions (vocals with guitar accompaniment) of much of his classic material on a series of LPs for Bluebonnet, entitled *Mountain Ballads and Old Time Songs*, in 1963. After retiring from performing, he owned the Morelli Music Store in Springfield, Ohio, where he later passed away. He was inducted into the Nashville Songwriter's Hall of Fame in 1971. Old Homestead recordings has reissued a CD of his late 1920s recordings (4014). The Berea College library holds a collection of Kincaid's songbooks and papers (<http://www.berea.edu/library/Special/saafindaidd/saa13.html>). [Wilgus liner notes. 1963.]

FRANK HOFFMANN

KINCAID, WILLIAM MORRIS

(26 APR 1895–27 MAR 1967)

American flutist, born in Minneapolis. He studied in New York with George Barrère, and played in the New York Symphony Orchestra in 1914–1921. He became principal flutist of the Philadelphia Orchestra in 1921, remaining until his retirement in 1960. Kincaid recorded the Telemann Suite in A Minor with the Philadelphia Orchestra (Victor VM890), bringing early attention to that composer as well as to the flute as a concert instrument. His recording of the Mozart Concerto No. 1 with the Philadelphia Orchestra remained in the Columbia catalog into the 1970s. He died in Philadelphia.

KINETOPHONE

The first device that added sound to motion pictures was developed by Thomas Edison and William Kennedy Dickson in 1889. It came to be called the Kinetophone. In a 1912 version the audio, using a Higham amplifier,

was provided by large Blue Amberol cylinders, 4 3/8 inches in diameter and 7 1/4 inches long. The cylinder played up to six minutes, running 120 rpm, with groove pitch of 100 lines per inch. Kinetophone films (projected with the Kinetoscope) were single-reel shorts of six minutes or less in duration; they included "Sextette from Lucia," "Jack's Joke," "Scene from Julius Caesar," "Charge of the Light Brigade," and "Revenge of the Indian Girl." Synchronization of the cylinder with the film was the main problem. It required the record operator to observe certain cueing on the cylinder, then to start the machine at the right moment. Adjustments were possible once the film had started, but they needed to be made with great precision. Because Edison required users of the cylinders to be authorized purchasers of the entire audiovisual apparatus, his records were not widely sold. Theater managers were already showing films with costly projection equipment and were not inclined to duplicate it in order to acquire Edison cylinders. [Blacker 1981.]

See also **Motion Picture Sound Recording**

KING ALBERT

(25 APR 1923–21 DEC 1992)

At a time when even B.B. King adopted a more soulful pop sound in order to achieve commercial success, Albert King was instrumental in keeping a traditional blues sound on the R&B charts. His raw, rootsy style — modeled on blues shouters like Big Joe Turner and Jimmy Witherspoon and bottleneck guitar specialists Elmore James and Robert Nighthawk — was a primary influence on a large number of late 20th-century blues musicians, including Robert Cray, Joe Louis Walker, and Donald Kinsey.

Born Albert Nelson in Indianola, Mississippi, he performed live in Memphis area clubs as well as with the Harmony Kings gospel group between 1949–1951. By the early 1950s, he had relocated to the Gary, Indiana-Chicago area, where he played occasionally on recording sessions for Chess. He cut a series of tracks as a soloist for the label in the late 1950s and early 1960s, adhering closely to the prevailing Chicago blues style then being popularized by the likes of Muddy Waters and Howlin' Wolf. His first sessions as a leader, however, were recorded in St. Louis for the Parrot label (purchased by Chess in 1959); the surviving tracks — currently available on the album *Door to Door* (MCA 9322; 1990) — include the self-penned "Bad Luck" (master #U53-177), "Merry Way" (#U53-178), and "Murder" (#U53-179). He was based in St. Louis by the mid-1950s, where his recordings for the Bobbin label brought him increased stature, but little commercial success.

King's first hit came in 1962 for the King/Federal firm (which owned his contract after purchasing Bobbin) with "Don't Throw Your Love on Me So Strong" (King 5575; #14 R&B). As a result, the Memphis-based Stax label added him to its roster. Accompanied by members of the company's renowned house band, Booker T. and the MGs, as well as the Bar-Kays and Memphis Horns, he enjoyed a long string of chart successes, including "Laundromat Blues" (Stax 190; 1966; #29 R&B), "Crosscut Saw" (Stax 201; 1967; #34 R&B), "Cold Feet" (Stax 241; 1968; #20 R&B, #67 pop), "Everybody Wants to Go to Heaven" (Stax 0101; 1971; #38 R&B), "I'll Play the Blues for You" (Stax 0135; 1972; #31 R&B), "Breaking Up Somebody's Home" (Stax 0147; 1972; #35 R&B), and "That's What the Blues Is All About" (Stax 0189; 1974; #15 R&B). Many of his Stax albums — most notably, *Born Under a Bad Sign* (MFSL/Atlantic 577; ca. 1967), *King Does the King's Things* (Stax 8504; 1991), *Wednesday Night in San Francisco* (Stax 8536; ca. 1968), *Thursday Night in San Francisco* (Stax 8537; ca. 1968), *Years Gone By* (Stax 2010; 1969), *I'll Play the Blues for You* (Stax 8513; ca. 1972), *Blues at Sunrise* (Stax 8546; ca. 1973) — are still considered classics today.

King landed with Utopia/Tomato following Stax's descent into bankruptcy in 1974. His output, however, was marred by unsympathetic supporting players, bland arrangements, and a preponderance of brass and strings. His fortunes improved somewhat when he signed with Fantasy in the early 1980s. However, he was better appreciated live than on record during the decade preceding his death.

FRANK HOFFMANN

KING B.B. (16 SEP 1925–)

American blues singer and guitarist, born Riley B. King in Itta Bena, Mississippi. He taught himself the guitar and made radio appearances; in 1952 he gained popularity with a record of "Three O'clock Blues" (RPM 339), and by the early 1960s he had assumed a leading place among blues artists. He was able to blend jazz, rock, and blues styles successfully, as in "Rock Me Baby" (Kent 393; 1964), which was on the charts for 10 weeks. An outstanding hit was "I Like to Live the Love" (ABC 11406; 1973), 16 weeks on the charts. His album *There Must Be a Better World Somewhere* (MCA 5162), won a Grammy in 1981; through 2002, he has won a total of 10 Grammys. Other popular albums included *Live in Cook County Jail* (ABC ABCS 723; 1971), and *To Know You Is to Love You* (ABC ABCX #794; 1973). By the 1990s, he was an institution, having been elected to the Rock and



B. B. King in the early '70s. Courtesy David A. Jasen

Roll Hall of Fame as well as collaborating on a best-selling CD with Eric Clapton. There are numerous CD reissues of King's recordings from all periods.

KING, CAROLE (9 FEB 1941–)

American songwriter, recording artist, born in Brooklyn. Carole King formed a songwriting partnership with her husband, Gerry Goffin, in the late 1950s and signed on with the Brill Building firm Aldon Music. They scored their first hit with the Shirelles' "Will You Love Me Tomorrow," which reached number one in January 1961. This began a long string of successes that lasted into the late 1960s and included the number one hits "Take Good Care of My Baby" (Bobby Vee; 1961), "The Loco-motion" (Little Eva; 1962), and "Go Away Little Girl" (Steve Lawrence; 1962), and such standards as the Chiffons's "One Fine Day," the Drifters' "Up on the Roof," and Aretha Franklin's signature song "A Natural Woman (You Make Me Feel Like)." King also tried her hand at recording her own material and scored a Top 40 hit with "It Might as Well Rain Until September" in September 1962. But she did not achieve significant success as a performer until 1971, when her LP *Tapestry* (featuring the number one hit "It's Too Late") topped the charts, sold over 10 million copies, and won the Grammy as album of the year, helping to usher in the singer-songwriter movement. She continued to place albums in the charts consistently through the end of the 1970s, reaching the Top 10 with *Music* (1971), *Rhymes and Reasons* (1972), *Fantasy* (1973), *Wrap Around Joy* (1974; featuring the number one hit "Jazzman"), and *Thoroughbred* (1976). From 1978, her

recordings were less successful commercially, but she continued recording occasionally into the 21st century.

WILLIAM RUHLMANN

KING CRIMSON

Unlike many British progressive rock bands that eventually eased into the pop mainstream (e.g., Genesis, Pink Floyd), King Crimson has steadfastly refused to make compromises in order to achieve broader mass consumption. The visionary force behind the group, guitarist Robert Fripp, has made a career out of confounding both critics and fans alike, exploring styles and scheduling releases according to his own inner dictates.

The band evolved out of Fripp's early collaborations in Bournemouth, England, during mid-1967 with brothers Peter Giles (bass) and Michael Giles (drums) as a soft-rock trio, Brain. With the additions of keyboardist Ian McDonald, vocalist Judy Dyble (formerly of Fairport Convention), and lyricist Pete Sinfield, the group — now billed as Giles, Giles, and Fripp — released an album, *The Cheerful Insanity of Giles, Giles, and Fripp* (Deram1022; 1968), a rather bucolic affair, with sophomoric anecdotes and wordplay interspersed between tracks.

Fripp then added vocalist/bassist Greg Lake to the nucleus of McDonald and Michael Giles to form King Crimson. Their debut, *In the Court of the Crimson King* (Atlantic 8245; 1969; #28 US, #5 UK), deftly blended Fripp's intense, often ascerbic, guitar runs and Sinfield's impressionistic verse with lush, mellotron-drenched arrangements reminiscent of the Moody Blues. Rather than solidifying the band's commercial appeal, however, Fripp — in the face of continued personnel shifts — increasingly opted for an avant-garde jazz approach in follow-up releases: *In the Wake of Poseidon* (Atlantic 8266; 1970; #31 US, #4), *Lizard* (Atlantic 8278; 1970; #30 UK), *Islands* (7212; 1971; #76 US, #30 UK), *Larks' Tongues In Aspice* (Atlantic 7263; 1973; #61 US, #20 UK), *Starless and Bible Black* (Atlantic 7298; 1974; #64 US, #28 UK), and *Red* (Atlantic 18110; 1974; #66 US, #45 UK).

By late 1974, when Fripp decided to disband King Crimson, he was in considerable demand as a session player and collaborator; his credits in the mid-1970s included Brian Eno, Van Der Graaff Generator, Peter Gabriel, and David Bowie. He would go to issue three experimental solo projects (focusing on the development of "frippertronics," his own vocabulary of guitar playing techniques), in addition to a group venture entitled *League of Gentlemen* (Polydor 16317; 1981), before re-forming King Crimson in 1981. The new lineup — featuring guitarist/vocalist Adrian Belew, bassist

Tony Levin, and former member Bill Bruford (percussion) — attempted to adapt Fripp's electro/avant-garde approach to a more accessible AOR/MTV format over the course of three albums: *Discipline* (Warner Bros. 3629; 1981; #45 US, #41 UK), *Beat* (Warner Bros. 23692; 1982; #52 US, #39 UK), and *Three of a Perfect Pair* (Warner Bros. 25071; 1984; #58 US, #30 UK).

Fripp then placed the band on hold for a decade while pursuing collaboration with Toyah Willcox, David Sylvian, and other cutting-edge artists. The third phase of King Crimson has produced five CDs with a pronounced metallic edge, only two of which have been released in the U.S.: *Vroom* (Virgin 0004; 1994), and *Thrak* (Virgin 40313; 1995; #83 US, #58 UK). In the meantime, Fripp continues to pursue solo projects that suit his whims. Hardcore Crimson enthusiasts have not been forgotten, thanks to a seemingly endless stream of retrospective anthologies, studio outtakes, and live concerts.

FRANK HOFFMANN

KING, FREDDIE

(30 SEP 1934–28 DEC 1976)

While overshadowed by other bluesmen named King— Albert and B.B.— Freddie King was an emerging blues-rock star at the time of his premature death from a heart attack. His stinging guitar style, anchored by a propulsive rhythmic intensity and flawless technique, reflected the years spent perfecting his craft in the gritty clubs of Chicago's Black districts.

Born Freddie Christian in Gilmer, Texas, he moved to Chicago in 1950. Shortly thereafter, he began playing in area venues with bands headed by the likes of Little Sonny Cooper and Hound Dog Taylor. He also did session work for the local Parrot and Chess labels during the early 1950s. He eventually formed his own band, the Every Hour Blues Boys.

King's first solo recordings, made for El-Bee Records in 1956, failed to have any commercial impact. By early 1961, however, he achieved success with the King/Federal label due in no small part to the sure-handed guidance of producer-piano player Sonny Thompson. His biggest hits were divided between instrumental workouts — "Hide Away" (Federal 12401; 1961; #5 R&B, #29 pop), and "San-Ho-Zay" (Federal 12428; 1961; #4 R&B) — and searing vocal renditions: "Lonesome Whistle Blues" (Federal 12415; 1961; #8 R&B), and "I'm Tore Down" (Federal 12432; 1961; #5 R&B). By the mid-1960s King had recorded an impressive body of work for the Cincinnati-based firm; nevertheless, he signed on with Atlantic that issued two LPs produced by the legendary saxophonist King Curtis.

Attempting to reach a mainstream audience in the early 1970s, he recorded three albums for Leon Russell's Shelter label. Although full of rock nuances, the raw vitality of classic cuts such as "Goin' Down" and "Big Leg Woman" revealed King at the height of his powers. His later work followed the then-current vogue of placing American blues giants within a British framework (e.g., producer Mike Vernon and guitarist Eric Clapton), a formula already tried by Muddy Waters, Howlin' Wolf, and Bo Diddley, among others. The results were rather tepid, and any hopes of an artistic rebirth were dashed by his untimely death.

King is well-represented on compact disc (CD) reissues. Both *Takin' Care of Business* (Charly 30), and *Texas Sensation* (Charly 242), compile the highlights of his King/Federal period. Also available are *Just Pickin'* (Modern Blues 721; a compilation of his instrumental tracks), *Texas Cannonball* (Shelter) and *Getting Ready* (Shelter 8003).

FRANK HOFFMANN

KING, PEE WEE

(18 FEB 1914–7 MAR 2000)

American country singer, born Julius Frank Anthony Kuczynski in Abrams, Wisconsin. In 1934 he was performing with Gene Autry, and two years later he formed his own band, the Golden West Cowboys. The group was heard on *Grand Ole Opry* in 1937. King was cocreator with Redd Stewart of "Tennessee Waltz," which became one of the country music standards; he recorded it for Victor in 1947 (#202680). "Slow Poke" (Victor 210489) was on the charts 14 weeks in 1951. His group was the first to use electric instruments on *Grand Ole Opry*, as Clel Summey played electric guitar from 1940. King was elected to the Country Music Hall of Fame in 1974.

KING, WAYNE

(18 FEB 1901–16 JULY 1985)

American dance bandleader, alto saxophonist, and clarinetist, born in Savannah, Illinois. He played in various Chicago bands and directed the Tivoli Theater orchestra until 1927, when he was invited to form a new group to open the Aragon Ballroom. He was identified with that venue for much of his career, playing languid dance numbers and waltzes; he acquired the sobriquet "Waltz King" and wrote an effective theme song, "The Waltz You Saved for Me" (Victor 22575; 1930). He won the *Radio Guide* prize as the most popular radio orchestra for seven years. In 1946 he began the Ziv Radio Series, doing 52 shows, all transcribed, and 26 more shows in 1947. Vocalist Nancy Evans,

KING RECORDS

who started with King at age 17, remained with the band throughout its existence. Franklyn MacCormack provided poetic introductions to many of the numbers on the radio. He made a record in 1941 of "Melody of Love" with the King orchestra that achieved enormous success.

King's earliest recordings were for Vocalion in 1923 as a saxophonist/clarinetist with a group called Albert E. Short and his Tivoli Syncopators. On the Autograph label he appeared with the Del Lampe Trianon Orchestra in 1925. He recorded for Victor primarily, with some work for Brunswick in 1933. "Stardust" was an early hit (Victor 22656; 1931), and "Josephine" — another of his compositions — was one of his most popular records (Victor 25518; 1936). After military service in World War II, during which he reached the rank of major, he appeared on radio and television, and was active into the 1970s. *Dream Time* was a popular LP album of 1958 (Decca DL 8663). His Decca recordings are anthologized on a *Best of* CD (MCA 4022). King died in Paradise Valley, Arizona. [Kressley 1983 gives list of the Ziv transcriptions.]

KING RECORDS

Shaped by its founder, Sydney Nathan (27 Apr 1904–5 Mar 1968), King Records was one of the premier independent labels of the postwar era. Founded in Cincinnati in November 1943, King began as a country label, signing Cowboy Copas, Moon Mullican, and the Delmore Brothers, among others, but it was the launch into R&B (initially on Queen Records) that secured the label's future. Nathan owned his own pressing plant, which enabled him to produce records in small runs economically, and also controlled his own distribution. Nathan preferred sophisticated R&B to blues, and scored many hits with saxophonist Earl Bostic, big band leader Bullmoose Jackson, and R&B shouter Wynonie Harris. In 1950, he started Federal Records in partnership with producer Ralph Bass, and the label became very successful, first with vocal groups (Billy Ward's Dominoes, Hank Ballard's Midnighters, etc.), and then with James Brown, whom Bass signed in 1956. King's signees during this era included Bill Doggett, whose "Honky Tonk" was a giant hit, and Little Willie John. In 1960, James Brown was transferred to King, and became the label's mainstay. Nathan died on 5 Mar 1968, and King was sold to Lin Broadcasting, who sold Brown's contract to Polydor Records, who then sold King to Tennessee Recording and Publishing, who in turn sold the company to Gaylord Music Ltd., owners of WSM and the *Grand Ole Opry*, in Nashville in 1975.

COLIN ESCOTT

KINGSTON TRIO

American folk-singing group, established in San Francisco in 1957 by David Guard. John Stewart replaced Guard in 1961. Other members were Nick Reynolds and Bob Shane. They achieved popularity in campus and coffeehouse appearances in the San Francisco Bay area, and recorded a number one hit "Tom Dooley" (Capitol 4049) in 1958; it took a Grammy award. The group had 18 chart singles — including "M.T.A." (Capitol 4221; 1959), and "Where Have All the Flowers Gone?" (Capitol 4671; 1962) — and 23 hit LP albums through 1965 (nine of them gold); the most popular were *The Kingston Trio at the Hungry i* (Capitol T 1107; 1959), and Grammy winner *Kingston Trio at Large* (Capitol T 1199; 1959). The group was less successful after 1963, leading to a breakup in 1967. Then in the 1970s, both Shane and Reynolds led new groups using the Kingston Trio name. Finally in 1981, the original members came back together to make the album *The Kingston Trio: 15 Years Non-stop*.

KINKS, THE

The Kinks' productive recording career has been exceeded in uninterrupted duration only by the Beach Boys and the Rolling Stones. Leader Ray Davies is also acknowledged as one of the most articulate social commentators within the rock scene.

The band was formed in the Muswell Hill section of London by brothers Ray and Dave Davies, who recruited bassist Peter Quaife from the Ravens. By the time they had signed with Pye early the following year, drummer Mick Avory had been brought in as a member. Visually, the Kinks projected a foppish, period fashion look; the early music, however, was Merseybeat-inspired power pop. Following a couple of unsuccessful singles, the Kinks broke out with "You Really Got Me" (Reprise 0306; 1964; #7 US, #1 UK), which was propelled by one of the most recognizable fuzztone-drenched guitar riffs in rock history. Follow-up singles — "All Day and All of the Night" (Reprise 0334; 1964; #7 US, #2 UK), "Tired of Waiting for You" (Reprise 0347; 1965; #6 US, #1 UK), "Who'll Be the Next In Line" (Reprise 0366; 1965; #34), and "See Me Free" (Reprise 0379; 1965; #23 US, #9 UK) — mined a similar vein, while LPs like *The Kinks* (Reprise 6143; 1964; #29 US, #3 UK), *Kinks-Size* (Reprise 6158; 1965; #13), *Kinda Kinks* (Reprise 6173; 1965; #60 US, #3 UK), and *The Kink Controversy* (Reprise 6197; 1966; #95 US, #9 UK) — consisted largely of forgettable, throwaway cuts, buoyed by a hit or two: in short, not a particularly auspicious beginning.

The release of "A Well Respected Man" (Reprise 0420; 1965; #13), signaled an increasing emphasis on

Davies' wry audio snapshots of English society backed by a more restrained, pastoral group sound. At this stage, the Kinks seemed content to cultivate a niche audience rather than adapt to ongoing changes in pop fashion; *Face to Face* (Reprise 6228; 1966; #12 UK), their glorious final take on the British beat tradition, and concept albums like *Something Else by the Kinks* (Reprise 6279; 1967; #35 UK), *The Kinks Are The Village Green Preservation Society* (Reprise 6327; 1968), and the rock opera *Arthur (or the Decline and Fall of the British Empire)* (Reprise 6366; 1969), which idealized England's mythological past in contrast to its contemporary decline, represent the band's artistic summit. Although uneven in quality, *Lola Versus Powerman and the Moneyground, Part One* (Reprise 6423; 1970; #35), and *Muswell Hillbillies* (RCA 4644; 1971; #100), included material — most notably, the transvestite tribute, "Lola" (Reprise 0930; 1970; #9 US, #2 UK), and the paranoid "20th Century Man" (RCA 74-0620; 1972) — ranking with their finest recordings.

With the theatrics of glitter rock becoming the rage in late 1971, the Kinks descended into self-parody, beefing up their sound by adding keyboardist John Gosling and a brass section; concept LPs like *Everybody's In Showbiz* (RCA 6065; 1972; #70), *Preservation Act I* (RCA 5002; 1973), *Preservation Act II* (RCA 5040; 1974), and *Soap Opera* (RCA 5081; 1975; #51), even incorporated a female chorus at points. By the late 1970s the band had pared back down to a basic five-piece unit; however, their brand of stadium rock continued to sound anachronistic with the rise of the punk revolution. While considered passe in Britain by the 1980s, the Kinks remained an AOR staple stateside; heavy MTV rotation helped them achieve their first Top 10 hit in 13 years, "Come Dancing" (Arista 9016; 1983; #6 US, #12 UK). Although new releases have failed to chart since the mid-1980s, the ascendancy of Brit-pop during the 1990s inspired a renewed interest in the band's classic 1960s material.

FRANK HOFFMANN

KIPNIS, ALEXANDER (13 FEB 1891–14 MAY 1978)

Ukrainian/American bass, born in Zhitomir. He played the trombone and string bass in his youth; then graduated in conducting from the Warsaw Conservatory in 1912, and studied voice in Berlin. At the outbreak of World War I he was interned as an enemy alien, but was released and made his debut in Hamburg in 1915. Kipnis sang in many opera houses, including Baltimore 1923 (his U.S. debut), the Chicago Opera 1923–1932, Buenos Aires, and throughout Europe. He

took American citizenship in 1931. From 1940 to 1946 he was with the Metropolitan Opera. He died in Westport, Connecticut. His son Igor is a renowned harpsichordist.

Kipnis performed the whole bass repertoire, distinguishing himself in particular as Boris, Baron Ochs, Gurnemanz, Sarastro, Simon Boccanegra, and Wotan. His recording began in Germany in 1916 for Odeon. The first of the four works he inscribed was "Il etait temps" (in German) from *Faust* (#AA79397). He recorded during 1921–1922 for Deutsche Grammophon. In 1923 he made four sides for Homokord. He performed *Lieder* for U.S. Columbia in 1927.

Most of his discs were recorded for HMV (1929–1931) and Victor (1946–1948; 1955–1959). Two distinguished sets to which he contributed were the albums of the Hugo Wolf Society (Kipnis sang 13 songs), and the Brahms Society (24 songs). A CD reissue by Harmonia Mundi (#89019) presents 1930–1931 recordings, including the outstanding "Il lacerato spirito" (HMV #D2088) and "Herr Kavalier" from *Rosenkavalier* (#DB 1543). [Frankenstein 1974.]

KIPNIS, IGOR (27 SEP 1930–23 JAN 2002)

Harpsichordist, son of Alexander Kipnis, born in Berlin. The family transferred to the U.S., where he took up the piano and served as accompanist to his father's pupils. He studied harpsichord with Fernando Valenti at Harvard University, graduating in 1952. After military service and odd jobs in New York, he made his debut as a harpsichordist in 1961. He quickly achieved recognition, and made world tours from 1967 to 1971. Kipnis helped to spread interest in the harpsichord, and also in the fortepiano. He recorded the Bach keyboard works for Columbia and Angel, as well as a set of six LPs that surveyed the harpsichord repertoire (Columbia M3X-31521/25). He died in West Redding, Connecticut.

KIRK, ANDY (28 MAY 1898–11 DEC 1992)

American Big band leader and bass saxophonist, born Andrew Dewey Kirk in Newport, Kentucky. He grew up in Denver, Colorado, and played in George Morrison's band there from 1918. Moving to Dallas in 1925, he was with Terence Holder's "Dark Clouds of Joy" and took the leadership in 1929. He established the group Clouds of Joy, in Kansas City, and became one of the principal proponents of that city's jazz style. His then-wife, Mary Lou Williams, was pianist and arranger for the band, which continued until 1948. Later he worked with various groups, and performed in Europe during the 1960s. Among the many notable

KIRK, RAHSAAN ROLAND

artists who were in his bands at one time or another were Charlie Parker, Ben Webster, and Lester Young. Kirk died in New York.

Kirk recorded for Brunswick in 1930, inscribing "Dallas Blues" (#6129) and five other numbers. He then worked for Columbia and primarily for Decca. "Until the Real Thing Comes Along," with a vocal by baritone Pha Terrell (Decca 809), was a hit in 1936. The CD *Mary's Idea* collects 20 classic recordings arranged by Williams from the band's Decca years (GRP 622). The British Classics label has been reissuing Kirk's complete recordings on a series of CDs.

KIRK, RAHSAAN ROLAND (7 AUG 1935–5 DEC 1977)

One of most innovative musicians in jazz history, Kirk pioneered many unorthodox performing techniques, including circular breathing, playing two or three saxophones at once, and simultaneously singing and playing the flute. Beyond these novelties, his improvisational skills as a soloist and encyclopedic mastery of jazz styles, from Dixieland to free jazz, were of the highest order. In addition to incorporating many instruments rarely used within jazz (e.g., piccolo, harmonica, nose whistle), he designed the "trumpophone" (a trumpet with a soprano sax mouthpiece), and "slidesophone" (a down-scaled trombone/slide trumpet with a sax mouthpiece).

Kirk lost his sight at the age of two when over-medicated by a nurse. Mastering a wide range of instruments as a youth, he cut the rhythm and blues-tinged *Triple Threat* (King 534; 1956), which featured his simultaneous playing of the tenor saxophone (fingered with the left hand), the "manzello" (a modification of the saxello, itself a curved variant on the B-flat soprano sax) with the right, and the "stritch" (a modified E-flat alto) functioning as a drone. Relocating from Louisville to Chicago, he recorded *Introducing Roland Kirk* (Argo 669; 1960), which featured saxophonist/trumpeter Ira Sullivan. Although now securely within the jazz fold, he would retain a pronounced bluesy edge for the duration of his career.

Following a stint with Charles Mingus in 1961, Kirk did sessions for a variety of notable recording artists, including Quincy Jones, Roy Haynes, Tubby Hayes, Eddie Baccus, and Sonny Stitt. His own recorded output — much of which featured his backing group, the Vibration Society — was equally prolific. Critically acclaimed releases included *I Talk with the Spirits* (Limelight 82008; 1964), an eclectic collection of material from musicals and seminal musicians like Django Reinhardt and Clifford Brown; the propulsive *Rig, Rig and Panic* (Limelight 82027; 1965), and *Volunteered Slavery* (Atlantic 1534; 1968), which

reflected Kirk's pronounced commitment to African-American sociopolitical concerns. In 1970, he formed the Jazz and People Movement (JAPM), primarily to bring attention to African-American issues through disrupting television tapings (the group famously broke into a taping of *The Merv Griffin Show* that year). In 1975, a stroke left him partially paralyzed, yet he managed to resume performing again within a year, playing with one hand, until his death in 1977.

FRANK HOFFMANN

KIRKBY, STANLEY

English baritone, born James Baker, credited with the largest number of records in Britain from the 1900s–1930s. Charles Holland was one of his several pseudonyms. In 1913 he made a famous disc about the Scott Antarctic expedition, "'Tis a Story that Shall Live for Ever" (Zonophone #1050). "It's a Long Way to Tipperary" was one of his best sellers in the U.S. Kirkby was also one of the founders of the Premier Manufacturing Co., Ltd.

KIRKPATRICK, RALPH (10 JUNE 1911–13 APR 1984)

American harpsichordist and scholar, born in Leominster, Massachusetts. He graduated from Harvard College in 1931, and studied in Paris with Nadia Boulanger and Wanda Landowska. Then he toured Europe, performing and carrying out research into Baroque performance practice. He became particularly expert on Domenico Scarlatti, and wrote the standard biography (1953). From 1940 to 1978 he taught at Yale University, then retired. Kirkpatrick edited works by several Baroque masters, and performed them with great fidelity to the idiom of their day; he also played works by modern composers. His recordings of Bach and Scarlatti were issued on LP by Deutsche Grammophon and Odyssey. He died in Guilford, Connecticut.

KIRSHNER, DON (17 APR 1934–)

Born in the Bronx, New York, Kirshner became a well-known record producer in the 1960s, responsible for creating teen pop groups, most notably the Monkees and the Archies. Kirshner began writing pop songs as a teenager in the mid-1950s, some in collaboration with a little known local singer named Robert Cassotto (later famous as Bobby Darin), before forming Aldon Music in 1958 with teen pop singer and composer Al Nevins. They subsequently hired many of the greatest early 1960s tunesmiths, including Gerry Goffin and

Carole King and Barry Mann and Cynthia Weil. The firm opened a West Coast office, hiring Lou Adler to run it (who later gained fame as a pop producer of acts like the Mamas and the Papas and Carole King). In 1962, Kirshner founded a related record label, Dimension Records, which had a major hit with Little Eva's "The Loco-Motion" (#1 pop and R&B; Dimension 1000), and the Cookies's "Chains" (#17 pop; Dimension 1002), both Goffin-King songs. In 1963, the company was sold to Columbia/Screen Gems. Kirshner rose to president of the new firm, where he developed the idea for a TV show focused on a fictional rock group after seeing the Beatles's successful first film, *A Hard Day's Night*. The result was the Monkees, one of the most successful pop groups of the 1960s. When the show was cancelled in 1968, Kirshner turned his attention to creating a cartoon rock group, the Archies, using studio musicians and his staff songwriters. In 1972, Kirshner began hosting the late-night syndicated TV show *Don Kirshner's Rock Concert*; his nasal delivery and deadpan manner was widely parodied. He also formed the Kirshner label to promote his latest signing, the rock group Kansas; they achieved considerable success through the 1970s. However, after that, Kirshner has not been as active on the pop scene.

CARL BENSON

KISS

Formed 1972, New York, New York. Gene Simmons (Born Chaim Whitz, changed to Gene Klein, 25 Aug, 1949), bass, vocals; Paul Stanley (born Stanley Eisen, 20 Jan 1950), guitar, vocals; Peter Criss (born Peter Crisscoul, 20 Dec 1947), drums, vocals; Ace Frehley (born Paul Frehley, 27 Apr 1951), guitar. With their distinctive comic-book makeup, Kiss may have veered closer to cartoonishness than any other rock act. They rocked hard, but theatrics were their calling card, exemplified by Gene Simmons's fire-breathing, stage-blood-spewing ghoulishness. They were signed to Neal Bogart's disco label, Casablanca, in 1974, and became one of the label's best-selling acts. Despite an almost universal thumbs-down from critics, Kiss established a loyal fan base and scored a Top 20 hit in 1975 with the anthemic "Rock and Roll All Nite." The cartoonishness was solidified in 1977 when Marvel Comics released a Kiss comic book, and in 1978 when NBC broadcast a full-length animated Kiss cartoon feature. When their success waned in 1979, there were several personnel changes, and the group employed the tactic of performing without camouflage. In 1984, they moved to Mercury Records. By the early 1990s, they had sold more than 70 million albums. The band

performed a farewell concert in 2000 and continues to merchandise its images in varied ways.

BOB SILLERY

KLEIBER, CARLOS (3 JULY 1930–)

German conductor, son of Erich Kleiber, born in Berlin. From 1935 to after World War II he lived with his parents in Argentina, studying music and making his first appearance as a pianist. Returning to Europe, he conducted in Munich in 1953, and secured numerous assignments in opera and the concert hall; however, he has not accepted any permanent post. His small number of recordings are highly regarded, including a *Rosenkavalier* (Philips CD V072405; 1989), two complete CD performances of *Freischütz* (Denon 1985 and Decca 1986), a complete *Tristan* (DGG 413315; 1986), and a brilliant Beethoven Fifth Symphony with the Vienna Philharmonic Orchestra (DGG CD 415861; 1985).

KLEIBER, ERICH

(5 AUG 1890–27 JAN 1956)

Austrian conductor, born in Vienna. He studied in Prague and commenced conducting there, at the National Theater. He then held various posts with opera companies until 1923, when he was appointed director of the Berlin State Opera. He conducted the world premiere of *Wozzeck* there in 1925. In 1935 he left Germany for South America, and toured widely there and in the U.S. He was engaged again to direct the Berlin State Opera in 1954, but resigned in 1955. He died in Zurich. His son Carlos, born 3 July 1930, is also a noted conductor.

Kleiber made distinguished recordings of Mozart, Beethoven, and Richard Strauss, mostly for Decca in the last 10 years of his life. *Rosenkavalier* (Decca LXT2954/57, 1954; CD reissue #425950, 1990), with Sena Jurinac as Octavian, is considered to be a definitive interpretation; and his *Nozze di Figaro* is also at the highest level. The Kleiber Beethoven Fifth Symphony with the Royal Concertgebouw Orchestra (on Decca CD 417 637; 1987) is widely regarded as the finest version of that work, rivaled only by that of his son.

KLEIN, ALAN (1932–)

Born in Newark, New Jersey, Klein was a somewhat notorious rock manager and executive, famous for his associations with the Rolling Stones and the Beatles. He began his career as an accountant, helping pop artists collect unpaid royalties owed to them by record companies. By the mid-1960s, he was active in pop

KLEIN, LARRY

management, handling Donovan, the Animals, and the Rolling Stones, and buying Cameo-Parkway Records. In 1969, he made a famous deal with the Beatles, reorganizing their Apple Records label, and gaining them a new and lucrative recording deal with EMI. However, by 1971 after two years of litigation by Paul McCartney against Klein and the other Beatles, the deal fell apart. Klein was convicted of tax evasion in the later 1970s, spending some time in jail, and then moved into Broadway and film production in the 1980s. His ABKCO Records holds the rights to the Rolling Stones's pre-1969 era recordings, as well as Phil Spector's Philles label, Sam Cooke's SAR label recordings, as well as other acts. [Website: www.abkco.com.]

CARL BENSON

KLEIN, LARRY (9 JULY 1928–)

A highly regarded and influential editor for *Stereo Review* magazine during the 1960s, 1970s, and 1980s, Klein grew up in New York City and became interested in audio and electronics at an early age. When he joined the army in 1945, he had already learned enough while working for radio-repair shops in the city to earn a position at the White Sands Proving Grounds, where he worked with scientists in setting up instrumentation for early rocket experiments. After his discharge from the army, he attended Brooklyn College, NYU, and Hunter College, studying social sciences and philosophy, rather than electronics. He also worked for various electronics companies as a consultant and paid troubleshooter during the early 1950s. This eventually led to a job for *Popular Electronics* magazine as technical editor. Two years after that, he moved on to a similar post at *Electronics Illustrated*, and in 1963, he became technical editor (later technical director) at *Stereo Review* magazine, a post he held for 20 years.

While at *Stereo Review*, Klein, along with Julian Hirsch, established a rational approach to audio system performance, and his influence in this area has been far reaching and long lasting. As technical editor, it was part of his job to deal with industry experts and designers and convert their often complex ideas about audio system performance and recording technologies into language understandable to typical audio enthusiasts. (He earlier had demonstrated this ability in a book, entitled *It's Easy to Understand Electronic Test Equipment*.) As a result, a small multitude of audio enthusiasts became adept at understanding the hobby at a time when it was expanding and becoming a powerful segment of the consumer electronics industry.

Klein left *Stereo Review* in 1983, and went on to be a contributing editor to *Audio Times*, *Sound and Vision*

(Canada), *Car Audio*, *Electronics Now*, and *High Fidelity*, and also wrote manuals and advertising copy. A life member of the Audio Engineering Society, he is currently retired from writing and listens to music without being overly concerned about how it is reproduced.

HOWARD FERSTLER

KLEMPERER, OTTO

(14 MAY 1885–6 JULY 1973)

German conductor, born in Breslau. He studied in Frankfurt and Berlin, and was conducting in Berlin at age 21. In 1910–1912 he conducted at the Hamburg Opera, in 1917 he was director of the Cologne Opera, and in 1924 he was director of the Wiesbaden Opera. Klemperer's American debut was in 1926 with the New York Symphony Orchestra. After a period in Germany, he returned to the U.S. as music director of the Los Angeles Philharmonic Orchestra in 1933. A brain tumor almost ended his career, but he recovered sufficiently to hold the post of director of the Budapest Opera from 1947 to 1950. He retired to Switzerland in 1972, and died in Zurich a year later.

Klemperer recorded for Polydor in 1925–1933, doing the first and eighth Beethoven symphonies and a movement of Bruckner's Symphony No. 8, all with the Berlin State Opera Orchestra. He recorded further with the same label and ensemble until 1933, when he left Germany. In 1947 he worked for Vox, doing Beethoven, Mendelssohn, Bruckner, and Mahler with the Vienna Symphony Orchestra and the Pro Musica Orchestra. In the 1950s he recorded prolifically for EMI, with the Philharmonia Orchestra, and the New Philharmonia Orchestra. He also made remarkable complete opera recordings, especially *Fidelio*. In 1962 he was awarded a Grammy for his recording of the Bach *St. Matthew Passion* with the Philharmonia Orchestra and Chorus, on the Angel label. EMI has released many of these interpretations on CD. [Heyworth 1983.]

KLEPPER, DAVID (25 JAN 1932–)

Born in New York and the son of a nose, throat, eye, and ear surgeon father and a pharmacist mother, Klepper graduated from grammar school in 1949, and then went on to enroll at MIT with the intention of becoming a railway electrification engineer. However, academic studies under acoustician Leo Beranek got him interested in architectural acoustics, as well as sound systems. He went on to earn an S.B.E.E. degree in 1953, and earned his S.M.E.E. degree in 1957, with a thesis entitled "A Binaural Recording System for Concert Hall Evaluation."

He then worked for the acoustic consulting firm of Bolt, Beranek, and Newman between 1957 and 1971, and moved on to be a partner at Klepper, Marshall, and King, between 1971 and 1996. During his career, Klepper has been responsible for several innovations in sound system design, including seat-back loudspeakers in reverberant spaces and coaxial loudspeakers for ceiling distributed systems. Design projects he is responsible for include the Danny and Mitzi Kaye Theater, the Bruno Walter Auditorium, and the St. Thomas Episcopal Church renovation in New York; the Tanner Building at Brigham Young University in Provo, Utah; Boston's Holy Cross Cathedral sound system and Harvard's Memorial Church renovation, in Massachusetts; and The Congregation Young Israel of Southfield, Michigan.

Klepper is a charter member of the Institute of Noise Control Engineers, a fellow of both the Acoustical Society of America and Audio Engineering Society, and active member of several music, railway, and historical societies. In 1987, he won the AES silver medal for his work in acoustics. After retiring in 1996, he moved to Israel, where he is has been working on several books in both Hebrew and English, studying toward a rabbi's or cantor's career, and studying Arabic.

HOWARD FERSTLER

KLH CORPORATION

A high-fidelity equipment company started by Henry Kloss, Malcolm Lowe, and Tony Hofmann in 1957. Hence the letters K, L, and H. From the beginning, the company produced a variety of consumer-oriented products, most of which were loudspeaker systems with acoustic suspension woofer designs licensed by Acoustic Research Corporation, which all three KLH principles had helped to start before moving on to found KLH. (The three sold their AR shares to Edgar Villchur, the primary founder of AR, before moving on to begin their new company.) In addition, the company marketed the six-foot-tall, Model 9 electrostatic speaker system (designed by Arthur Janszen), and produced a top-quality (and expensive for its time, at \$160) table radio, as well as the first high-quality portable stereo hi-fi system, both designed by Kloss. In 1968, the company also produced the first consumer-grade tape recorder utilizing Dolby noise reduction, the reel-to-reel Model 40. [Website: www.klhaudio.com.]

See also **Loudspeaker**

HOWARD FERSTLER

KLINGSOR

A trade name (taken from the name of the sorcerer in *Parsifal*) used for gramophones and disc recordings, originating in Germany. The manufacturer in 1907 was Stephan Hain, of Krefeld. By 1912 the Klingsors were being made by the Polyphon Musikwerke AG in Leipzig, producers of the Polyphon label; Hermann Krebs and Heinrich Klenk were patentees. In 1912 *TMR* reported that the patent had been acquired by Theodore Isaac, to make and sell the instrument in Chicago. The Klingsor device was patented in the U.S., #899,491 (filed 28 Feb 1907; granted 22 Sep 1908).

The gramophone was remarkable for its "Saiten-Resonanz" — a harplike bank of steel strings that crossed the front of the instrument, at the loudspeaker opening. As the strings moved in sympathetic vibration to the speaker an enhanced sound resulted. Machines were still on the market in Britain in 1925, sold by J.G. Murdoch and Co. [*TMR* #13 (1971) has several photos and a short account.]

KLIPSCH, PAUL

(9 MAR 1904–5 MAY 2002)

A noted audio pioneer and speaker designer, Klipsch received a bachelor of science in electrical engineering from New Mexico State University in 1926, worked in Chile maintaining locomotives from 1928 to 1931, and obtained a master of science in electrical engineering from Stanford University in 1934. After receiving his master's degree, Klipsch worked as a geophysicist for a Texas oil company, and later served in the U.S. Army during World War II, earning the rank of Lt. colonel. In 1981, he earned a doctor of laws from New Mexico State University (NMSU). The NMSU engineering department was renamed the Klipsch School of Electrical and Computer Engineering in 1995, in his honor. In 1978, Klipsch was awarded the Audio Engineering Society's silver medal, for his contributions to speaker design and distortion measurement. In 1984, he was inducted into the Audio Hall of Fame, and in 1997 he was inducted into the Engineering and Science Hall of Fame, an honor shared by Thomas Edison, George Washington Carver, and the Wright brothers. One of his most notable design achievements is the well-known Klipschorn, which was designed to be located in a room corner, so as to be able to utilize the two wall surfaces as the mouth of the horn. The system was designed and patented in 1945, with further upgrades in 1948. Models using the design principles are still in production.

See also **Loudspeaker**

HOWARD FERSTLER

KLOSS, HENRY
(21 FEB 1929–31 JAN 2002)

Born in Altoona, Pennsylvania, Audio Hall of Fame member and Emmy award winner Henry Kloss founded or helped to found five different and successful electronics companies, and is justifiably considered to be a legendary figure in consumer-audio (and video) history.

In 1954, Kloss and Edgar Villchur cofounded Acoustic Research, Inc. (Kloss had been one of Villchur's students at NYU, and had previously been building Baurch-Lang loudspeakers for mail-order sale). The company's first product, the model AR-1 loudspeaker, incorporated the first acoustic-suspension woofer. Villchur invented and patented the acoustic-suspension woofer system; however, Kloss quickly realized the value of Villchur's invention, and was responsible for most of the mechanical and production design work on the AR-1 loudspeaker. By 1957, Kloss left AR to help found KLH Research and Development Corporation. While at KLH, Kloss (with Malcolm Low and Tony Hofmann) produced acoustic-suspension speaker systems under license to Acoustic Research and designed the first high-quality, portable stereo system and the first high-fidelity table radio, the Model Eight.

Kloss sold his share in KLH in 1967, and went on to form Advent Corporation, where he worked with both Tomlinson Holman and Andy Kotsatos, who quickly became fine designers in their own right. Kloss's primary interest in starting the new company involved the development of a high-quality front-projection video system. However, in order to fund his research he also designed and marketed the low-cost but very high-quality (and also very popular) Advent line of loudspeakers, many of which became borderline audio-cult items for some hi-fi enthusiasts. In addition, the company produced the first high-fidelity audio cassette deck, the Model 200, which worked as well as it did because it employed Dolby noise reduction circuitry. In 1977, Kloss became founder and president of Kloss Video Corporation, which marketed a refined version of the projection TV system he had worked on and sold while at Advent.

In 1988, Kloss and Tom DeVesto joined forces to form Cambridge Soundworks, which continues to specialize in an assortment of consumer-electronics products (including conventional and powered speaker systems that were designed by Kloss) sold by mail order. Kloss left Cambridge Soundworks after selling it in 1997 to Creative Labs, and in 2000, he unveiled an elegant tabletop radio, the Model One, from yet another company, Tivoli Audio. Kloss was a giant in the audio industry (and even won an Emmy for his video designs), and it could be said that he was one of

the originators of modern, affordable, and high-quality consumer audio products.

See also **Loudspeaker**

HOWARD FERSTLER

KNICKERBOCKER QUARTET (I)

An American vocal ensemble that recorded for Edison from 1908 to 1915, replacing the Edison Male Quartet. The original members were John Young, George M. Stricklett, Frederick Wheeler, and Gus Reed. After about 1912 the membership was frequently changed; among the singers at one time or another were Reinald Werrenrath, Thomas Chalmers, Royal Fish, William S. Hooley, and Harvey Hindermeyer. Four records are listed in Koenigsberg, of which the earliest was "Come Where My Love Lies Dreaming" (#9994; 1908). The group made seven Edison Diamond Discs, one with Elizabeth Spencer, in 1914–1915. [Koenigsberg 1987.]

KNICKERBOCKER QUARTET (II)

An American vocal group that recorded for the Columbia Graphophone Co. in 1917. Members were George Eldred, Lewis James, William Morgan, and Glenn Howard. One popular number was "Yaddie, Kaddie, Kiddie, Kaddie, Koo" (Columbia 47166).

KNICKERBOCKER QUINTET

An American vocal group that recorded for Edison. In 1905 the members were Parvin Witte, first tenor; Charles H. Bates, second tenor; Geoffrey O'Hara, baritone; Walter C. White, baritone, and Leon Parmet, bass. A popular two-minute cylinder by the quintet was "The Rosary." (#9052; 1905).

KOCH, LUDWIG

(13 NOV 1881–4 MAY 1974)

German bass, and recording executive in Germany and England, born in Frankfurt. His father acquired an Edison "perfected phonograph" at the Leipzig Fair in 1889, and the boy began to collect famous voices on the cylinders. Among the persons he recorded were Hermann Helmholtz, the physicist and acoustician; Queen Victoria, Edward VII, Bismarck, and Hugo Wolf. He was also interested in animal sounds, and made the first birdsong record in 1889, and went on to make many more in outdoor settings.

As a singer, Koch appeared in concert and opera, and recorded for Beka, but he ceased performing at the outset of World War I. He became an executive for German

Odeon and the Parlophone Co. in 1928, made more animal records, and wrote 11 books. He was harassed by the Nazis and eventually left the country, arriving in London in 1936. There he was assisted by Louis Sterling and others, and was able to continue recording bird songs. He was on the BBC staff in 1941–1943, and was heard on the radio through the 1950s.

Unfortunately, most of Koch's early cylinders were left behind when he fled Germany and were evidently destroyed. His 1889 birdsong cylinder survived and has been played on BBC radio. [Carreck 1974.]

KOCH (AND) CO.

A New York firm, marketing in 1916 a disc player (Koch-O-Phone) in six models and vertical-cut Koch-O-Phone discs.

KOCH INTERNATIONAL (LABEL)

Founded in 1986 by Franz Koch, Koch is the largest independent recording distributor in the U.S. and Canada, and its Koch Entertainment unit is also an important record producer. With headquarters in New York, the company employs more than 200 people and has the largest marketing and sales department of any independent American distributor, with eight regional sales offices and a marketing and sales staff of over 70 music professionals. Headed up by CEO Michael Koch, it incorporates a large roster of strong independent labels, covering the entire spectrum of music and video, including Chandos, Pearl, ASV, Gothic, MD&G, Ondine, as well as their own Koch productions. In 1999, with the purchase of Walter Yetnikoff's label, Velvel Records, Koch founded a subsidiary, Koch Entertainment, to include all of its web, music publishing, and recording holdings. Koch's own label focus on classical and jazz music. In 2002, Koch Europe's independently run recorded music and music publishing operations, founded in 1975, in Austria, were sold to Universal Music International. [Website: www.kochint.com.]

HOWARD FERSTLER

KOEHLER AND HINRICHS

A firm located in St. Paul, Minnesota, manufacturer of a record player combined with a clock and bookcase; this amalgamation sold for \$100 in 1916.

KOERBER-BRENNER CO.

A St. Louis firm, distributor of Victor products. In 1917 E.C. Rauth was vice president.

KOLODIN, IRVING

(22 FEB 1908–29 APR 1988)

Music critic and writer, born in New York. He studied at the Institute of Musical Art and became a critic for the *New York Sun* in 1932, remaining to 1950, having become its chief music critic. Kolodin was music editor for *Saturday Review* from 1947 to 1982, gaining great influence. Kolodin was a historian of the Metropolitan Opera, having issued three editions of a standard narrative account beginning in 1883. He was given responsibility for assembling the classical recordings in the first official White House music library (1970).

In the 1950s he compiled record albums for RCA, including a *Critic's Choice* set and a five-record album entitled *50 Years of Great Operatic Singing*. He was among the earliest critics to concentrate on reviewing phonograph records. Among his many books are *Guide to Recorded Music* (1941; 3rd edition 1950), and *Saturday Review Home Book of Recorded Music and Sound Reproduction* (1952; 2nd edition 1956). He died in New York.

KONITZ, LEE (13 OCT 1927–)

American jazz alto saxophonist, born in Chicago. He began with the clarinet at age 11, then switched to the saxophone, playing with the Gay Claridge band in Chicago, then with Claude Thornhill (1947–1948), and Miles Davis (1948–1950). Later he worked with Lennie Tristano, and from 1952 to 1953 with Stan Kenton, performing in a quasi-bebop style. Konitz had his own combo in 1954, and toured widely in America and Europe. During the mid-1960s he turned to experimental jazz and cool jazz, influencing men like Art Pepper and Paul Desmond. His technique was smooth, with minimal vibrato. During the 1960s he settled on the West Coast. He led a nine-piece band in the 1970s, modeled after the Davis "Birth of the Cool" band. He has continued to perform through the early 21st century, leading a Brazilian-flavored band in the 1990s with pianist Peggy Stern.

In 1949 Konitz and Miles Davis made an important album, *The Birth of the Cool; Intuition* was one of the significant albums made with Tristano (Capitol 1224; 1949). *The Real Lee Konitz* was issued in 1957 by Atlantic (1273).

KORJUS, MILIZA

(17 AUG 1913–27 AUG 1980)

Swedish/Polish/Russian coloratura soprano, born in Warsaw of a Swedish father (a military attaché) and Polish/Russian mother. The facts of her birthplace and date are uncertain. She began singing in public as a child, and attracted the attention of Max von Schillings,

KOSHETZ, NINA

who arranged for an appearance with the Berlin State Opera in 1934. After touring in Germany, she went to Hollywood to make the film *The Great Waltz* (1939). Then she toured Latin America, and in 1944 sang in Carnegie Hall. Not long after she retired from the stage.

Korjus recorded for Electrola in Berlin during 1934–1936, and for Victor in the U.S. from 1945 to 1947. Her discs display her remarkable virtuosity, especially the *Lakmé* Bell Song, variations by Adam on “Ah, vous dirai-je, maman?,” and arias from *Entführung aus dem Serail* and *Zauberflöte*. EMI issued two LPs of her favorite numbers in 1979 (Electrola #147–30 819/20). She died in Culver City, California. CD reissues of her 78-rpm recordings include Pearl 9186 and Preisser 89169. [Pearmain 1964.]

KOSHETZ, NINA

(30 DEC 1894–14 MAY 1965)

Ukrainian soprano, born in Kiev. She was the daughter of Pavel Alexejevitch Koshitz (1863–1904), a tenor at the Bolshoi Opera in Moscow; studied piano as a child (giving a recital at age nine), then singing. She toured Russia with Rachmaninoff, and became recognized as an interpreter of his songs. Her opera debut was on 22 Sep 1913 in Moscow, as Tatiana in *Eugene Onegin*; she sang there in the Russian, Italian, and French repertoires to 1919. Her American career began in 1920, and was almost exclusively in the concert hall, where she specialized in Russian songs; however, she did sing in the premiere of *Love for Three Oranges* in Chicago, in 1921. In 1924–1931 she toured Europe, and in the late 1930s she was again in Hollywood. In 1941 she retired from the stage and settled in California, appeared in several motion pictures, and died in Santa Ana.

Koshetz recorded for Brunswick in 1922–1923, beginning with “None but the Lonely Heart” (#8720–2) and “At the Ball” by Tchaikovsky (#15029), and going on with other Russian and Ukrainian songs. She made 10 sides for Victor in 1926–1931, the most notable of which were arias from *Prince Igor* and *Sadko*. In 1939 she made an important four-disc album for G. Schirmer (#SCH–16), the New York music publisher, which was reissued on LP by the International Piano Archives (#IPA–116; 1978); it includes songs by Tchaikovsky, Rachmaninoff, and Arensky, plus traditional gypsy airs. Among various CD reissues of her 78-rpm-era recordings, Opal has issued a two-CD set drawn from 1916–1941 sources (9855). [Dangarfield 1991.]

KOSMOPHONE

A disc player sold by the New Polyphon Supply Co. in London in 1903, at a price of £3 2sh (including two Zonophone discs). The Kosmophone trademark was

owned by the German firm Bumb and König in 1901. In September 1908 it was registered by the B.H. Han firm of Dresden, Germany, for machines and parts.

KOSS, JOHN C. (1930–)

Koss designed the first commercially viable high-fidelity audio headphones in 1958. They were successful because up until that time audio-playback hardware had been heavy and anything but portable. However, the advent of the transistorized, portable players made headphone listening more attractive, and the Koss product line benefited from the requirements of the new small-player technology. Today, the Koss family still has a 60 percent share in the company (now run by the founder's son, Michael J. Koss), and the products include studio and home-audio stereo headphones, portable headphones, cordless headphones, noise-reduction headphones, and microphones and headsets with microphones.

HOWARD FERSTLER

KOSTELANETZ, ANDRE

(22 DEC 1901– 13 JAN 1980)

Born in St. Petersburg, Russia, Kostelanetz became famous in the 1930s–1950s as a popular orchestra leader on radio and record. Trained as a pianist at the St. Petersburg Conservatory of Music, he conducted opera in his homeland before emigrating with his family to the United States in 1922. In 1928, he joined the fledgling CBS network as an orchestral conductor, performing popular and light classical music over the radio for four decades. Kostelanetz recorded numerous albums of instrumental versions of popular songs and classics, and also toured widely with his wife, opera singer Lily Pons (they were married from 1938 to 1958). His style of instrumental recordings helped establish the “easy listening” style of the 1950s. He is said to have sold more than 52 million records during his long career. He died while vacationing in Port-au-Prince, Haiti.

KOTSATOS, ANDREW (14 FEB 1940–)

Born in Baltimore, Kotsatos initially worked for KLH Corporation, where he was mentored by Henry Kloss. In 1969, he joined Advent Corporation where he worked on specific design aspects of all speakers. Indeed, working closely again with company president Kloss, Kotsatos helped to create one of the great success stories of its era - the original Advent loudspeaker. He then went on to design the highly successful Advent/2, Advent/3, and New Advent loudspeakers.

Kotsatos left Advent in 1978, and in 1979, he joined with Frank Reed, who had worked with him at KLH and Advent, to establish Boston Acoustics.

FRANK HOFFMANN

KOUSSEVITZKY, SERGE (26 JULY 1874–4 JUNE 1951)

Russian conductor and string bass player, born in Vishy-Volochok. He learned trumpet as a child and played with a family ensemble at local events. After studying the string bass in Moscow he joined the Bolshoi Opera Theater orchestra in 1894, and became first chair in 1901. He gave recitals in Moscow and Berlin; and turned to conducting, leading the Berlin Philharmonic Orchestra in 1908, then forming his own orchestra in 1909. He toured Russia until the revolution, moved to Paris in 1920, then to America. In 1924 he was named director of the Boston Symphony Orchestra, a post he held for 25 years. Koussevitzky was a champion of new compositions, and commissioned many important works, including *Symphony of Psalms*. He established the Berkshire Music Center (Tanglewood) in 1940. He retired in 1949, and died in Boston in 1951.

Koussevitzky was a Victor artist almost exclusively. During his tenure in Boston the orchestra made only one commercial recording for another label, the Roy Harris *Symphony No. 1* (1933) (Columbia M-191; 1934). His earliest recording was of his own *Concerto for Double Bass in F Minor*, with a piano accompaniment, not released at the time. (This and five other double bass performances by him were issued on Victor LP LCT1145; 1954.) His first released recording was with the Boston Symphony, performing the *Petrouchka Concert Suite* (Victor M-49; 1929). Among his later records of distinction were *La mer* (Victor M-643; 1940), *La valse* (Victor DB 1541/2; 1931), and Tchaikovsky's symphonies No. 4 (Victor DM-1318; 1949) and No. 5 (Victor M-1057; 1946). There are numerous CD reissues of his recordings, including *Serge Koussevitzky Conducts* (Pearl 9037), featuring works by Schubert, Schumann, and Mendelssohn, and *Conducts American Music* (Pearl 9492). [Young 1990.]

KRAFTWERK

Part of the Euro-rock movement that garnered much attention from the pop music press in the mid-1970s, Kraftwerk would exert considerable influence on synth-oriented New Wave bands such as Devo and Ultravox as well as the techno and electronica genres. Furthermore, their work would be heavily sampled by dance club deejays and rappers, including Afrika



Electro-pop group Kraftwerk cover. Courtesy Frank Hoffmann

Bambaataa on his seminal hip-hop single, "Planet Rock" (Tommy Boy 823; 1982; #48).

The Dusseldorf, Germany-based band began as Organization in 1969. Following the release of one LP, Ralf Hutter (electric organ, strings), and Florian Schneider-Esleben (flute, echo unit, strings), broke away to form Kraftwerk in 1971 with Klaus Dinger (guitar, keyboards), and percussionist Thomas Homann. Although Dinger and Homann left later in the year to start NEU! (replaced by Klaus Roeder and Wolfgang Flur), Kraftwerk would go on to record one of the most visionary albums of the rock era, *Autobahn* (Vertigo 2003; 1974; #5 US, #4 UK). The 22 minute title track — a synthesizer-dominated evocation of a trip on Germany's famed superhighway, also found substantial success edited down to a three-minute single (Vertigo 203; 1975; #25 US, #11 UK).

While later recordings failed to achieve the commercial impact of *Autobahn*, the reclusive group remains active to the present day. Anthologies and reissues of vintage albums such as *Radio-Activity* (Capitol 11457; 1975), *The Man Machine* (Capitol 11728; 1978; #9 UK), and *Computer World* (Warner Bros. 3549; 1981; #72 US, #15 UK) continue to sell well.

FRANK HOFFMANN

KRAINIS, BERNARD (28 DEC 1924–18 AUG 2000)

American recorder player, born in New Brunswick, New Jersey. Although he did not begin to study the

KRAUSS, ALISON

recorder until he was 21, he quickly became recognized as an outstanding virtuoso and brought the recorder repertoire to the attention of the public. He and Noah Greenberg established the New York Pro Musica in 1952. After 1959 Krainis left the Pro Musica group and toured with his own Krainis Baroque Ensemble, Krainis Trio, and Krainis Consort. He gave up extensive concertizing in 1970, taught at several colleges, and made records. An important album by his consort was made for Kapp (9034; 1960). He died in Great Barrington, Massachusetts.

KRAUSS, ALISON (23 JULY 1971–)

Born in Decatur, Illinois, Krauss began her career as a teenager winning local fiddle competitions before establishing herself as a leading singer in country/bluegrass styles. Krauss won her first fiddle contest at age 10, was signed to the bluegrass label Rounder when she was just 14, and won her first Grammy when she was 19. (She has a total of 13 Grammy awards to date.) Her fourth Rounder album, 1990's *I've Got that Old Feeling*, saw a change in direction, away from emphasizing her fiddle skills to playing up her country singing. She had two hits from the album, the title track and "Steel Rails." A slew of awards came to Krauss in the early 1990s, including a CMA "single of the year" award for her hit recording, "When You Say Nothing at All" in 1993. She was also invited to join the *Grand Ole Opry* that year, the first bluegrass-oriented act in 29 years to be so honored. In 1995, a "hits" retrospective album, *Now That I've Found You*, reached the Top 20 on both country and pop charts, and sold double platinum, propelled by the title cut. She had further hits in 1997 with "So Wrong, So Long," 1999 ("Forget About It"), and 2001 ("The Lucky One"). In 2000, she was a featured performer on the major hit album, the soundtrack from the film *O Brother, Where Art Thou?*, which shocked the country world by topping the charts for more than a year. Krauss has also worked as a record producer, overseeing two very successful albums by the new bluegrass group, Nickel Creek, in 2001 and 2002.

CARL BENSON

KREISLER, FRITZ (2 FEB 1875–29 JAN 1962)

Austrian/American violinist, born in Vienna. As a child he studied in Vienna, then went to Paris and graduated with highest honors from the conservatory at age 12. He made his U.S. debut in 1888, and toured with great success. Kreisler then gave up performance



Fritz Kreisler from a 1917 Victor catalog illustration. Courtesy Jerald Kalstein

to study medicine and art, and to serve as an officer in the Austrian army; he did not return to the stage until 1899 in Berlin. He toured again in America and Europe, gaining much acclaim. During World War I he returned to the Austrian army, continuing his musical career after the Armistice. In 1943 he became a U.S. citizen. He died in New York.

Kreisler recorded first for G&T in 1904. He played five works: "Chant sans paroles" (Tchaikovsky; #2084), "Sarabande" (Sulzer; #2085), "Bagatelle" (Schubert; #2085), the first movement of Bach's *Partita No. 3*, and the Bach "Air on the G String" (#2087). Kreisler was known as a composer as well as

a virtuoso: among his popular works are "Tambourin chinois," "Schön Rosmarin" "Caprice viennois," "Liebesfreud," and "Liebeslied." These pieces were among his early recordings, which included also many of his arrangements of compositions by Couperin, Tartini, Dvořák, and others. There were 50 solo records in the Victor 1917 catalog, mostly short concert pieces, plus duets with Geraldine Farrar, John McCormack, and Efreim Zimbalist.

Among the finest of his recordings were those he made in the late 1920s, while his technique was at its height. His Schubert and Grieg sonatas, with Sergei Rachmaninoff at the piano, are highly regarded (Victor M-107 and M-45). The first recordings of the Beethoven, Brahms, and Mendelssohn concertos, with the London Philharmonic, are preferable to his later versions of them. Victor issued an album of recordings from 1924 to 1929 as *Fritz Kreisler Souvenirs* (Victoria 1372), and a CD from Pearl displayed performances from the same period (*Encores*; 9324; 1990). His complete Victor recordings are available on an 11-disc set for true fans of the artist (RCA 61649). There are numerous other CD reissues as well. [Lewis, J. 1976.]

KRIPS, JOSEF (8 APR 1902–13 OCT 1974)

Austrian conductor, born in Vienna. At age 16 he was a violinist with the Vienna Volksoper, and he made his conducting debut in 1921. He held various posts in Germany, then at the Vienna State Opera in 1933. From 1935 he was also a professor in the Vienna Academy of Music. During World War II he was unable to take part in musical life, but as soon as the conflict ended he was immediately active; Soviet authorities in Vienna gave him the task of restoring opera to the Staatsoper, and within two weeks after the fighting stopped he conducted *Fidelio* there. Krips remained in Vienna until 1950, when he took the directorship of the London Symphony Orchestra, staying until 1954. From 1954 to 1963 he was conductor of the Buffalo Philharmonic Orchestra, and from 1963 to 1970 of the San Francisco Symphony Orchestra. He died in Geneva.

Krips was most distinguished for his Mozart performances, and for interpretations of the other Viennese masters. But he was also a promoter of modern music. Among his best recordings were those made with the London Symphony for EMI and Decca. These included the Schubert Ninth Symphony (London 6061), all the Beethoven symphonies (on the Everest label), and numerous Mozart symphonies. Near the end of his life he began a series of Mozart symphony discs for Philips with the Royal Concertgebouw Orchestra, completing nine of them.

KRISTALL (LABEL) (I)

A German label, issued by the Kristall Schallplatten GmbH in 1929–1945.

KRISTALL (LABEL) (II)

A Swedish record issued in 1933–1939, affiliated with Sonora. In 1934 the releases were from Svenska Kristall Rex, a subsidiary of the German Kristall Schallplatten.

KRISTALL SCHALLPLATTEN GMBH.

A Berlin firm founded in 1929 by Andreas Biele as a subsidiary of the Crystalate Gramophone Record Manufacturing Co. of London. It contracted with the American Record Corp. to issue matrices of various ARC labels, and issued also Vox records and Kristall records. Carl Lindström — then a part of EMI, Ltd. — took over the firm in 1938, and continued to use the Kristall label until 1945. [Sieben 1985.]

KRISTOFFERSON, KRIS (22 JUNE 1936–)

American country singer and motion picture actor, born in Brownsville, Texas. A Rhodes scholar at Oxford, Ph.D. recipient from Pomona College, and an U.S. Army pilot, he turned to country music in Nashville and eventually began producing hit discs. "Why Me" (Monument 78571; 1973; #16 pop, #1 C&W), was on the pop charts for 38 weeks; and there were five other chart singles by 1982. From 1971 to 1974 Kristofferson had six chart albums, most notably *Jesus Was a Capricorn* (Monument 31909; 1972, 1973), which enjoyed 42 weeks on the list. An album with Rita Coolidge, *Full Moon* (A&M SP-4403), had 18 chart weeks in 1973.

Kristofferson was awarded a Grammy in 1973 for the song "Help Me Make It Through the Night." He and Rita Coolidge received Grammys for their duets "From the Bottle to the Bottom" (1973) and "Lover Please" (1975). Other successful collaborations have included "Highwayman" (Columbia 04881; 1985; #1 C&W), "Desperadoes Waiting for a Train" (Columbia 05594; 1985; #15 C&W), and "Silver Stallion" (1990; #25 C&W), all with Willie Nelson, Johnny Cash, and Waylon Jennings. Since the early 1970s he has appeared in many films and TV programs, most notably *Alice Doesn't Live Here Anymore* (1974), a remake of *A Star Is Born* (1976), *Trouble in Mind* (1984), and the miniseries *Sodbusters* (1994).

REV. FRANK HOFFMANN

KRONOS QUARTETS



The original Kronos Quartet; l to r John Sherba, David Harrington, Hank Dutt, and Joan Jenrenaud.
Photographer: Horst Wackerbarth

KRONOS QUARTETS

Progressive classical string quartet formed in 1973 in San Francisco. The group has done much to popularize contemporary classical music through their showmanship as performers on stage and record. They initially recorded for the small Landmark label, gaining recognition for their string quartet arrangements of jazz compositions on the 1984 album *Monk Suite* (Landmark 1505). They signed with Nonesuch Records in 1986, and their debut album (Nonesuch 79111), created a stir because it featured an arrangement of Jimi Hendrix's "Purple Haze." The group has been associated closely with contemporary composers like Philip Glass. They have recorded a wide range of material, including collaborations with such far-flung artists as Argentinean tango master Astor Piazzolla (*Five Tango Sensations*, 1990; Nonesuch 79254), and poet Allen Ginsburg (*Howl_U.S.A.*, 1996; Nonesuch 79372). The original lineup of David Huffington (first violin), John Sherba (second violin), Hank Dutt (viola), and Joan Jeanrenaud (cello) remained intact through 1999, when Jeanrenaud was replaced by Jennifer Culp.

KRS-ONE (20 AUG 1965–)

KRS-One (Knowledge Rules Supreme Over Nearly Everyone) is best known for his humanistic leanings; he has promoted self-enlightenment and antiviolence through both his recordings and lectures on the college circuit. Known as "The Teacher" within the hip-hop community, he was the driving force behind the Stop the Violence Movement and 1991 H.E.A.L. (Human Education Against Lies) project, which featured contributions from a wide range of socially conscious artists, including Chuck D, Queen Latifah, R.E.M., and Billy Bragg.

Born Laurence Krisna Parker in the Bronx, New York, he teamed up with a social worker he met while staying at a local homeless shelter, Scott Sterling (aka DJ Scott LaRock), to form Boogie Down Productions. The duo's debut LP, *Criminal Minded* (B-Boy 4787; 1987), remains a landmark recording, featuring a hard-hitting style that anticipated the gangsta rap movement. Although Sterling was fatally shot in August 1987, KRS-One soldiered on with the additions of his brother Kenny Parker, and D-Nice, releasing a string of albums — *By All Means Necessary* (Jive 1097;

1988; #75 US, #38 UK), *Ghetto Music: The Blueprint of Hip Hop* (Jive 1187; 1989; #36 US, #32 UK), *Edutainment* (Jive 1358; 1990; #32 US, #52 UK), and *Sex and Violence* (Jive 41470; 1992; #42) — notable for their innovative use of reggae stylings and social advocacy street verse.

Without changing his innovative approach to any discernable degree, KRS-One opted for a solo career in 1992. His CD releases — *Return of Da Boom Bap* (Jive 41517; 1993; #37), *KRS-One* (Jive 41570; 1995; #19), and *I Got Next* (Jive 41601; 1997; #3), which incorporated prominent drum 'n' bass stylings — have enjoyed steadily increasing commercial success; as a result, at the onset of the 21st century, he stood on the verge of superstardom.

FRANK HOFFMANN

KRUESI, JOHN (15 MAY 1843–22 FEB 1899)

Swiss/American machinist, born in Speicher. He learned the machinist's trade in Zurich, and from 1867 to 1870 he worked in the Netherlands, Belgium, and France. In 1870 he crossed to America, taking a job with Singer Sewing Machine Co., then going to the Edison plant in Newark, New Jersey, in 1871. He became foreman of the machine shop, responsible for the mechanical execution of many Edison ideas. He assisted with the installation of the electric light system in New York; he patented the Kruesi Tube, an insulated underground cable. Kruesi and Charles Batchelor were responsible for the building of Edison's great plant in Schenectady, New York, which became the Edison General Electric Co.; in 1889 he became its assistant general manager. In 1895 he was appointed chief engineer of the new General Electric Co. He died in Schenectady.

Kruesi is best known in the history of recorded sound as the man who made the first working model of the phonograph, following a sketch given to him (and Charles Batchelor) by Thomas Edison on 29 Nov 1877. Kruesi and Batchelor had the model ready on 6 December. An unfortunate error in dating the sketch has only recently been corrected (by Allen Koenigsberg in 1969); the mistake resulted from Edison's much later (ca. 1917) inscription on a copy of the drawing "Kreuzi make this Edison Aug 12/77." The inventor evidently forgot the date of his original instruction to Kruesi, and also the spelling of his machinist's name. Kruesi also made the patent model of the phonograph.

The spelling of Kruesi has had a varied history in the literature. It appears as Kreusi, Kreuzi, Krusci, and Kruesci in various respected sources. A photo of the

Schenectady tombstone, reproduced in Betz, clearly shows the correct spelling; but Betz's article presents a misspelled version in its very title. [Betz 1990; Biel in *ARSCJ* 13–2 (1981), p. 114.]

KRUPA, GENE (15 JAN 1909–16 OCT 1973)

American jazz drummer and Big band leader, born in Chicago. He worked with the McKenzie-Condon Chicagoans and recorded with them in 1927–1928. Then he was with various groups, and in 1935 joined Benny Goodman. He was soon recognized as the premier drummer of jazz, providing virtuoso displays and lightning speed. His energetic stage presence was a big draw for the Goodman band. In 1938 he left Goodman and formed several bands of his own to 1951. Among the noted participants in his prewar bands were trumpeter Roy Eldridge and singer Anita O'Day; after World War II, Krupa hired Gerry Mulligan to write arrangements for his band, becoming one of the first big bands to feature the new bebop style. After folding his last band, Krupa toured with Norman Granz's famous jazz caravan, *Jazz at the Philharmonic*, through the 1950s. In 1959, *The Gene Krupa Story* was released by Columbia Pictures, featuring Sal Mineo in the lead role. Krupa's health began declining in the 1960s, although he continued to perform as long as possible. Krupa died in Yonkers, New York.

Among his famous discs are "After You've Gone," with Benny Goodman (Victor 25115; 1935), "Drummin' Man" (Columbia 35324; 1939), and "Drum Boogie" (Okeh 6046; 1941). The British Classics label is in the process of issuing a series of CDs featuring all of Krupa's recordings as a leader in chronological order. Other noteworthy reissues include *Uptown* (Columbia 45448), 20 selections featuring Eldridge and O'Day from sessions in 1941 and 1949, with a similar collection issued as *Drum Boogie* (Columbia 53425), although it lacks the 1949 material. There are also various reissues of radio airchecks and V discs by the band.

K-TEL RECORDS (LABEL)

TV mail-order label specializing in compilations of hits sold through infomercials, founded in the 1971 in Minneapolis, Minnesota. The K-Tel company was founded in Winnipeg, Canada, by Phillip Kives in the early 1960s to sell items like the beloved Veg-O-Matic (it slices! it dices!) through late-night TV ads. He moved into music in 1971 with K-Tel's first release, a compilation of polka music. Through the 1970s and early 1980s, the company expanded, selling classical, country, and pop compilations in the U.S. and opening offices in Great Britain, Canada, Germany, Holland,

KUBELIK, JAN

Japan, Australia, and New Zealand, tailoring its offerings to local tastes. It inspired competitors including the well-known Ronco company (famous for selling products that “really, really work” on late night TV); its label lasted from 1972 to 1984. In 1985, the U.S. branch went bankrupt, but later successfully reorganized, and the U.K. branch did not survive past 1990; at the same time, the company sold its Australian holdings. Currently, the company offers its compilation albums on CD via its website, as well as giving consumers the opportunity to make custom CDs by drawing from some 6,000 licensed tracks (not all by the original artists). [Website: <http://www.ktel.com>.]

CARL BENSON

KUBELIK, JAN (5 JULY 1880–5 DEC 1940)

Bohemian violinist, born in Michle, near Prague. He studied with Otakar Ševřik at the Prague Conservatory, and made his debut in Vienna in 1898. Then he toured Europe and the U.S., acclaimed as a new Paganini. His technique began to weaken in the 1930s, and after World War I he was less active; his final concert was in 1940. Kubelik died in Prague. He was father of the conductor Rafael Kubelik.

He was the first world-class violinist to record on disc, for G&T in 1902. He played František Drdla’s “Serenade” (#7956), and arrangements of pieces from *Carmen* and of the *Lucia* Sextette. He was then heard on Victor Monarch records, in the 5000 series transferred from G&T, and on Fonotipia in 1905–1910. From 1911 to 1915 he recorded for HMV. He had eight solos in the Victor 1917 catalog, and duets with Nellie Melba. The principal acoustics were reissued on two Biddulph compact discs (CDs) in 1991 (#LAB 033/4). Symposium Records issued the complete material of 1902–ca. 1934, including eight test pressings, in 1991 (CD 1072). [Lewis, J. 1981.]

See also **Violin Recordings (Historic)**

KUBELIK, RAFAEL (29 JUNE 1914–)

Bohemian conductor, born in Bychory. His father was the violinist Jan Kubelik. He studied at the Prague Conservatory, and made his debut with the Czech Philharmonic Orchestra in 1934, becoming its director in 1936. In 1948 he went to Britain, then to Switzerland (where he took citizenship in 1973). He was appointed conductor of the Chicago Symphony Orchestra and served from 1950 to 1953 in that post. In 1955–1958 he was director of Covent Garden; then for a year (1973) he was music director of the Metropolitan Opera Co. He was also director of the Bavarian Radio Orchestra, Munich. He retired in 1985.

Kubelik made numerous outstanding recordings with the world’s great orchestras. With the Chicago Symphony he is heard on Mercury recordings of — among others — Tchaikovsky, Brahms, and Smetana. DGG recorded his acclaimed renditions of the Mahler symphonies with the Bavarian Radio Symphony. Earlier, on 78s, he recorded Dvorák, Smetana, and Janáček with the Czech Philharmonic Orchestra for HMV. He directed the Vienna Philharmonic Orchestra in the Brahms symphonies for EMI. His DGG set of the Beethoven symphonies was made in the unusual manner of presenting each symphony by a different orchestra; among them were the Berlin Philharmonic, the Royal Concertgebouw, and the Cleveland orchestras.

KUDELSKI, STEFAN

In 1951, a Polish immigrant named Kudelski was a physics student at what is now the Swiss Federal Institute of Technology at Lausanne. That year, he built the first portable and self-contained audio recorder (using a wind-up motor), thereby freeing on-site recording engineers from dependence upon power-line electrical sources or electrical generators. He named the recorder the Nagra, which in Polish means “will record,” started a business, and began producing the device, but only in limited quantities. However, in the early 1960s, Jerry Lewis, after visiting Kudelski at his factory, brought the first Nagra to Hollywood, showed it to some film executives, and the device went on to revolutionize movie making.

In 1968, Kudelski’s private company became Kudelski SA, and moved into a new factory at Cheseaux-sur-Lausanne. Under his leadership and that of his son, Andre, after 1991, the Kudelski Group’s product line, including the Nagra audio recorders and advanced digital recording systems, continued to be an important part of audio and video production industry. The Academy of Motion Picture Arts and Sciences awarded Kudelski its Gordon E. Sawyer award in 1990, which recognizes an individual in the motion picture business whose technological contributions have brought credit to the industry. Kudelski is also a three-time Oscar winner for technical achievements, in 1966, 1978, and 1979. In addition, he won the Audio Engineering Society’s gold medal in 1984, is an honorary member of the Society of Motion Picture and Television Engineers, and is also an honorary fellow of the Association of Motion Picture Sound, in the U.K.

HOWARD FERSTLER

KUNSTKOPF STEREO

SEE DUMMY HEAD STEREO

KUNZ, ERICH (20 MAY 1909–8 SEP 1995)

Austrian bass-baritone, born in Vienna. He studied at the Vienna Academy of Music, and sang with various opera companies; then went to the Vienna State Opera. He appeared in London, Tokyo, Salzburg, Bayreuth, and the Metropolitan Opera (debut on 26 Nov 52 as Leporello). Kunz was acclaimed primarily for his buffo roles and for his operetta interpretations. Many of his finest recordings — doing Papageno, Leporello, Figaro (Mozart's), Beckmesser, and Viennese light pieces — were reissued on two LPs (1C 147–03) by EMI in 1980. CD reissues of entire operas featuring Kunz are available on RCA Red Seal, EMI, and Pearl; Vanguard Classics has issued a series of CDs of Kunz performing popular German songs.

KURLANDER, JOHN (25 MAY 1951–)

Born in London, Kurlander has been in the recording industry since 1967, with the first 28 years spent at EMI's Abbey Road facility. He began his career working as an assistant to Geoff Emerick on the Beatles album, *Abbey Road*, with Emerick winning the engineering Grammy for that album. Expanding his horizons, Kurlander did some singles with Paul McCartney, and in the early 1980s he engineered the popular *Hooked on Classics* series. Later, he recorded Toto and Elton John, layering 80-piece orchestra tracks on top of the rock-music tracks. This led to doing some serious classical recordings around 1980, which included projects with the Berlin Philharmonic and the Philadelphia Orchestra. In 1985, Kurlander became Abbey Road's chief balance engineer and also chief classical engineer for EMI. Today, he is a highly sought, Hollywood-based independent engineer specializing in major motion picture film scoring and soundtrack albums.

HOWARD FERSTLER

KURZ, SELMA

(15 NOV 1874–10 MAY 1933)

Silesian coloratura soprano, born in Bielitz. Her first appearances were in Hamburg in 1895; she then went to the Vienna Court Opera from 1899 to 1926. In 1904 she was a great success as Gilda at Covent Garden. In the U.S. she was acclaimed as a concert singer. Kurz recorded for the Gramophone Co. in 1900, doing airs from *Mignon* and *Faust*. She made seven sides for International Zonophone Co. in Vienna in 1902, beginning with a seven-inch disc of the Brahms "Ständchen" (#10902). She was then a Gramophone Co. artist, doing the standard coloratura repertoire

until 1914, and in 1923–1926. In ca. 1919 she worked with Deutsche Grammophon. A CD of her principal numbers was issued in 1990 by Club 99 (43), and a collection of her 1923–1924 recording is available on Preisser (89504). [Halban 1960; Kelly 1979.]

KYSER, KAY

(18 JUNE 1906–23 JULY 1985)

American big band leader, born in Rocky Mount, North Carolina. He attended the University of North Carolina, earning a degree in 1928, and formed a dance band. He was engaged by the Blackhawk Restaurant in Chicago in 1934, and broadcast from there his popular *College of Musical Knowledge* radio show, in which people from the audience were brought to the stage to answer amusing questions. The program was carried to television in 1949–1951. Kyser made eight motion pictures before retiring in 1951. He did not play an instrument himself, but took the part of host and showman. He died in Chapel Hill, North Carolina.

Kyser's ensemble was one of the smooth, sweet bands of the era, graced by outstanding vocalists, and sparked with some humorous and novelty arrangements. Often there were "singing song title" introductions. His orchestra recorded first for Victor in 1928, doing "Broken Dreams of Yesterday" and "Tell Her" (#V-40028). They were back on the Victor label for two sides in 1929, then did not record until 1935, for the Brunswick label. Star singer Ginny Simms joined the group then, and began a long series of successful ballad numbers; and Merwyn Bogue did many clown pieces as Ishkabibble. Wind player Sully Mason sang in novelty pieces. In 1938 Harry Babbitt joined the vocal forces, and he made a popular duet with Ginny Simms, "The Umbrella Man" (Brunswick 8225; 1938), with a charming solo, "Sixty Seconds Got Together," on the B side. "Three Little Fishies" was a hit of 1939, sung by Babbitt, Simms, and Bogue (Brunswick 8368). The orchestra signed with Columbia in 1939, and produced their greatest hits, of which only a few can be cited here: "On the Isle of May" sung by Simms and Babbitt (Columbia 35375; 1940), with "Playmates" sung by Sully Mason and chorus on the flip side; "Who Wouldn't Love You?" with Simms and Babbitt (Columbia 36526; 1942); and Sully Mason's lively "Got the Moon in My Pocket" backed by Babbitt's delicate solo of "Just Plain Lonesome" (Columbia 36575; 1942). CD compilations include "Best of" collections on Columbia (45343), and a two-CD set on Collectors Choice (111), consisting of mid 1930s-late 1940s Brunswick/Columbia recordings in chronological order.



L

LA BELLE (LABEL)

A record issued by the La Belle Phonograph Corp., New York, around 1919–1920. The discs were, in fact, Columbia records — and other labels later — with the La Belle stickers pasted over the original labels. [Rust 1978.]

LA SCALA

The principal opera theatre and opera company of Italy, full name Il Teatro alla Scala. It opened in Milan in 1778, was nearly destroyed in a bombing raid in 1943, and was rebuilt in 1946. Complete opera recordings by the La Scala company have been made since 1907. HMV and Columbia recorded more than 25 such sets by 1932, conducted by Carlo Sabajno or Lorenzo Molajoli. A number of superior artists who did not perform widely outside of Italy are heard on these discs, such as tenors Aureliano Pertile and Francesco Merli, and baritone Enrico Molinari. The La Scala chorus recorded for Odeon and Fonotipia, accompanying soloists or doing choral numbers. A 1990 CD reissue offered on 12 discs the complete *Pagliacci*, *Aida*, *Otello*, *Rigoletto*, *Trovatore*, and the Verdi *Requiem* (Harmonia Mundi 32539/50).

LABEL (I)

A paper attachment to a disc or cylinder, giving identification data on the music and or the performers. Before 1900 discs had no paper labels, but carried identification scratched into their surfaces. Eldridge Johnson began using paper labels on discs in 1900, and the practice soon became widespread.

LABEL (II)

The popular name for a record company or a division of a company that issues one or more series of records; for example, “the Brunswick label” refers to records released by the Brunswick-Balke-Collender Co.

LABIA, MARIA

(14 FEB 1880–10 FEB 1953)

Italian soprano, born in Verona. She made her debut in Stockholm as Mimi on 19 May 1905, then sang with the Berlin Komische Oper from 1906 to 1908. She was with the Manhattan Opera Co., New York, until it folded in 1910, then appeared at the Vienna Opera. She died in Malcesine del Garda, Italy.

Labia recorded for Odeon in Berlin in 1907–1910, doing dramatic arias (in German) from *Tosca*, *Carmen*, *Traviata*, and *Ballo in maschera*. In 1911 she sang in London for Edison wax Amberol cylinder 35021: “Voi lo sapete” (later Blue Amberol 28114; 1912 or 1913), “Ave Maria” from *Otello*, and “Non la sospiri” from *Tosca* (later Blue Amberol 28153, 1912 or 1913). There were also five numbers cut for Edison Diamond Discs, in 1912–1913: “Tre giorni son che Nina” (#82004, 82014, 82037), “Seconda mattinata” (#82010); “In quelle trine morbide” from *Manon Lescaut* (#82019, 82038), “Ballatella” from *Pagliacci* (#82021, 82035), and “Mi chiamano Mimi” (#82503).

LABYRINTH

SEE LOUDSPEAKER

LACQUER DISC

LACQUER DISC

Another name for the acetate disc; one usually made of metal, glass, or fiber, and coated on one or both sides with a lacquer compound. Lacquers were used in home recording and in making instantaneous recordings between the introduction of electrical recording and the advent of the 1948 LP. Around 1950 the industry generally began to abandon wax in favor of lacquer surfaces.

LAFACE RECORDS (LABEL)

SEE *BABYFACE* (EDMONDS, KENNY); *REID, ANTONIO* "L.A."

LAINE, FRANKIE (30 MAR 1913–)

American popular singer, born Frank Paul Lo Vecchio in Chicago. He sang in church, then at age 15 in clubs, then went on to radio. He developed a crooning, jazzy style said to be modeled on Louis Armstrong's singing. In 1946 he went to Hollywood, and contracted to record for Mercury. He scored a great success in 1947 with "That's My Desire" (Mercury 5007), followed by another, "Mule Train" (Mercury 5345; 1949). In the 1950s and 1960s he put 21 singles on the charts, including "I Believe" (Columbia 39938; 1953), and "Moonlight Gambler" (Columbia 40780; 1956). His most popular album was *I'll Take Care of Your Cares* (ABC 604; 1967), 19 weeks on the charts. Laine enjoyed a minor comeback in 1966, and has since performed and recorded sporadically, despite two major heart surgeries. He sang the theme song for Mel Brooks's western spoof *Blazing Saddles* in 1974. HE has continued to record and perform into his 80s; in 1996, he was elected into the Songwriters' Hall of Fame. His 1946–1950 Mercury recordings are collected on Mercury 510435, and his "16 most requested" hits from his later Columbia days are gathered on Columbia Legacy 45029. Bear Family has numerous album reissues on CD, as well as their usual complete boxed sets for the truly dedicated fan; radio transcriptions and other material are available on various labels.

LAMBERT, THOMAS BENNETT (1862–9 JAN 1928)

American inventor and recording company executive, born in Chicago. In 1900 he received British patent #13,344 for an "indestructible" cylinder record, and U.S. patent #645,920 (where the term used was "infrangible"). His process involved coating the usual wax master with a form of carbon, then depositing copper on it by electrolysis to make a shell. When the

wax master was cooled and removed, a copper negative matrix remained; it was used to form duplicate cylinders in celluloid ("cellulose" was Lambert's term). The Lambert Co. was established in Chicago to produce and market the records. With the bankruptcy of that firm in 1906, Lambert turned to telephone research, then was vice president of the Marsh Laboratories in Chicago, producers of the earliest commercial electrical discs. [Koenigsberg 1990.]

LAMBERT CO.

SEE *CYLINDER*

LAND

A term for the surface of a record between adjacent grooves.

LAND-O-PHONE CO. INC.

A New York firm, in operation ca. 1906. It manufactured the Land-O-Phone home recorder for discs, selling at \$10. Blank discs, 10 1/2-inches in diameter, cost \$0.25.

LANDOWSKA, WANDA (5 JULY 1879–16 AUG 1959)

Polish pianist and harpsichordist, born in Warsaw. She studied piano at the Warsaw Conservatory, then in Berlin. She toured Europe as a pianist, but shifted her interest to the harpsichord. In 1913 she gave a special course on that instrument at the Berlin Hochschule für Musik. Landowska achieved acclaim and made her American debut with the Philadelphia Orchestra in 1923. In 1925 she established a school and concert center near Paris for the study of early music. She fled Europe during World War II, and settled in the U.S. in 1941. Her home was in Lakeville, Connecticut, where she died.

Landowska's work was the single most important factor in reviving interest in the harpsichord after 200 years of neglect. She recorded the instrument on four Red Seal sides for Victor in 1924, including "Harmonious Blacksmith" by Handel and the "Turkish March" from the Mozart A Major Sonata (#1193). Her most important records were of the "Goldberg Variations" by J.S. Bach, made for Victor in 1945 (#1650), and the six-disc album of the *Well-Tempered Clavier* issued in the 1950s (Victor 26–35005). There are numerous CD reissues of Landowska's recordings available on RCA and reissue labels. [Lewis, J. 1979.]

LANG, EDDIE
(25 OCT 1902–26 MAR 1933)

American jazz guitarist, born Salvatore Massaro in Philadelphia. He studied violin and guitar, then teamed with his schoolmate Joe Venuti in performances during the 1920s. He was with the Mound City Blue Blowers in 1924, and worked with many major artists. Lang became recognized as the premier jazz guitarist. During the 1920s he made an important series of discs with Venuti, and in the 1930s he accompanied Bing Crosby. He died in New York following an unsuccessful tonsillectomy.

Lang's first solo records, with piano accompaniment, were made for Okeh on 1 Apr 1927: "Eddie's Twister" and "April Kisses" (Okeh 40807). After five more solo sessions for Okeh, he recorded with his orchestra (including at times Tommy Dorsey and Jimmy Dorsey) for various labels through 1932. Among the fine records that came from the Lang-Venuti partnership were "Stringing the Blues" (Columbia 914D; 1926), and "Doin' Things" with "Goin' Places" (Okeh 40825; 1927). Lang's recordings have been reissued in various formats on CD, both on domestic and foreign labels; one of the better reissues is on Yazoo 1059.

LANGUAGE INSTRUCTION RECORDS

The earliest recorded language instruction is credited to Cortina Academy of Languages, which issued Spanish lessons on Edison cylinders in 1889. As early as April 1891 *Phonogram* carried notices of language cylinders available at \$30 from Columbia, 24 records in each set, for French, German, Italian, or Spanish. Richard S. Rosenthal was the instructor; he named his system Meisterschaft. International Correspondence Schools used the Edison phonograph for language courses from 1901. Language Phone Records were advertised in *TMW*, issued by the Language Phone Method Co. of New York in November 1916. That company filed for dissolution in 1921.

In Britain, Pathé recorded courses for the Modern Language Press, until the Russell Hunting Record Co., Ltd., took over in 1906, when the name was changed to the Linguaphone Co., Ltd. (Its successors are still in business, as the Linguaphone Institute.) Another early course was made for the Bizeray School of Languages by G&T through its Zonophone label in 1905. The International Correspondence Schools cylinders were also available in Britain, made by the Edison Works in the U.S., and are still on the market.

Language lessons appeared in the Victor catalog of 1938, with sets in French, German, Italian, and Spanish. At the peak of the LP era in 1979 there were courses from Cortina, Conversa-phone, and other labels on disc or cassette for 40 languages. On CD the

number of vendors and languages has increased further, with a new emphasis on English instruction for speakers of other tongues.

LANOIS, DANIEL (19 SEP 1951–)

Born in Hull, Quebec, Lanois has been one of the most influential pop producers of the 1980s and 1990s. When Lanois was 12, his parents separated and he moved to a suburb of Hamilton, Ontario, where he began playing the guitar and making home recordings, working with his brother. In 1970 the duo opened a primitive studio in their home, and began working with local acts. During the late 1970s, Lanois did his first work for noted producer/composer Brian Eno. Eno became a mentor for the young producer. In 1984, Eno invited Lanois to coproduce the next U2 album, *The Unforgettable Fire*. His work on this record impressed Peter Gabriel, who invited him to produce his 1986 album, *So*. A year later he joined again with Eno to produce U2's smash album, *The Joshua Tree*, and his reputation was launched. In the late 1980s he set up a studio in New Orleans, Louisiana, called Kingway, and worked with a variety of artists, including producing Bob Dylan's 1989 *Oh Mercy* album, the best-received recording by Dylan in years. Lanois reunited in the 1990s with U2 (1991's *Achtung Baby*), Gabriel (*Us* from 1992), and Dylan (the Grammy-winning 1997 album, *Time Out of Mind*), and produced Emmylou Harris's 1995 hit album, *Wrecking Ball*. Lanois's production work is highly atmospheric; he creates an evocative sonic landscape for his artists, recalling classic sounds of the 1950s and 1960s while updating them through the use of new technologies. Lanois has also recorded a few albums on his own, although without achieving the same level of success as the acts that he has produced.

CARL BENSON

LANSING, JAMES B.
(14 JAN 1902–24 SEP 1949)

An early pioneer in high-fidelity loudspeaker design. Lansing was born James Martini and for unknown reasons changed his name to James Bullough Lansing just prior to starting the Lansing Manufacturing Company in Los Angeles in 1927. The company later made notable contributions to the design and building of large horn systems for motion picture sound reproduction. In 1941, Lansing sold the company to Altec Service Corporation (Altec stood for "all technical," and the original company had been formed in 1938 by M. Conroe and George Carrington), and the new combination was called Altec Lansing. After the

LANSING MANUFACTURING

merger, Lansing stayed on and helped to design several notable monitor and theater-horn systems, including the 604 coaxial and the A-4, mainly designed by John Hilliard. In 1946 Lansing left Altec and formed a new company, Lansing Sound, with several other partners. Later on, the company came to be called James B. Lansing Sound, Incorporated (JBL). Between the time he helped to start the new company and his death in 1949, he was responsible for several notable speaker designs and manufacturing methods. The company continued to prosper after his death, and since 1969, JBL has been owned by Harman International.

See also **Loudspeaker**

HOWARD FERSTLER

LANSING MANUFACTURING

SEE LANSING, JAMES B.

LANZA, MARIA

(31 JULY 1921–7 OCT 1959)

Born Alfredo Arnold Cocozza in the Italian neighborhood of South Philadelphia, Pennsylvania, Lanza became a major film and recording star in the 1950s. He took his stage name from his mother's maiden name, Maria Lanza. Lanza studied voice locally, and then was given the chance to audition for Boston conductor Serge Koussevitsky, who invited him to study at the famous Tanglewood Music Center. Soon after, in 1943, Lanza was drafted into the army, but a bad eye precluded him from serving with the troops. Instead, he auditioned for a traveling army show, and began performing for enlisted men, earning the nickname "the Service Caruso." After discharge in 1945, he settled in New York where he was signed by Columbia Artists, a prestigious booking agency for classical performers. He toured extensively, giving a concert at the Hollywood Bowl in 1947 that brought him to the attention of Louis B. Mayer, who signed him to a contract with MGM. Lanza's hit records were all promoted through his films, beginning with "Celeste Aida" from his movie debut, 1948's *The Midnight Kiss*. A year later, he had a million-seller with "Be My Love," and then in 1951 "The Loveliest Night of the Year" (from *The Toast of New Orleans* and *The Great Caruso*, respectively). He had his final million-selling disc in 1952: "Because You're Mine," the title song from the film of the same name. During this period, Lanza also appeared on several radio programs as a host and guest, most notably singing on "The Coca Cola Show" from 1951 to 1952. Lanza completed the soundtrack for *The Student Prince* but then walked out on his contract with

MGM before the filming could begin; nonetheless "The Drinking Song" from the aborted film became a number one pop hit. Troubled by drug and alcohol addiction, Lanza made one final U.S. film, and then moved to Rome, Italy. He made two more films before his death in Rome; rumored to be a mob hit, supposedly because Lanza refused to perform for a benefit concert arranged by Lucky Luciano. However, the death was officially attributed to heart failure. Lanza's recordings were reissued numerous times on LP through the 1980s and then on CDs, and there are still several active fan clubs dedicated to the singer. RCA/BMG continues to reissue his studio recordings on various CD compilations, while his 1949–1954 MGM soundtrack recordings are anthologized on *Be My Love* (Rhino 72958); these versions often differ from the "official" recording released at the time.

LASERDISC

A laser-read, video-recording format supported in the 1980s by a number of manufacturers, the most notable of which was Pioneer. Most laserdiscs were 12 inches in diameter and early versions had both the picture and sound in analog form. While the picture was always a frequency-modulated analog signal, later configurations had the sound in potentially very high quality two-channel, PCM digital form, with the very last versions having Dolby Digital or DTS audio tracks. Discs were available in two forms, standard (constant angular velocity) and extended play (constant linear velocity), with the former having as much as 30 minutes of sound on a side and the latter doubling that to 60 minutes. Repertoire offered by various labels until the demise of the format near the end of the 1990s included operas, ballets, concerts, and motion pictures, with the latter being the most common use. The laserdisc was eclipsed by the rapid success of the DVD in the late 1990s and both laserdiscs and players eventually went out of production.

REV. HOWARD FERSTLER

LASER TURNTABLE

A turntable designed to reproduce sound from analog vinyl recordings using a laser beam instead of a phono cartridge. Introduced to great fanfare in 1986 by Finial Technology of Sunnyvale, California, the company was unable to find adequate distribution for the product and sought outside investors to acquire the technology. In 1988, ELP Corporation of Japan, a consumer audio company formerly known as BSR Japan, acquired the patents for the laser turntable and began production. After several years of producing the turntable for

institutional use, ELP introduced its first commercial models in 1995 and targeted them at the high-end audiophile. By 2001, the company was making a profit.

The primary advantage of the laser turntable is the reproduction of analog records without subjecting them to the wear associated with phono cartridges. Each turntable is constructed by hand and includes laser reading optics that can be adjusted to the speed and groove depth of all commercially produced vinyl recordings. The speed of the turntable is fully adjustable in 1-rpm steps within the range of 30 to 50 rpm, and in 2-rpm steps within the range of 60 to 90 rpm. Vinyl discs measuring seven inches, eight inches, nine inches, 10 inches, 11 inches, and 12 inches can be played, as can rpm speeds that are the equivalent of traditional vinyl playback speeds of 45, 33-1/3, and 78 rpm. The laser turntable has notably low distortion and can faithfully reproduce the sound of records that may even have scratches or warps. The height of the scanning laser can be adjusted within the groove of a record to fine-tune its reproduction.

The high price of the laser turntable — ranging from about \$13,500 to \$23,500, depending on features — has proven to be a worthwhile investment for institutions and collectors concerned about preserving their vinyl heritage.

THOM HOLMES

LASWELL, BILL (12 FEB 1955–)

Laswell has been termed a “postmodern Renaissance man,” founding the Axiom label in 1988 through a partnership with Island Records, establishing Greenpoint Studio (1990), and pursuing new directions in the fusion of jazz, rock, and funk both as a producer and with his own band, Material. Born in Salem, Illinois, and raised in Detroit, where he performed in funk groups, he moved to New York City in 1978. Formed at the outset to accompany former Gong front man, David Allen, on a U.S. tour, Material would become a forum for Laswell’s musical experiments. Built around keyboardist Michael Beinhorn, drummer Fred Maher, and himself on bass, the group has negotiated many styles — including world music, avant-garde jazz, ambient music, hip-hop, and mutant rock — and collaborated with many artists (e.g., Nona Hendryx, Sonny Sharrock, Fred Frith, Henry Threadgill, Archie Shepp, Nile Rodgers, Whitney Houston, William Burroughs). Although outside the pop mainstream, Material’s recordings — *Temporary Music* (Celluloid; 1981), *American Songs EP* (Red Music; 1981), *Busting Out EP* (ZE/Island, 1981), *Memory Serves* (Celluloid/Elektra Musician 1-66042; 1982), *One Down* (Celluloid/Elektra; 1982), *Red Tracks* (Red; 1986), *Seven Souls* (Virgin 2-91360; 1989), *The Third*

Power (Axiom 422-848 417-2; 1991), *Live in Japan* (Restless; 1994), and *Hallucination Engine* (Axiom; 1994) — remain required listening for adventurous listeners.

Laswell has been widely sought after both as a session player and producer. He contributed bass on Laurie Anderson’s *Mr. Heartbreak* (1982), and has gone on to play with the Golden Palominos, Last Exit, the Last Poets, Brian Eno, David Byrne, Peter Gabriel, Fela Kuti, John Zorn, Bootsy Collins, and Buckethead, among others. In 1983 he cowrote and produced Herbie Hancock’s hit, “Rockit” (Columbia 14200; 1983; #71), and won a Grammy for his work on Hancock’s follow-up album, *Sound-System* (Columbia 39478; 1984; #71). His production of the hip-hop single “World Destruction” (available on Time Zone’s *Zulu Groove*, Celluloid 5003; 1997), featuring Africa Bambaataa and Johnny Lydon, also garnered considerable praise. From that point to the present day, he has produced a diversified array of artists, including Sly (Dunbar) and Robbie (Shakespeare), Mick Jagger, Motorhead, Iggy Pop, the Ramones, and Yellowman. [Romanowski and George-Warren 1995.]

FRANK HOFFMANN

LATE REFLECTIONS

In concert halls, churches, and recording studios, they are the sounds reflected from more distant room boundaries, and it is those reflections that allow for a recording made in those spaces to partially simulate a large-space environment. In home listening room situations, they are the sounds that arrive at the listening position after being reflected from multiple room surfaces that are considerably closer to the listener than what we have in studios, concert halls, and churches. As a result, those small-room reflections are not delayed enough to do a proper simulation, and they therefore tell the listener that they are listening to a music ensemble recorded in a large room being played back in a smaller one.

To counter this artifact with two-channel recordings, DSP ambiance-synthesizing devices that incorporate surround channels and extra channels can be employed to simulate a larger space. One purpose of well-done, dedicated surround-sound recordings, like what we have with DVD-A, SACD, Dolby Digital, and DTS, is that they are able to reproduce those late reflections from the surround channels.

HOWARD FERSTLER

LATERAL ALIGNMENT

SEE GAP ALIGNMENT

LATERAL RECORDING

The process — also known as lateral cut or needle cut — of cutting records in which the vibrations are represented by sidewise deflections in a groove of uniform depth. It was developed commercially by Emile Berliner and was accepted widely in the U.S. and Europe by 1900. The other system, vertical cut, or “hill-and-dale,” was preferred by a few labels, such as Pathé and Edison, into the 1920s, but the industry had standardized on lateral recording by the beginning of the 1930s. Both lateral-cut and vertical-cut recordings were made in the Volta Laboratories in the early 1880s, as shown by the notes of Charles Sumner Tainter. However, the lateral method is not mentioned specifically in the key U.S. patent of Tainter and Chichester Bell, #341,214 (filed 27 June 1885; granted 4 May 1886). Berliner’s method was not strictly a cutting, as it was the old method of acid etching. Berliner could not use a true cutting process because of the wax-cutting Bell and Tainter patent.

**LAUDER, HARRY, SIR
(4 AUG 1870–26 FEB 1950)**

Scottish singer and comedian, born in Portobello, near Edinburgh. After a wretched childhood of work in mills and coal mines, he took to the stage at age 12, and at 20 was performing in a touring company. He formed his own group in 1897, and was famous through Scotland and northern England in a few years. At age 30 he performed in London, offering songs in a rich dialect, and became “the hottest property in the British theatre” (Baker). His fame was soon international. He was knighted in 1919. The stage was his life

until his 75th year, when he retired. He died in Strathaven, Scotland, where he had built “Lauder Hall.”

Lauder’s discography covers 1902–1940. His first records were for G&T in February 1902; he made nine 10-inch sides in that session, with a piano accompaniment possibly by Landon Ronald. “To Jericho” was the first number (2–2657). In December 1903 Lauder again recorded for G&T, in four sessions, and he went on with the label until August 1905, some of the titles appearing on the Zonophone label. In June 1906 he recorded for Pathé discs, “We Parted on the Shore” (60286), and 13 other songs. In August he was back with G&T, to 1908. Lauder made Edison two-minute cylinders in London in March–June and July–September 1908, and four-minute cylinders in 1909. He began with Victor in New York in December 1909, and though he did return from time to time to Edison, his principal affiliation remained with Victor and HMV (and Zonophone, its subsidiary).

He achieved such popularity that several labels copied his repertoire, using Peter Dawson as an excellent imitator under the name of Hector Grant. With Victor, Lauder moved from the cheap black label to the more prestigious purple label. Four Victors made on 18 Oct 1911 were among the most popular discs issued by the firm before electric recording: “The Picnic” (70060), “Roamin’ in the Gloamin’” (70061), “Just a Wee Deoch an’ Doris” (70062), and “Breakfast in Bed on Sunday Morn” (70063). The 35 titles in the Victor 1917 catalog were embellished by a “glossary of Scotch words used by Mr. Lauder, also phrases which might not be understood by our customers.” The

LAUDER, SIR HARRY, Comedian (*Law’-der*)

Sir Harry Lauder began life as a miner. He lightened the labors of his fellows by singing to them, at odd times, his now world-famous songs of humor and sentiment. He sought the music-halls of London; at first was received coldly, but in a short while was singing at three or four every night, being whirled from one to the other in taxicabs. It has been said of him that in national crises, he possibly did more than any single individual to raise the spirits of London; his appearance anywhere was the signal for laughter and cheers. The World War, which brought him the loss of his only son, brought also the honor of knighthood. His contracts with the Victor, made for a long term of years, have brought forth some of the best humorous records in any language of humankind.



LAUDER

Harry Lauder as he is described in the 1917 Victor catalog. Courtesy Jerald Kalstein

same catalog copy identified Lauder as “the highest salaried entertainer in the world.” He wrote many of his hit songs.

In the 1927 catalog Victor had moved the Lauder repertoire to the Red Seal label. He still had 10 titles in the 1940 Red Seal section. Lauder records were reissued on numerous LP labels, and there were also reissues on Victor 45 rpm. Lauder was also a film star, with appearances in 37 motion pictures of varying lengths, from 1904 to 1936. There are numerous CD reissues, including *Road to the Isles* (Pearl 7834) and *Roamin' in the Gloamin'* (Happy Days 164). [Baker 1990.]

LAURI-VOLPI, GIACOMO (11 DEC 1892– 17 MAR 1979)

Italian tenor, born in Lanuvio, near Rome. He studied law and voice in Rome, and served at the front during World War I. Then he made his debut in Viterbo (1919), and sang in Florence and at La Scala. On 26 Jan 1923 he appeared at the Metropolitan Opera as the Duke, remaining with the company until 1933. Subsequently he returned to Europe, and resided in Spain. He died in Valencia.

Lauri-Volpi sang the standard tenor repertoire, but gained special praise for his interpretation of Raoul in *Ugonotti* (*Huguenots*) — a role he recorded in 1955 in the complete opera set issued by Golden Age of Opera (#EJS 116; taken from a radio broadcast). His other outstanding role was in *Guglielmo Tell*; he recorded two arias for Cetra in the 1930s: “O muto asil del pianto” and “O Matilde” (45017). His earliest discs were Fonotipias, made in Milan in 1920. Later he was with the Brunswick label in the U.S. (1932–1936). Victor (1928–1930), and HMV (1934 and the 1940s). An important recording for Victor was the Nile scene from *Aida*, with Elisabeth Rethberg and Giuseppe De Luca (8206; 1930). Lauri-Volpi sang in the complete *Luisa Miller* recording for Cetra (1221; 1951), and in *Trovatore* for the same label (1226; 1951). He took part in a complete *Boheme* in 1952. A compact disc (CD) reissue on Harmonia Mundi (89012) offers material from 1928 to 1934; Sings Verdi (Nimbus 7853) collects recordings made from 1927 to 1941, mostly for HMV. [Williams, C. 1957/11.]

LAURIE (LABEL)

Teen-pop/rock label founded in March 1958 by a group of New York businessmen, brothers Bob and Gene Schwartz and their partners Elliott Greenberg and Allen Sussel; the label was named for Sussel's daughter. Their first big act was Dion and the

Belmonts, who were hitmakers from 1958 to 1960, including “A Teenager in Love” (#5, 1959; Laurie 3027), and “Where or When” (#3, 1960; Laurie 3044). After the group fell apart, Dion continued on his own on the label, scoring major hits with his signature songs, the number one “Runaround Sue” (1961, Laurie 3110), and its follow-up “The Wanderer” (#2, 1961; Laurie 3115). Dion left the label when he signed with Columbia in 1962. During 1963, Laurie's big act was the Chiffons: the number one “He's So Fine” (Laurie 3152), and the number five “One Fine Day” (Laurie 3179), and from 1964 to 1965, Gerry and the Pacemakers, licensed from the U.K., “Don't Let the Sun Catch You Crying” (#4, 1964; Laurie 3251); and “Ferry Cross the Mersey” (#6, 1965; Laurie 3284). The label's swan song came in the later 1960s, with their last major acts being The Royal Guardsman (the million-selling camp classic “Snoopy vs. the Red Baron,” #2 in 1966 [Laurie 3366]) and the return of Dion for his last big hit “Abraham Martin and John” (#4, 1968; Laurie 3464). The label also featured a slew of bands admired among lovers of 1960s kitsch and garage groups, including Randy and the Rainbows, the Barbarians, Think, the Balloon Farm, and the Passions. Active recording ceased around 1970, although the label remained in business through 1987 (taking the new name 3C, Continental Communications Corporation, in the early 1980s) primarily to reissue its earlier hit recordings. The label's back catalog was sold to Capitol-EMI in 1987.

CARL BENSON

LAW, DON (24 FEB 1902–20 DEC 1982)

Don Law's role as one of the architects of the “Nashville Sound” was recognized in his posthumous induction into the Country Music Hall of Fame in 2001. Born in London, England, Law moved to the United States in 1924, settling in Dallas, where he became a bookkeeper for Brunswick Records, subsequently Columbia/ARC. Working with fellow Englishman Art Satherley, Law arranged Dallas sessions for Columbia, including Robert Johnson's. In 1945 he and Satherley divided responsibility for country music. Law assumed sole control in 1951, signing Carl Smith, Lefty Frizzell, Ray Price, Johnny Horton, Stonewall Jackson, and many others. He produced all of Marty Robbins's biggest hits, and signed Johnny Cash to Columbia. Mandatorily retired in 1967, Law continued producing on a freelance basis, but scored his last major hit with Henson Cargill's “Skip a Rope” on Monument Records in 1968. He died in Galveston, Texas.

COLIN ESCOTT

LAWRENCE, MARJORIE
(17 FEB 1907– 13 JAN 1979)

Australian soprano, born in Dean's Marsh, Victoria. She studied in Melbourne and Paris, and made her Metropolitan Opera debut as Brünnhilde in *Walküre* on 18 Dec 1935; she stayed with the Metropolitan until 1941. In that year she contracted poliomyelitis in Mexico, and was unable to walk. Despite this disadvantage, Lawrence returned to the stage in the following year, singing while seated. Her last stage role came in 1943, but she was heard thereafter on radio. She retired from performing in 1952, and thereafter taught voice at Tulane University (1957–1960), Southern Illinois University (where she founded the Marjorie Lawrence Opera Theater, a training company still operating; 1960–1973), and finally the University of Arkansas (1974–her death). In 1977, she was made a Commander of the British Empire. She died in Little Rock, Arkansas. Her papers are held by the National Library of Australia (website: <http://www.nla.gov.au/ms/findaids/7225.html>).

Many of her recordings are of concert songs, by Brahms, Grieg, Mahler, Rachmaninoff, and so on. Her finest operatic records are from *Salome*, in which she earned great praise on stage. She recorded four arias from the opera, in French, for HMV in 1933–1934 (reissued on Harmonia Mundi 89011). The same arias were in the Victor catalog as well. [Hogarth 1987.]

LAYERING

The recording of a musical part with several, similar sounding inputs playing simultaneously. The technique is an outgrowth of the multitrack tape recorder.

HOWARD FERSTLER

LÁZARO, HIPÓLITO
(13 AUG 1887–14 MAY 1974)

Spanish tenor, born in Barcelona. He studied in Milan, sang in Barcelona, then in 1912 in London. In 1913 he was at La Scala, and in 1918 he made his debut as the Duke at the Metropolitan Opera, remaining for two years. Later he sang throughout Europe and appeared in South America. Lazaro retired in 1950, and died in Madrid.

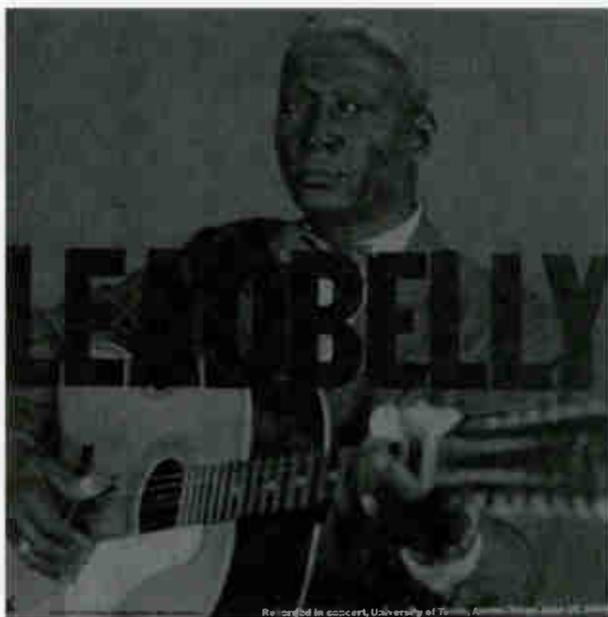
Most of Lázaro's records are Columbias made in 1916–1920 and (imported from Spain) 1925. He did the standard tenor arias, but was most acclaimed for two numbers from *Puritani*: "Vieni fra queste braccia" (Columbia 46752), and "A te o cara" (Columbia 48783) — the latter with a spectacular high D-flat. Some of these recordings are reissued on Preiser 89147. [Richards 1964.]

LEACHMAN, SILAS F
(20 AUG 1859–28 APR 1936)

American singer and comedian. Chiefly a comic performer, noted for "coon songs," he rendered standard and patriotic songs as well. He was in politics, described in an article in the March 1888 *Scientific American* as "a 24th ward politician [with] a voice ranging from bass to first tenor." His first records were for the Chicago Talking Machine Co. in the early 1890s, and he remained with that label until about 1900; he had more than 100 titles in the 1899 catalog, selling at \$.75, while other cylinders in the same catalog were going at \$.50. He was also in the Columbia 1894–1895 catalog. Victor recorded him in around 1902–1904, presenting about 50 numbers, but Leachman's popularity faded quickly and he was not in later catalogs. He died in Chicago. [Walsh 1955/7–8.]

LEADBELLY (20 JAN 1888–6 DEC 1949)

American blues and folk singer, born as Huddie Ledbetter in Mooringsport, Louisiana. He began performing as a teenager, and played a 12-string guitar in Dallas, accompanying Blind Lemon Jefferson. He spent 1918–1925 in prison, and again in 1930–1933. Alan Lomax discovered him there and arranged for his parole. From 1935 to 1940 Leadbelly recorded for the Library of Congress. He was a great success in New York clubs and on college campuses. "Goodnight Irene" (Asch 343–2; 1943), and "Rock Island Line" (available



Live recording of Leadbelly from 1949, issued on LP by the shortlived Playboy label of the mid-'70s. Courtesy Frank Hoffmann

on *Huddie Ledbetter's Best*, Capitol 92075; 1989), were among his hit commercial records. Other important discs include "Honey I'm All Out and Down" (Melotone 3327; 1935), and "Good Morning Blues" (Bluebird 8791; 1940). He died in New York. A motion picture about his life was made in 1975. Folkways issued home recordings by jazz enthusiast Fredric Ramsey Journal as *Leadbelly's Last Sessions*, in 1950 on two two-LP sets; this was reissued on CD by Smithsonian/Folkways in 1997, and displays the diversity of his music. The Smithsonian has also reissued other recordings of Leadbelly made by Folkways owner Moses Asch during from the early to late 1940s on a series of CDs. There are numerous other CD reissues, including *Take This Hammer* (Bluebird 50597), which collects all 26 recordings made in June 1940 for RCA, including some with the Golden Gate Quartet singing with Leadbelly; *King of the 12 String Guitar* (Columbia Legacy 46776); the complete Library of Congress recordings made by Alan Lomax (issued by Rounder on six CDs); and the European Document label, which has been reissuing all of Leadbelly's recordings in chronological order on a series of CDs.

LEADER

A short length of uncoated tape attached to the beginning of an open-reel magnetic tape or cassette tape of facilitate winding the recording tape on the take-up reel.

LEAD-IN GROOVE

The plain unrecorded groove that is found at the edge of an analog-disc record; it has the function of guiding the stylus to the beginning of the recorded part of the groove.

REV. HOWARD FERSTLER

LEAD-OUT GROOVE

The plain groove that follows the recorded groove on an analog-disc record; it has the function of keeping the stylus silently in place on the revolving disc until the machine's operation is either automatically terminated or terminated by the user.

REV. HOWARD FERSTLER

LEANER, ERNEST (1922–1990)

Founder of the United Record Distributorship, Chicago, said to be the first major African-American record distributor in the U.S. Leaner distributed the early records of the Supremes, Smokey Robinson, Stevie

Wonder, and others. He carried the Motown, Stax, Soul, VIP, Sceptor, Wand, and Cotillion labels. He also had recording studios at 1827 S. Michigan Avenue, named One-Derful, and Toddlin' Town. Later he opened a shop, and the Record World chain of stores.

LEBEL, CLARENCE JOSEPH (16 DEC 1905–14 APR 1965)

One of the founders of the Audio Engineering Society, in 1948, LeBel was also the society's first president. He earned a degree from MIT in 1926, and went on to obtain his master's from the same institution in 1927. His first job was as a research physicist at Raytheon, from 1927 until 1929, where he worked on lamps and rectifiers. After Raytheon, he worked at Sylvania from 1929 through 1932, where he worked on lamps and ozone tubes. In 1937, his growing interest in audio systems helped him to found Audio Devices, where he was chief engineer and was active in the development of lacquers used for the machine production of recording discs. During this period, he also worked on the development of high-grade recording tapes. In 1940, he became vice president of the company, a position he held (with a five-year sabbatical hiatus to work for the Maico Company, doing hearing-aid research) until his death. From 1945 through 1946, he also worked as a project engineer at Cambridge Instrument, and went on to found still another company, Audio Instrument, in 1947. LeBel was also a member of the Acoustical Society of America and the Society of Motion Picture Television Engineers. He had a profound impact on the audio technologies of the era and his influence has been honored at MIT with a teaching position called the C.J. LeBel professor of engineering.

HOWARD FERSTLER

LED ZEPPELIN

Led Zeppelin was, far and away, the most popular rock band of the 1970s. The group's immense popularity played a significant role in enabling heavy metal to cross over into the industry mainstream. In addition, guitarist Jimmy Page, who also produced the band's recordings, created a new sonic vocabulary built around virtuoso guitar riffs and special electronic effects.

Zeppelin grew out of the desire by Page, who had established a reputation as one of the top session guitarists in England during the 1960s, to explore his musical ideas within a group setting. In 1966, he jumped at an offer to play bass with the Yardbirds, a popular experimental, blue-rock act best known as the launching pad for the solo careers of guitar heroes like Jeff Beck and the previously departed Eric Clapton.

LEDE (LIVE END/DEAD END)

Page remained in the background until Beck left the Yardbirds in 1967; he then switched to lead guitar and assumed a major voice in the band's musical direction. When the remaining members of the group decided to call it a day, Page put together his own unit, tentatively named the New Yardbirds. His recruits included a teenage lead singer, Robert Plant, bassist John Paul Jones, and drummer John Bonham. They decided to base their name on one of the favorite catchphrases used by the Who's Keith Moon, "going down like a lead zeppelin."

Their eponymous debut, *Led Zeppelin* (Atlantic 8216; 1969; #10 US, #6 UK), was a straightforward blues-rock affair, accented with proto-metal touches derived from the likes of San Francisco's Blue Cheer and fellow countrymen Black Sabbath. Although inherently conservative in approach, the album stood out, driven by Page's thick, power chording, Plant's intensely-keening vocals, and Bonham's pile-driving sense of rhythm. Recorded while on tour, *Led Zeppelin II* (Atlantic 8236; 1969; #1 US, #1 UK), exudes a live feel, especially the hard-rocking "Living Loving Maid (She's Just a Woman)" and "Bring It On Home." If that LP represented, as is sometimes claimed, the birth of British heavy metal, then *Led Zeppelin III* (Atlantic 7201; 1970; #1 US, #1 UK) exhibited a masterful fusion of hard rock with more intimate, acoustic material. The next album (Atlantic 7208; 1971; #2 US, #1 UK), identified only by four runes (one selected by each group member), added ancient mysticism to the band's increasingly folk-oriented leanings. It included "Stairway to Heaven": a study in shifting instrumental textures, the track — the most revered in the Zeppelin oeuvre — opened with aching pseudo-philosophical musings accompanied by soft strumming, and slowly builds to a frenzied climax featuring a wailing electric guitar solo by Page.

With every release now assured of mega-platinum sales, the band entered a more experimental mode, branching out into reggae and funk on *Houses of the Holy* (Atlantic 7255; 1973; #1 US, #1 UK), and following that with an eclectic double-disc set, *Physical Graffiti* (Swan Song 200; 1975; #1 US, #1 UK). However, the balance of Led Zeppelin's efforts — *Presence* (Swan Song 8416; 1976; #1 US, #1 UK), the sprawling live set, *The Song Remains the Same* (Swan Song 89402; 1976; #2 US, #1 UK), *In Through the Out Door* (Swan Song 16002; 1979; #1 US, #1 UK), and the posthumous collection of studio outtakes, *Coda* (Swan Song 90051; 1982; #6 US, #4 UK), were uneven in nature. The group decided to disband in late 1980 following Bonham's death brought on by alcohol abuse. Since then, the remaining members explored various solo and group options, with Page and Plant reuniting in the late half of the 1990s, performing

Zeppelin classics on tour and releasing *No Quarter — Unledded* (Atlantic 82706; 1994; #4 US, #7 UK), comprised of ethnically updated versions of their 1970s materials (plus four new cuts). In the meantime, all of the band's original LPs, as well as various anthologies, have been reissued on compact disc (CD).

FRANK HOFFMANN

LEDE (LIVE END/DEAD END)

Formulated by Don Davis in the 1980s, and relating to recording control rooms or even home playback rooms, it involves acoustically treating the front area of the room with absorbing materials, in order to minimize reflections that would muddy the direct sound coming from the speakers. In contrast, the back of the room remains reflective, often with special surfaces designed to scatter reflections and delay their reception by the ears as long as possible, in order to enhance the sense of space and envelopment.

HOWARD FERSTLER

LEE, BRENDA (11 DEC 1944—)

Known as "Little Miss Dynamite," Brenda Lee — along with the more middle-of-the-road oriented Connie Francis — was the dominant female star during the early rock 'n' roll era. Her powerful, worldly-wise voice, capable of negotiating rave-up rockers as well as tender ballads, seemed incongruous with her youth.

Born Brenda Mae Tarpley in Atlanta, she began singing by age seven on local radio and television programs. When her father died a year later, her income helped support the family. Her big break came when she met Red Foley's manager, Dub Albritten, in 1956. He booked her on Foley's shows, which led to national TV appearances. On 30 July of that year she recorded "Rockin' Around the Christmas Tree" (Decca 30776), with producer Owen Bradley in Nashville; it became her first hit. Tours of both the U.S. and Europe followed; to satisfy French promoters, who thought she was an adult, Albritten started the rumor that she was a 32-year-old midget.

With the release of "Sweet Nothin's" (Decca 30967; 1959; #4), Lee enjoyed a string of hits that ran through the 1960s, including "I'm Sorry"/"That's All You Gotta Do" (Decca 31093; 1960; #s 1/6), "I Want To Be Wanted" (Decca 31149; 1960; #1), "Emotions" (Decca 31195; 1960–1961; #7), "You Can Depend on Me" (Decca 31195; 1961; #6), "Dum Dum" (Decca 31272; 1961; #4), "Fool #1" (Decca 31309; 1961; #3), "Break It to Me Gently" (Decca 31348; 1962; #4), "Everybody Loves Me But You" (Decca 31379; 1962; #6), "All Alone Am I" (Decca 31424; 1962; #3), and "Losing

You" (Decca 31478; 1963; #6). By the time she was 21 she had recorded 256 tracks for Decca. Recognizing that her style ran counter to pop tastes at the time, she shifted her emphasis to the country music business in the early 1970s. In addition to chart success — Top 10 recordings included "Nobody Wins" (MCA 40003; 1973), "Sunday Sunrise" (MCA 40107; 1973), "Wrong Ideas" (MCA 40171; 1974), "Big Four Poster Bed" (MCA 40262; 1974), "Rock On Baby" (MCA 40318; 1974), "He's My Rock" (MCA 40385; 1975), "Tell Me What It's Like" (MCA 41130; 1979), "The Cowgirl and the Dandy" (MCA 41187; 1980), and "Broken Trust" (MCA 41322; 1980) — she did a syndicated interview program based in Nashville and had occasional acting roles (e.g., *Smokey and the Bandit 2*).

With lifetime record sales estimated to have exceeded 100 million, Lee has won many honors including the National Academy of Recording Arts and Sciences governors award. Her autobiography, *Little Miss Dynamite* (Hyperion), was published in early 2002. [Lee 2002.]

FRANK HOFFMANN

LEE, PEGGY (6 MAY 1920–21 JAN 2002)

One of master song stylists of the 20th century, Peggy Lee integrated jazz, swing, pop, Latin, and blues elements into her suave, understated approach with equal facility. She also anticipated the rock era tendency for performers to write their own material. Her compositions have included "I Don't Know Enough about You," "Mariana," and "It's a Good Day."

Born Norma Deloris Egstrom in Jamestown, North Dakota, she began singing professionally at age 14 on a Fargo, North Dakota, radio station. She sang briefly with Will Osborne and, while performing at a Palm Springs hotel, she met Benny Goodman, who signed her to sing with his orchestra. Tours, film clips, and recordings while fronting Goodman's group during 1941–1943 — most notably, "Somebody Else Is Taking My Place" (Okeh 6497; 1941; #1), "Jersey Bounce" (Okeh 6590; 1942; #1), and "Why Don't You Do Right?" (Columbia 36652; #4) — brought her widespread public renown.

Marrying Goodman's guitarist, David Barbour, Lee took several years off to have a child. During this time, she began actively writing songs (primarily lyrics) with her husband. Returning to performing as a solo act, she enjoyed considerable recording success over the years, including the hits "Waitin' for the Train to Come In" (Capitol 218; 1945; #4), "Golden Earrings" (Capitol 15009; 1947; #2), "Manana" (Capitol 15022; 1948; #1 for nine weeks), "Riders In the Sky" (Capitol 608; 1949; #2), "Lover" (Decca 28215; 1952; #3),

and, during the rock era, "Fever" (Capitol 3998; 1958; #8), and "Is That All There Is" (Capitol 2602; 1969; #11). She also began working actively in films, both as an actress — she starred in *Mr. Music* (1951), *The Jazz Singer* (1953), and *Pete Kelly's Blues* (1955, for which she was nominated for an Academy Award) in the 1950s — and singer/songwriter (e.g., Disney's *Lady and the Tramp*, *Johnny Guitar*).

Lee lightened her workload in the 1970s due to periodic physical ailments. Nevertheless, she mounted a one-woman Broadway show, *Peg*, in 1983. Her autobiography, *Miss Peggy Lee* (1989), received positive reviews and sold well. She has received many honors in recent decades, including the Society of Singers' lifetime achievement award, and selection as a founding artist of the John F. Kennedy Center for the Performing Arts. She died of a stroke at her Hollywood, California, home in early 2002. [George-Warren and Romanowski 2002.]

FRANK HOFFMANN

LEEDS (LABEL)

A record issued sometime between 1904 and 1906 by the Talk-o-phone Co., of Toledo, Ohio. It was single-sided, offering a routine repertoire of popular songs and instrumental solos.

LEEDS AND CATLIN

A New York record manufacturer, with a plant in Middletown, Connecticut. The firm pioneered in making cylinder records for home entertainment, then turned to discs. Imperial was its own label; the Concert Records label was produced from its masters. The firm also supplied pressings for the Imperial, Nassau, Leeds, Sun, Talk-o-Phone, and other labels. After lengthy litigation for patent violations, Leeds and Catlin was finally forced into bankruptcy in the summer of 1909. Edward F. Leeds was president until his death in August 1908. After 1909, matrices of the firm continued to appear in Britain, appearing on the Britannic, Burlington, Pelican, The Leader, and probably other labels.

FRANK ANDREWS

LEEK, BRUCE

Freelance recording engineer and occasional consultant for Telarc Records. Leek holds degrees from Los Angeles State and Long Beach State Universities. He has recorded the Philadelphia Orchestra, the Los Angeles Chamber Orchestra, the Luxembourg Symphony, the Utah Symphony Orchestra, the

LEGACY (LABEL)

Mormon Tabernacle Choir, and the United States Air Force Band, as well as ensembles from the University of Cincinnati, the University of North Texas, and Indiana University of Pennsylvania. He has mastered albums for the Rolling Stones, the Beatles, Jefferson Airplane, the Beach Boys, Crosby, Stills, Nash, and Young, Judy Collins, Fleetwood Mac, and the Fifth Dimension.

HOWARD FERSTLER

LEGACY (LABEL)

Label begun by Sony Music in 1990 to reissue material from the back catalogs controlled by Columbia Records in blues, jazz, folk, and popular music. The label has issued several series, including its Roots 'n' Blues, Gospel Spirit, and Columbia Broadway Masterworks, as well as repackagings of classic individual albums from the rock era (often with additional "bonus" tracks) and massive boxed sets. Important parts of the Columbia catalog — such as Louis Armstrong's complete early recordings — have been remastered for this series. The label has also issued sets to accompany documentary films and series, such as Ken Burns's 10-part history of Jazz broadcast over PBS in 2000. [Website: www.legacyrecordings.com.]

CARL BENSON

LEGGE, WALTER

(1 JUNE 1906–22 MAR 1979)

Record industry executive, with the Gramophone Co. and later with EMI from 1927 to 1964. He began as a writer of HMV liner notes, and became one of the great record producers. One of his innovations, in 1931, was the concept of society records — material of specialized interest sold by subscription. From 1945 until his retirement in 1964 he supervised recordings for EMI. He was married to the soprano Elisabeth Schwarzkopf, who collected some of his writings and various articles about him into a book, *On and Off the Record: A Memoir of Walter Legge* (New York: Scribner, 1982). [Sanders 1984.]

LEHMANN, LILLI

(24 NOV 1848–16 MAY 1929)

German soprano, born in Würzburg. She studied in Prague as a child and made her debut there in October 1865; she then sang elsewhere and at the Berlin Opera from 1870. In Bayreuth she was coached by Richard Wagner, and created the roles of Wöglinde, Helmwige, and the Forest Bird. Her Metropolitan Opera debut

was as Carmen, on 25 Nov 1885; she sang with the Metropolitan until 1890, doing the Wagner repertoire and Italian roles with Jean and Edouard De Reszke. Lehmann performed 170 different roles, and also gained distinction as a Lieder singer. She died in Berlin.

In 1905 and 1907 Lehmann recorded in Berlin for Odeon, beginning with the traditional love song "Long Long Ago" (50071). She made discs of Verdi, Wagner, Mozart, and a particularly effective "Casta diva" (52698). Other notable records, frequently reissued, included "Ohättich Jubals Harf" from Handel's *Joshua*, and "O glückliche Land" from *Hugenotten* (*Huguenots*). A two-CD set on Symposium collects some of her classic recordings (1207/08). She authored the book *How to Sing*, first published in German in 1902; the third, revised edition, which appeared in English in 1924, was reprinted by Dover Publications in 1993. Lehmann also wrote her autobiography, *Mein Weg/My Path Through Life* (1913 in Germany, 1914 in English). [Dennis 1981/2.]

LEHMANN, LOTTE

(27 FEB 1888–26 AUG 1976)

German/American soprano, born in Perleberg. She studied in Berlin, made her debut in Hamburg in 1910, and was quickly recognized as a Wagner interpreter. She made her first recording in 1914, and would eventually release more than 500 discs. In 1916 she was engaged by the Vienna Opera, where she gained fame for her Marschallin. Her U.S. debut was in 1930 in Chicago, as Sieglinde, a role she took to her Metropolitan Opera debut on 11 Jan 1934. American audiences also appreciated greatly her fine Lieder recitals. In 1945 she became a U.S. citizen, and gave her last recital in 1951. Lehmann settled in California, and died in Santa Barbara. The library of the University of California, Santa Barbara, performing arts collection houses Lehmann's archives (Website: <http://www.library.ucsb.edu/speccoll/pa/pamss02.html>). The Lotte Lehmann Foundation was founded in 1988 to promote the study of classic art song, and holds an annual singing competition.

Lehmann's earliest recordings were on two vertical-cut sides for Pathé in 1914. She made a few Polydor and Odeon discs in 1927–1936, most notably the *Tosca* duet "Mario! Mario! Perchè chiuso?" sung with Jan Kiepura (Odeon 0–8743), one of the very few records she sang in Italian. *Song Recital* (RCA 87809; 1990), offers Lieder from 1936 to 1950. Selected performances of arias and songs from her many operatic roles are available on Nimbus (7873). [Jefferson 1988.]

LEHRER, TOM (5 APR 1928–)

Tom Lehrer is revered as one of the finest sociopolitical satirists in the recorded sound medium. Because this activity remained secondary to his academic career, however, his legacy is based upon only three long-playing albums.

Born in New York City, Lehrer earned a bachelor's and master's degree in mathematics from Harvard University, and continued on there until mid-1953 as a teaching fellow. His first LP, *Songs by Tom Lehrer*, issued on his own label in 1953 (reissued as Reprise 6216), collected those songs he had composed and performed during the Cambridge years. Topics receiving satirical treatment included regional pride ("I Wanna Go Back to Dixie"), the cowboy mystique ("The Wild West Is Where I Want To Be"), college football songs ("Fight Fiercely, Harvard"), hunting ("The Hunting Song," love songs ("I Hold Your Hand In Mine"), and the Boy Scouts of America ("Be Prepared"). Musically speaking, the arrangements consisted of Lehrer's relaxed, informal singing to his piano accompaniment.

Following army service based in the Washington, D.C. area in the mid-1950s, Lehrer embarked on a full-time performing career. He released a March 1959 live recording, *An Evening Wasted with Tom Lehrer* (Reprise 6199; 1966; #133). One cut, the acidic "Poisoning Pigeons in the Park," released as a single sweetened with strings, failed to garner either substantial radio play or sales. He returned to graduate work in 1960, teaching courses at Harvard and MIT through much of the decade. He also found time to perform regularly on the weekly NBC-TV program, *That Was The Week That Was*. Many of the songs first heard on *TW3* were included on *That Was The Year That Was* (Reprise 6179; 1965; #18), recorded live at the Hungry i, San Francisco, in July 1965. This remains his best known set, although many of the songs require some knowledge of history (e.g., "Whatever Became of Hubert," "New Math," "Wernher Von Braun"), for the biting humor to be appreciated today. Others — "National Brotherhood Week," "Smut," and "Pollution" — remain timely to the present day. Furthermore, his approach has influenced many later comedians, most notably Ken Russell, Steve Martin, and the Credibility Gap.

FRANK HOFFMANN

LEIBER AND STOLLER (JEROME LEIBER 25 APR 1933–; MICHAEL STOLLER, 13 MAR 1933–)

Jerry Leiber and Mike Stoller will be forever linked as pioneers of early rock 'n' roll. They met in New York City and, while still in their teens, wrote the

classic songs "K.C. Loving" — a number one hit for Wilbert Harrison (Fury 1023; 1959) — and "Hound Dog," first a chart-topping hit for "Big Mama" Thornton (Peacock 1612; 1953), and later one of the biggest hits of the rock era for Elvis Presley (RCA 47-6604; 1956). They would become one of Presley's key sources for recording material, including the hits "Loving You" (RCA 47-7000; 1957) and "Jailhouse Rock" (RCA 47-7035; 1957). Their success owed much to the ability to blend Black gospel and R&B musical elements with urbane, street-smart song lyrics.

Signing an independent production pact with Atlantic Records, Leiber and Stoller were responsible for string of chart successes by the doo-wop comedy group, the Coasters, most notably, "Young Blood" (Atco 6087; 1957), "Yakety Yak" (Atco 6116; 1958), "Charlie Brown" (Atco 6132; 1959), and "Poison Ivy" (Atco 6146; 1959). In addition to launching their own label, Red Bird, and various music publishing interests, the duo would also produce many other artists (e.g., the Dixie Cups, the Drifters, Peggy Lee, Procol Harum), cutting across a wide range of musical styles.

FRANK HOFFMANN

LEIDER, FRIDA**(18 APR 1888–4 JUNE 1975)**

German soprano, born in Berlin. She studied in Berlin, and made a debut in Halle in 1915 as Venus. From 1923 to 1940 she was with the Berlin State Opera, and sang also in other major European houses. Her American debut was in Chicago as Brünnhilde in *Walküre*. At the Metropolitan Opera, 16 Jan 1933, she was heard as Isolde, a role that became associated with her. In 1934 she returned to Germany, and remained there despite problems with the Nazis. Her autobiography, *Das war mein Teil* was published in 1959 (released in English in 1966 as *Playing My Part*). She died in Berlin.

Leider's recordings for Polydor in Berlin (1923–1926) included many notable items, such as the "Du bist der Lenz" duet with Lauritz Melchior (72934). Her finest work was for HMV in 1927–1931, records made in London and Berlin. *Tristan* excerpts, including the love duet with Melchior (D1723–24; 1929), "Ich sah das Kind" from *Parsifal* (DB1545; 1932), and "Or sai chi l'onore" from *Don Giovanni* with "Ah! si la liberté" from *Armide* (D1547; 1929). A collection of her recordings made for Polydor between 1927–31 are reissued on Preiser CD 89004; later 1930s-era recordings are available on 467911–2, as part of Decca's "The Singers" reissue series. [Burros 1946.]

LEINSDORF, ERICH

LEINSDORF, ERICH
(4 FEB 1912–11 SEP 1993)

Austrian/American conductor, born Erich Landauer in Vienna. He studied piano and cello, then made a conducting debut in Vienna in 1933. He secured the post of assistant to Bruno Walter and Arturo Toscanini at the Salzburg Festivals, and in 1937 was conducting at the Metropolitan Opera. He settled in the U.S., and became a citizen in 1942. Military service in 1943–1944 interrupted his new appointment to the directorship of the Cleveland Orchestra in 1943; he resumed work in Cleveland in 1945. He directed the Rochester Philharmonic Orchestra from 1947 to 1955, then the Boston Symphony Orchestra from 1962 to 1969. He published his autobiography in 1976, *Cadenza — A Musical Career*. In 1977–1980 he was principal conductor of the (West) Berlin Radio Symphony Orchestra. He died in Zurich.

Leinsdorf recorded extensively, having done all the major symphonies and about 20 complete operas. He performed with the major world orchestras, and on many labels. He won eight Grammys, five for operatic recordings (awarded in 1959 for *Nozze di Figaro*, in 1960 for *Turandot*, in 1963 for *Madama Butterfly*, in 1968 for *Così fan tutte*, and in 1971 for *Aida*), and three for orchestral records (in 1963 for the Bartók *Concerto for Orchestra*, in 1964 for the Mahler Fifth Symphony, and in 1966 for the Mahler Sixth Symphony).

LE MAIRE, PETE

American yodeler, whose name is also seen as Le Mar, La Mar, and Le Maur. He recorded for the United States Phonograph Co. of New Jersey and the Chicago Talking Machine Co. in the mid-1890s, and later made three titles for Columbia (in their 1897–1898 catalog). He was heard on U.S. and U.K. Zonophone also, and on Victor from 1901 to 1905. [Brooks 1979.]

LEMNITZ, TIANA
(26 OCT 1897–5 FEB 1994)

German soprano, born in Metz. She sang with small companies until 1929, when she joined the Hanover Opera and remained to 1934. Then she was engaged by the Berlin State Opera, 1934–1957; she retired in 1957. She died in Berlin. Lemnitz sang across the repertoires, including Russian operas in Russian. She was heard in London and Buenos Aires. Her first records were for Polydor in 1934, beginning with “Wie nahe... leise, leise” from *Freischütz* (#15081) — one of her famous roles — and including two *Lohengrin* arias (#35081). From *Otello*, another of her fine showpieces, she sang four numbers for Electrola (HMV) in Germany (who

recorded her in 1937–1948). Although sung in German, these recordings represent her voice at its delicate best: the love duet (with Torsten Ralf), and the “Ave Maria.” A CD from Harmonia Mundi (89025) includes the *Otello* numbers, plus a splendid “Dich, teure Halle” from *Tannhäuser* and other material made for HMV in 1938–1939; Preiser reissued recordings made during the war years on CD 89025. [Seeliger 1963.]

LENNON, JOHN (9 OCT 1940–8 DEC 1980)

Although best remembered for his recorded work with the British Invasion group, the Beatles, Lennon enjoyed a productive — if uneven — solo career. His studio output — while ranging widely from avant-garde experiments, to edgy political protest, to more standard pop fare — was always characterized by an uncompromising integrity and idiosyncratic richness of expression that sometimes achieved a poetic beauty unparalleled among commercial music songsmiths.

Lennon's decision to pursue a career path apart from the Beatles appears to have been at least in part the result of his personal relationship with pop artist

POWER TO THE PEOPLE
JOHN LENNON / PLASTIC ONO BAND



John Lennon/Plastic Ono Band's “Power to the People” sheet music cover from the early '70s. Courtesy David A. Jasen

Yoko Ono. While still with the band, he teamed with Ono to produce two free-form musical collages, *Unfinished Music No. 1: Two Virgins* (Apple 5001; 1968), packaged in a brown paper wrapping to avoid legal problems over the full-frontal nude picture of the couple that graced the cover, and *Unfinished Music No. 2: Life with the Lions* (Zapple 3357; 1969). *Life with the Lions* epitomized the problems associated with allowing full rein to self-indulgent whims, including such non-songs as “Baby’s Heartbeat,” a home recording depicting the death of the couple’s unborn child, and “Two Minutes Silence.”

Following a series of highly publicized peace activities in 1969, he released two more LPs, *Wedding Album* (Apple 3361; 1969), another collaboration with Ono featuring autobiographical snippets punctuated by amateurish electronic noodling, and the pop-oriented *The Plastic Ono Band – Live Peace In Toronto 1969* (Apple 3362; 1969; #10). The latter record — which included guitarist Eric Clapton, bassist Klaus Voorman, and drummer Alan White — featured two charting singles, the flower-power anthem “Give Peace a Chance” (Apple 1809; 1969; #14 US, #2 UK), and the drug withdrawal dirge, “Cold Turkey” (Apple 1813; 1969; #30 US, #14 UK).

On the heels of the Beatles’s official breakup, Lennon recorded his widely regarded masterpiece, the Phil Spector-produced *John Lennon: Plastic Ono Band* (Apple 3372; 1970; #6 US, #11 UK). Allegedly a product of his primal scream therapy, songs such as “Mother,” “Working Class Hero,” and “God” reflected a lifetime of resentment and barely suppressed rage. He returned to a more commercial groove with *Imagine* (Apple 3379; 1971; #1 US, #1 UK); the idealistic title track (Apple 1840; 1971; #3) remains one of the most revered compositions of the rock era. Perhaps reflecting his legal fight with U.S. immigration authorities, later releases — the double-disk live set featuring support by Elephant’s Memory, *Sometime in New York City* (Apple 3392; 1972; #48 US, #11 UK), the densely-layered *Mind Games* (Apple 3414; 1973; #9 US, #13 UK), an intensely-interpreted collection of stylistically-diversified covers with Nilsson, *Pussy Cats* (RCA 0570; 1974; #60), and *Walls and Bridges* (Apple 3416; 1974; #1 US, #6 UK), which included the number one single, “Whatever Gets You Thru the Night” (Apple 1874; 1974), featuring Elton John — contained some memorable songs amid much material of a more pedestrian nature. Although the cover LP, *Rock ‘N’ Roll* (Apple 3419; 1975; #6 US, #6 UK), was marketed as a loving tribute to the classic 1950s hits by the likes of Little Richard, Gene Vincent, Chuck Berry, and Buddy Holly, more than one observer speculated that Lennon’s muse had deserted him.

Following a period focusing on child-rearing responsibilities, Lennon produced another collaboration with Ono, *Double Fantasy* (Geffen 2001; 1980; #1 US, #1 UK). Although the album’s split format (with Lennon and Ono each fronting on seven tracks) diluted critical response, the tuneful, richly-textured singles — “(Just Like) Starting Over” (Geffen 49604; 1980; #1 US, #1 UK), “Woman” (Geffen 49644; 1981; #2 US, #1 UK), and “Watching the Wheels” (Geffen 49695; 1981; #10 US, #30 UK) — ranked with Lennon’s finest work. This new creative phase was cut short by Lennon’s assassination outside his New York City condominium complex. However, previously unreleased material has continued to surface as Lennon’s legacy has achieved increasing stature over the intervening years. Notable posthumous releases have included *Milk and Honey* (Polydor 817160–2; 1983; #11 US, #3 UK); a *Playboy* interview, *A Heart Play: Unfinished Dialogue* (Polydor 817238–1; 1984); 1972 concert material, *Live in New York City* (Polydor 12451; 1986; #41 US, #55 UK); a compilation of 1974–1975 studio sessions, *Menlove Ave.* (Polydor 12533; 1986); and the four-CD collection of alternative takes, live rarities, and home recordings, *John Lennon Anthology* (Polydor 8 30614–2; 1998; #99 US, #62 UK).

FRANK HOFFMANN

LENOX (LABEL)

A rare American record issued briefly in the 1920s, perhaps affiliated with the Plaza Music Co. group of labels. Dance music and popular vocals were featured. [Rust 1978.]

LENYA, LOTTE

(18 OCT 1898–27 NOV 1981)

Lotte Lenya, a singing actress, was born Karoline Wilhelmine Charlotte Blamauer, in Vienna, Austria. Her stage experience began in 1914 at the Pfauen Theater and later the Stadttheater where she appeared in mute roles in Suppe’s *Fatinitza* and Richard Strauss’s *Der Rosenkavalier* under the direction of the composer himself. During World War I she lived in neutral Switzerland, then returned to Berlin where she settled in 1921. Her first performance in a Kurt Weill work was as Bessie in the *Mahagonny Songspiel* (1927), the 35 minute scenic cantata which was a prelude for a full-length opera, and she created the role of Jenny Smith in *Die Dreigroschenoper* (1928), then recreated the role in G.W. Pabst’s 1930 film version. Her next Weill production was in the 1930 Berlin premiere of *Aufstieg und Fall der Stadt Mahagonny*.

LEVAPHONE (LABEL)

Weill and Lenya married in 1925; they divorced in 1933 then remarried three years later. Throughout the marriage, but especially after Weill's death in 1950, Lenya was the chief interpreter of his work and keeper of his musical heritage. She married three more times but continued to popularize Weill's work, starting in Marc Blitzstein's English-language adaptation of *The Three Penny Opera* (1953), recording and performing this work; her performance garnered her a Tony award. Other successes were in the New York City Ballet's *The Seven Deadly Sins* (1958), and her memorable turn as Fraulein Schneider in *Cabaret* on Broadway (1966), which won her a Tony nomination as best supporting actress and a new popularity with a younger audience when the show's original cast recording was released. There were also radio and television appearances, documentaries, and talk shows to supplement the stage roles.

Her appearances in films, beginning with the G.W. Pabst 1931 German-language *Die Dreigroschenoper*, included an Academy Award nomination for best supporting actress for *The Roman Spring of Mrs. Stone* (1961), James Bond's nemesis Rosa Klebb in *From Russia with Love* (1963), *The Appointment* (1968), and *Semi-Tough* (1977).

In 1969, the West German government awarded Lenya its "grosse Verdienstkreuz," complementing the Freedom Bell awarded her in West Berlin in 1958 and in November 1979, she was elected to the Theater Hall of Fame, the same month the Metropolitan Opera mounted its first production of *Aufstieg und Fall der Stadt Mahagonny*.

Lotte Lenya recorded many of her stage roles, both in English and in German versions. Although she first recorded in 1929 in her native Germany, Lenya became more famous as a recording artist during the mid-1950s, when she made her triumphant Broadway appearance in *The Three Penny Opera*. Many of these later recordings have been reissued on CD, including: *Berlin and American Theatre Songs* (Sony, 1955–1958) with Lotte Lenya and various artists; *Lotte Lenya Sings Kurt Weill* (1997), a digitally mastered CD reissue of Sony discs originally released in 1955 and 1957; *The Stories of Kafka* (1958); and *Invitation to German Poetry* (1958); *Happy End* (1964); *Johnny Johnson* (1987); and *From Berlin to Broadway* (1995). In a change of pace, Lenya recorded "Mack the Knife" with Louis Armstrong. The major compilation, encompassing most of the recorded works, is the *Lenya Centennial Recording Collection* (Bear Family 16019), 11 CDs of Lenya's complete commercial recordings, previously unreleased material, and selections from radio and television programs.

Lenya's papers and sound recordings (CDs, records, videos, films) are housed in the Weill/Lenya Archives of the Yale University Music Library and the Weill-Lenya

Research Center, New York, New York. *A Guide to the Weill-Lenya Research Center* (1995) includes, as Appendix B, "Lotte Lenya: A Chronological List of Live Performances, Recordings, Films, Radio, Plays, Television Appearances, and Awards." Most of the Lenya films are available on video and DVD. The Hessischer Rundfunk in Frankfurt produced a television documentary by Barrie Gavin and Kim H. Kowalke, *Lenya: An Invention* (1994).

MARTIN MANNING

LEVAPHONE (LABEL)

A British record issued in 1926 by Levy's, in London. It appeared in a pale lilac color, and also — for three items made from U.S. Vocalion matrices — a black label. Cliff Edwards was one of its better known artists. [Rust 1978.]

LEVEL

The intensity of output from an audio system, referring either to the signal or to noise; it is technically measured in decibels (dB) against a standard reference level (zero level) that is equivalent to a power of one milliwatt in a resistance of 600 ohms.

LEVINE, JAMES [LAWRENCE] (23 JUNE 1943–)

American conductor and pianist, born in Cincinnati, Ohio. At age 10 he performed a concerto with the Cincinnati Symphony Orchestra, then studied piano with Rudolf Serkin. He graduated from the Juilliard School of Music in 1964, and served as assistant conductor of the Cleveland Orchestra in 1965–1970. Then he went to the Metropolitan Opera, as principal conductor in 1973–1974, as music director from 1976, and artistic director from 1986. Levine has also conducted in Salzburg and Bayreuth, and is director of the Ravinia Festival, summer home of the Chicago Symphony Orchestra. In 2002, he was honored at the 25th annual Kennedy Center Honors by President George Bush. Levine is to begin a new appointment as director of the Boston Symphony Orchestra in 2004.

Levine's early recordings were primarily orchestral — with the Chicago, Philadelphia, and Vienna orchestras — rather than operatic. Among his finest discs are the Beethoven piano concertos, with Alfred Brendel soloist and the Chicago Symphony (Philips 412 787/788 and 411 189; 1983–1985). Levine received a Grammy in 1983 for his conducting of the Chicago Symphony in the Mahler Seventh Symphony, and another for his *Carmina Burana* with the Chicago

Symphony in 1986; he has won eight Grammy awards in total to date.

In the 1980s his important series of complete operas with the Metropolitan Opera began to appear on CD. (They are noted in the Metropolitan Opera entry.) The recording of *Walküre* won a Grammy in 1990.

LEVY, JULES (28 APR 1838–28 NOV 1903)

British cornetist, born in London. He was the "most celebrated concert cornetist in history, playing for huge crowds and fantastic sums of money" (Brooks). He transferred to the U.S. in 1866. Levy is said to have made the first musical recording, when he performed "Yankee Doodle" at a public demonstration of the phonograph in New York, sometime in 1878. In the 1890s Levy made cylinder records for several companies: New England Phonograph Co. (1893), New York Phonograph Co. (ca. 1893), and Columbia (1895; he remained in the Columbia catalog to 1912). "Blue Bells of Scotland" and "My Country 'Tis of Thee" were among his Columbias, described as "played in four octaves"; he made 11 more, but none have survived. He made discs for Victor and Columbia from 1903. In the Victor catalog of 1917 he is listed with "Merry Birds—Solo with Variations" (#31176; 1904), the only Levy item in that catalog, retained "as a memorial of this great cornetist who died in 1905 [*sic*] although it is not up to our current standard of recording." Victor kept the memorial disc in print through 1919. Levy did two of the 14-inch records introduced by Victor in 1903. He died in Chicago [Brooks 1979.]

LEVY, MORRIS

(27 AUG 1927–21 MAY 1990)

Notorious record label owner of the 1950s and 1960s, Levy was born poor in the Bronx. He quit school when he was 13 years old, and worked in various small jobs in nightclubs in New York and Florida before joining the navy. After World War II, he managed the New York jazz club Topsy's Chicken Roost and its related Cock Lounge, and then opened the soon-to-be-famous Birdland on 52nd Street, which became the home for the bebop movement. Levy formed Patricia Music in the mid-1950s to begin accumulating copyrights, and in 1957 partnered with producer George Goldner and Joe Klosty to form Roulette Records. Levy soon absorbed many of Goldner's other small labels, and Roulette grew to be a major player in rock and jazz. He also partnered with deejay Alan Freed in his famous rock 'n' roll shows held at Brooklyn's Paramount Theater. Through the 1960s, Levy continued to sign new acts, but by the mid-1970s turned his attention to reissues, forming the Adam VIII label for TV marketing. In an

audacious move, he issued an early version of John Lennon's *Rock and Roll* album through this company, under the name *Roots*, claiming the rights to the material because Lennon had agreed to record three Levy copyrights on the record in exchange for Levy dropping his plagiarism charges against Lennon over "Come Together" (which took its opening line from a Chuck Berry song that Levy owned).

Long rumored to have Mafia ties, Levy was finally convicted on extortion charges in May 1988, but this was long after the heyday of his power in the music industry. Also in 1988, he sold Roulette and his publishing holdings to Rhino and EMI for \$55 million. While out on appeal, he died of cancer in Ghent, New York.

CARL BENSON

LEVY'S

A jazz record shop, the first of its kind in Britain, located in London. Advertisements announced that the establishment date was 1890. From ca. 1927, Levy's issued American import material from Vocalion and other U.S. labels. The firm also had its own labels for a time, the Levaphone (1926), and the Oriole (1927; 1931–1935).

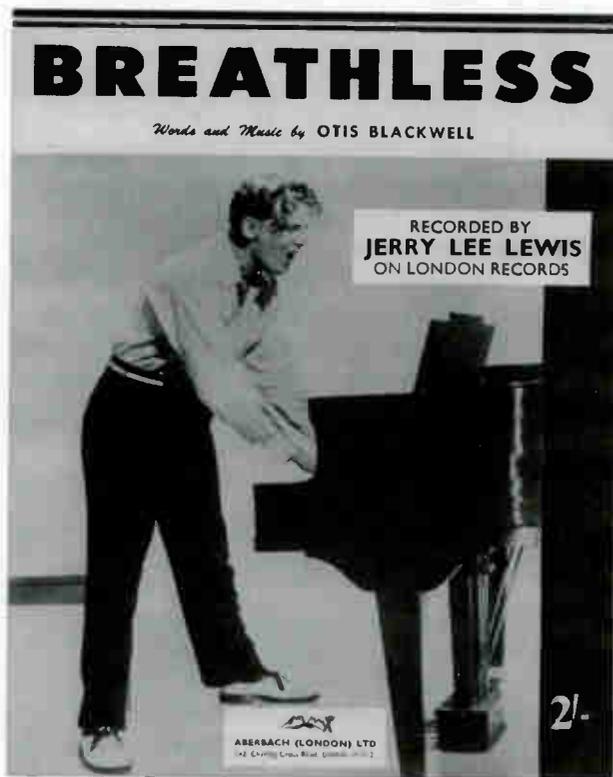
LEWIS, EDWARD ROBERT, SIR (1900–1980)

British recording industry executive. He attended Rugby and Trinity College, Cambridge. In 1929 he founded the Decca Record Co., Ltd., in London, acquiring the Decca Gramophone Co., Ltd. (formerly Barnett Samuel and Sons). Entering the market in difficult times, Lewis acquired rights to American labels, made other foreign deals, and undersold his competitors. In 1934 Lewis organized the American counterpart firm, Decca Record Co., and brought Jack Kapp from Brunswick to manage it. The subsequent history of the two Decca firms is told in the articles under their names. Lewis was knighted in 1960.

LEWIS, JERRY LEE (29 SEP 1935–)

Jerry Lee Lewis was one of the great originals of 1950s rock 'n' roll, a dynamic showman possessing a lascivious vocal style underscored by revved-up boogie-woogie piano that fairly leapt from the monaural grooves of his classic Sun records. The absence of a steady source of high-quality song material, combined with personal problems, severely curtailed his ability to sustain any kind of career momentum.

Born in Ferriday, Louisiana, Lewis grew up amid a melting pot of music styles (his cousins included gospel singer Jimmy Swaggert and country-pop star



Jerry Lee Lewis's "Breathless" sheet music cover. British edition, late '50s. Courtesy David A. Jasen

Mickey Gilley). Matriculating to Memphis, he soon signed a recording contract with the legendary Sun label. Alternating between honky-tonk, rockabilly, rhythm and blues, and old folk standards in early recording sessions, Lewis struck pay dirt with talking blues-derived "Whole Lotta Shakin' Goin' On" (Sun 267; 1957; #3), augmented by his superb improvisational gifts both as a singer and pianist, as well as producer Sam Phillips's trademark echo. He stuck closely to this formula with the follow-up singles, "Great Balls of Fire" (Sun 281; 1957; #2), and "Breathless" (Sun 288; 1958; #7). By this time, Lewis was embroiled in controversies involving alleged bigamy and marriage to his 13-year-old cousin, Myra Gale Brown.

Arguably one of the most stubbornly egotistical and driven artists in popular music history, he soldiered on despite being virtually banned from important promotional outlets such as radio, television, and major performing venues. Signing with Smash (distributed first by Phillips, and then by Mercury) in 1963, Lewis released material focusing on his high-voltage live act and the growing nostalgia for early rock 'n' roll — e.g., *The Greatest Live Show on Earth* (Smash 67650; 1964; #71), and *The Return of Rock* (Smash 67063; 1965) — before cultivating a country audience. However, despite a successful run of C&W singles — most notably,

"What's Made Milwaukee Famous (Has Made a Loser Out of Me)" (Smash 2164; 1968; #2 C&W, #94 pop), "To Make Love Sweeter for You" (Smash 2202; 1968; #1), "There Must Be More to Love than This" (Mercury 73099; 1970; #1 C&W), "Would You Take Another Chance on Me" (Mercury 73248; 1971; #1 C&W, #40 pop), "Chantilly Lace" (Mercury 73273; 1972; #1 C&W, #43 pop), and "Middle Age Crazy" (Mercury 55011; 1977; #4 C&W) — he kept on releasing albums aimed at a broader rock demographic. Moving on to Elektra in the late 1970s, and later MCA, Sire, and Warner Brothers, Lewis — still dogged by controversy and exhibiting more attitude than most rappers — has continued producing new material in the face of significantly greater demand for his vintage Sun and Smash recordings. He was inducted into the Rock and Roll Hall of Fame in 1986, and was the subject of the 1989 biopic, *Great Balls of Fire*, starring Dennis Quaid.

FRANK HOFFMANN

LEWIS, RAMSEY (27 MAY 1935–)

Ramsey Emmanuel Lewis, Jr., composer, pianist, and electric keyboards synthesizer, has a performance style and musical selections that display his early gospel playing and classical training along with his love of jazz and other musical forms. Born in Chicago, Ramsey Lewis first captivated fans with his first album, *Ramsey Lewis and the Gentlemen of Swing* (Argo LP-627; 1958), by the Ramsey Lewis Trio.

Lewis, who studied at Chicago Music College and De Paul University, straddled the boundary between bop-oriented jazz and pop music. Most of his recordings, particularly by the mid-1960s, attracted a large non-jazz audience. In 1950, he began working in a quartet led by saxophonist Wallace Burton, with Eldee Young (bass) and Red Holt (drums). In 1955, it became a successful trio, with Young and Holt, after Burton joined the U.S. Army. From the start, their records for Argo/Cadet (later Chess Records) were popular with jazz fans.

By 1965, Lewis was one of the nation's most successful jazz pianists, topping the charts with "The In Crowd" (Argo 5506), from a live performance at the Bohemian Caverns, Washington, D.C., 13–15 May 1965 (Grammy: jazz, best instrumental performance, group), which became a signature piece; both the single and the following album earned gold discs for selling more than a million copies. Lewis enjoyed further hits with "Hang On Sloopy" (1965; Cadet 5522) and "Wade in the Water" (1966; Cadet 5541). On these, Ramsey made the pianist into a major attraction and his records became much more predictable and pop-oriented. In 1966, his trio's personnel changed with

bassist Cleveland Eaton (from 1966), and drummer Maurice White (1966–1969; later a founder of Earth, Wind, and Fire), who was replaced by Morris Jennings (from 1970), joining Lewis.

In the 1970s, Lewis began to play electronic keyboards with larger ensembles and he experimented with soul music and funk, but performed again on acoustic piano after 1978. He signed with Columbia in 1973, who marketed him as a jazz-funk-fusion artist through most of the decade. In 1981, *The Best of Ramsey Lewis* (Columbia, FC 36364; 1981), was released, summarizing his Columbia years to that date. An interesting match came about a few years later with *The Two of Us*, when Lewis paired with his sometime touring partner, vocalist Nancy Wilson (Columbia, FC 39326, 1984). In the early 1990s, he left Columbia to join jazz label GRP.

Along with three Grammys, Lewis has seven gold records to his credit and he has been honored with three honorary doctorate degrees, the Recording Academy governor's award (2000) and the prestigious Lincoln Academy of Illinois "laureate" award in Springfield, Illinois, in April 1997. As of the early 21st century, Lewis hosts WNUA-FM Chicago's weekday morning drive-time radio show, and the syndicated *Legends of Jazz with Ramsey Lewis*, a two-hour radio program that airs in more than 65 cities throughout the U.S. Active in community affairs, especially on behalf of youth, he helped organize the Ravinia Festival's jazz mentor program and also serves as the artistic director for that festival's jazz series.

MARTIN J. MANNING

LEWIS, TERRY

SEE JAM, JIMMY AND TERRY LEWIS

LEXICON CORPORATION

One of the most important and influential producers of recording hardware and super-grade consumer-audio processors in the world. Lexicon was the initial brainchild of MIT professor Dr. Francis Lee, who had developed a digital delay unit for heartbeat monitoring. With engineer Chuck Bagnashi, he went on to found American Data Sciences in 1969, with offices over the Lexington Savings Bank in Lexington, Massachusetts. The company changed its name to Lexicon in 1971, when it appeared that there would be a future in digital technology for language instruction. Barry Blesser, then a teaching assistant to Dr. Lee at MIT, and later another luminary at Lexicon, suggested putting audio through the system. The result was a 100 millisecond audio delay line – not so impressive today, but at the time it was more than state of the art.

The new technology interested the late Steve Temmer at Gotham Audio in New York, who commissioned 50 units from the Lexicon team, to be used to overcome propagation delays in live sound installations and as a pre-delay for echo-plates. Thus, in 1971 the Delta T-101 (the world's first commercially-available professional digital audio product) was born, followed by the T-102, which offered even better performance. The two components helped convince many in the industry that digital audio was the way to go.

The year 1972 saw the introduction of a Lexicon product for the language instruction market — the Varispeech, the first digital time-compression system. Its successor, the broadcast-quality Model 1200, went on to win an Emmy in 1984. Ron Noonan joined the company in 1973 as CEO (a position he held until 1996), and realized that Lexicon needed to also target the professional audio market. The breakthrough was the development of the 224, one of the first commercially viable digital reverb systems, which was shown at the AES convention in 1978 and shipped the following year. Designed by David Griesinger, a Ph.D. physicist from Harvard who is still with the company, the 224 remained an industry standard until the introduction, in 1986, of its successor, the 480L, which was itself superseded by the 960L, with its 24-bit/96 kHz capability and true multichannel surround reverb processing.

Lexicon went public in the U.K. (which had always been a strong market for the company) in 1985, and raised the funds needed for the development of the groundbreaking Opus digital audio workstation, which was released in 1988. In the same year, the company introduced the first all-digital surround-sound processor for the home-theater market, the CP-1, and as a result Lexicon has been justifiably dominant in the high-end home theater ever since. That unit was followed by the CP-2 and CP-3, and later on by the even more advanced DC and MC series, which make use of Lexicon's proprietary Logic 7 circuitry, a technology that is capable of creating a simulated 7.1-channel output from any two-channel source. Presently, the "Lexicon sound" is heard on more than 80 percent of the world's most successful music albums and theatrical soundtracks. In the early 1990s, the company became a part of Harman International.

HOWARD FERSTLER

LHÉVINNE, JOSEF

(13 DEC 1874–2 DEC 1944)

Russian pianist, born in Orel. He studied at the Moscow Conservatory, and even before graduating (1891) he performed the Emperor Concerto in concert, under Anton Rubinstein. He toured widely, and made his American

LIBERTY (LABEL)

debut in New York in 1906. In addition to concertizing, he and his wife Rosina established a teaching practice in New York, where he would live the rest of his life.

Lhévinne was renowned for his virtuosic playing of the romantics, especially Chopin and Tchaikovsky. His performance of the Chopin B-Minor Etude, opus 25-10, was cited by Josef Hofmann as "the most colossal octave playing I have ever heard." Modern criticism has tended to agree with contemporary views of Lhévinne's masterful technique and sensitivity.

His first recordings were for Pathé in the U.S. in 1921. After that he worked only for Victor, producing a very small legacy: one item in 1928 and one in 1939, the others (including the Chopin piece mentioned by Hofmann) in 1935-1936. All his records have been reissued on one CD from Novello/BMG (902).

LIBERTY (LABEL)

Pop-rock label of the 1950s and 1960s founded in 1955 by Simon (Si) Waronker and Jack Ames. The label's first hits came in 1958 with rocker Eddie Cochran, and then producer Snuff Garrett signed Johnny Burnette and Bobby Vee to the label in the early 1960s. In 1963, the company purchased Imperial Records, inheriting its roster of rock acts. Major hitmakers for the label through the 1960s were the Ventures, Gary Lewis and the Playboys, and Jan and Dean; its last major signing was the blues-rock group Canned Heat. The company also had a related music publishing division, Metric Music. In 1972, Liberty was sold to United Artists Records.



Julie London appearing sultry on a late '50s Liberty cover. Courtesy Frank Hoffmann



Label issued out of a New York Record shop from the mid-'30s through the '40s. Courtesy Kurt Nauck/Nauck's Vintage Records

LIBERTY MUSIC SHOP

A New York record emporium opened in January 1927. The shop began to issue records around 1933, featuring Broadway musicals, with some jazz and sophisticated vocal or dance material. About 214 78-rpm records were released under the Liberty Music Shop label, plus 10 LP reissues, through the late 1940s. Studio facilities were provided by Columbia and American Record Corp. Among the artists to appear on the label were Ethel Waters, Beatrice Lillie, Ethel Merman, Lee Wiley, Cy Walter, and Gracie Fields. [Raymond 1981 is a complete label list.]

LIBERTY PHONOGRAPH CO.

A Cleveland firm. It first advertised discs with the Liberty Record label in February 1919. In March 1920 the company was renamed Arrow Phonograph Co., and the name of the record label became Arrow. Laboratories were at 16-18 W. 39th Street, New York. Both labels were announced to be "lateral" but not "lateral cut." The process, invented by F.W. Matthews, called for a ridge to be the recorded section of the master, with the recording done with a forked head instead of a cutting straight edge. Apparently these were the only discs made by that process.

LIBRARY OF CONGRESS

One of the three federally supported "national" libraries of the U.S., established in 1800. The library's

activities in the area of recorded sound began in the 1920s, as Carl Engel became chief of the music division. When his tenure commenced in 1922, the library had but one recording, a cylinder made in 1904 of Kaiser Wilhelm II, received by donation. Since recordings were not at that time received by the U.S. Copyright Office (a unit within the Library of Congress), Engel made informal arrangements with the Victor Talking Machine Co. for donated copies of selected discs. Subsequently, other labels began to supply the library with much of their recorded output. These deposits are now required under copyright law.

In 1928 the Archive of Folk-Song was established, and became a principal focus of recordings. The organization became the American Folklife Center in 1981. The principal resource for research is the motion picture, broadcasting, and recorded sound division; in its recorded sound reference center, it holds about 2.5 million recordings in all formats, including some 450,000 78-rpm discs, 500,000 unpublished discs, 500,000 LPs, 2000,000 CDs, 175,000 tape reels, 150,000 45-rpm discs, and 75,000 cassettes, along with recordings in other, less common formats. Access to these recorded materials for study — and to discographies and other reference books — is through the recorded sound reference center (website: www.loc.gov/rr/record/). It also holds significant collections of radio programming, including Voice of America, Armed Forces Network, and NPR shows. One reference tool of particular interest is the Rigler-Deutsch Index, the major access guide to 78-rpm discs.

Two books are of special value to anyone who wishes to make use of the library's holdings: *Special Collections in the Library of Congress: A Selective Guide* (Library of Congress 1980), and *Scholar's Guide to Washington, D.C., Audio Resources*, by James R. Heintze (Smithsonian Institution Press, 1985). [Smart 1983.]

See also **American Folklife Center**

LIEBERSON, GODDARD **(5 APR 1911–29 MAY 1977)**

British/American composer and record industry executive, born in Hanley, Staffordshire, England. In 1915 the family moved to Seattle, Washington, and subsequently Lieberson graduated from the University of Washington. Then he studied at the Eastman School of Music in Rochester, New York, and wrote music criticism in Rochester. Lieberson moved to New York City to work for the League of Composers, and founded the American Composer's Alliance. In 1939 he gained the post of assistant to the director of the Masterworks Division of Columbia Records, and three years later he

was director. He quickly initiated pioneering projects during a time of economic turmoil for the label. Arnold Schoenberg's *Pierrot Lunaire* was one of his productions, and in 1940 he made recordings of Igor Stravinsky's music. In 1946 he became vice president of Columbia Records.

Lieberson also took up opera, making the first complete recording at the Metropolitan Opera House, *Hansel und Gretel* (1947). He succeeded with dramatic recordings, doing complete versions of several major plays, including Edward Albee's *Who's Afraid of Virginia Woolf*, for which he won the Grammy award in 1963.

The new Columbia LP record of 1948 gave Lieberson the opportunity to expand the musical horizon of his firm, and of the American public; he gambled successfully on the public's willingness to accept esoteric offerings by Charles Ives, Leonard Bernstein, Alban Berg, and other moderns. But his finest triumphs were made with cast recordings of Broadway musicals, beginning with *South Pacific* in 1949, and going on to the great hits *Camelot*, *My Fair Lady* (sales reported at more than 6 million copies), and *West Side Story*. He also established the profitable Columbia Record Club. In 1956 he became president of Columbia, and vice president of CBS, Inc. He became senior vice president of CBS in 1971, but returned to head Columbia Records in 1973 to replace Clive Davis — fired for improper handling of funds — and put that house in order. He retired in 1975 and died in 1977 in New York.

LIGHTFOOT, GORDON (17 NOV 1938–)

Like many commercial folk singers in the 1960s, Gordon Lightfoot adapted to changing industry trends by beefing up his song arrangements and accommodating a rock beat. Although possessing a distinctive baritone voice, he is best known as a pop music composer.

Born in Orillia, Ontario, Lightfoot studied music at Westlake College in Los Angeles before becoming interested in the work of folk revivalists like Pete Seeger and Bob Gibson. After recording for various local labels in Canada during the early 1960s, he caught the attention of Albert Grossman, then manager of Bob Dylan and Peter, Paul, and Mary. Grossman added him to his stable of artists and had Peter, Paul, and Mary record two of his compositions, "For Lovin' Me" (Warner Brothers 5496; 1965; #30), and "Early Morning Rain." Although a stint with United Artists was relatively unsuccessful, he became a consistent hit-maker after signing with Warner Brothers in 1969. His most popular singles included "If You Could Read My Mind" (Reprise 0974; 1971; #5), "Sundown"

LIGHTPHONE

(Reprise 1194; 1974; #1), "Carefree Highway" (Reprise 1309; 1974; #10), and "The Wreck of the Edmund Fitzgerald" (Reprise 1369; 1976; #2). He enjoyed even greater success as an album artist, placing 16 titles on *The Billboard 200* up through the late 1980s, most notably *Sit Down Young Stranger* (Reprise 6392; 1970; #12), *Sundown* (Reprise 2177; 1974; #1), *Cold on the Shoulder* (Reprise 2206; 1975; #10), and *Summertime Dream* ((Reprise 2246; 1976; #12). While Lightfoot has not creased the charts since the late 1980s, he continues to tour and record new music up to the present day.

FRANK HOFFMANN

LIGHTPHONE

A device invented by Arthur C. Ferguson for reproducing sound, accorded U.S. patent #595,053 (filed 17 Apr 1897, granted 7 Dec 1897). A diaphragm-controlled shutter varied a tiny light beam directed along a spiral path directed to a seven-inch glass plate coated with photographic emulsion. The plate was developed and transferred by photo engraving to a metal plate, etching a groove that was usable for reproducing sound with a gramophone-type player. Although Ferguson did not exploit the invention, the principle was taken up later for sound film.

LIMELIGHTERS

American folk singing group, formed in 1959. The members were Glenn Yarbrough, singer and guitarist; Alex Hassilev, singer; and Lou Gottlieb, bassist. They were successful with modernized folk material and topical songs. *Tonight in Person*, their first successful album (RCA LPM 2272; 1961), charted for 40 weeks. Later in 1961 they made *The Slightly Fabulous Limelighters* (RCA LPM 2393), which had 22 chart weeks. There were six other hit albums before the group broke up in the mid-1960s.

LIMITER

A circuit used in tuners and amplifiers to control the volume during signal peaks; it prevents overloading that would be caused by unwanted overmodulation.

LINCOLN (LABEL)

A record issued by the Lincoln Record Corp., New York, from 1924 to 1930, as a low-cost (\$0.50 per record) subsidiary of the Cameo label. Cameo material was used, with the real names of the artists suppressed. [Rust 1978.]



Lincoln label. Courtesy David A. Jasen

LINDENBERG, THEODORE (1911–12 DEC 1995)

A founding member of the Audio Engineering Society, Lindenberg was born in Columbus, Ohio, and went on to study engineering at Ohio State University. In the mid 1930s he had a recording studio in Columbus, and soon after became interested in phonograph cartridge design. In 1941, he joined Sherman Fairchild at his company, with Fairchild soon after marketing a cartridge designed by Lindenberg. In 1950, Lindenberg was elected president of the AES, and from that year until 1959 he was chief engineer at Pickering and Company, working for Walter Stanton. He was responsible for refining the design of the molded pickup cartridges featuring the replaceable stylus assemblies that Stanton had designed. He also designed an integrated arm/cartridge combination, electrostatic loudspeakers, and a turntable. He left Pickering in 1960, and until 1967 was director of engineering at the Astatic Corporation. After leaving Astatic, he worked for the Martin Marietta corporation until his retirement, researching optics, electronics, piezoelectric devices, and laser components.

HOWARD FERSTLER

LINDSTRÖM (CARL) GMBH

A German firm established 1 Feb 1904, with Max Strauss as managing director. It was reorganized as Carl Lindström AG in June 1908, and joined with Beka Records AG in August 1910. In July 1911 the U.K. firm Fonotopia, Ltd., was acquired. At that point Lindström controlled these labels: Beka Grand, Beka Meister,

Fonotipia, Jumbo, Odeon, and Parlophon; the firm had become a major competitor to the Gramophone Co. on the European market. Carl Lindström (London), Ltd., was formed on 26 Mar 1913. With the onset of World War I, the firm's fortunes were reversed. This British company, and Fonotipia, Ltd., were sold at public auction and acquired by the Hertford Record Co., Ltd., under restrictions established by His Majesty's government. Hertford was controlled by three staff members of the Columbia Graphophone Co., Ltd.; after the war Columbia acquired Hertford and all its assets.

Lindström's factories in France, Spain, Argentina, Chile, Italy, Switzerland, and Brazil were taken over by the Transoceanic Trading Co. (Netherlands) in 1920; that firm established Parlophone Co., Ltd., in London on 30 Aug 1923, and Parlophone passed to the control of the Columbia Graphophone Co., Ltd. in 1925. The name of Carl Lindström (London), Ltd., having done no business since its acquisition by the Hertford Record Co., Ltd., was finally struck from the register on 10 Dec 1927. Carl Lindström AG — changed again to Carl Lindström GmbH on 14 Oct 1969 — was ultimately to combine with Electrola GmbH on 30 Mar 1972 to become the EMI Electrola GmbH. The important Odeon label had been produced constantly throughout the interwar period. A label named Lindström American Record was recorded in the U.S. and pressed in Germany sometime after the 1918 Armistice.

In America the General Phonograph Corp. of New York, established by Otto Heinemann in 1915 (owner of the Okeh and Odeon labels), was the Lindström affiliate, or had a contractual arrangement with Lindström. General's Okeh label (1918) issued material from Fonotipia, Parlophon and Odeon. [Dearling 1984; Rust 1980.]

FRANK ANDREWS

LINE SOURCE LOUDSPEAKER

SEE LOUDSPEAKER

LINEAR PREDICTOR

A device that allows modification of one characteristic of speech sounds (e.g., pitch change) without altering other characteristics (e.g., duration). In terms of a recording, it permits playback at various speeds without changing pitch, or a shift in pitch without change of turntable or tape velocity.

LINK PIANO CO.

A firm established in Binghamton, New York, by Edwin A. Link, Sr., in 1912, as successor to a bankrupt

manufacturer of player pianos — the Binghamton Automatic Music Co. — that he had purchased two years earlier. Link's new company made player pianos and nickelodeons, and with considerable success; the Link Player Piano became one of the best known instruments in southern New York and Pennsylvania. Coin-operated pianos were a popular product. The firm also made pipe organs for movie palaces, mausoleums, and private homes as far away as California. Link's son, Edwin A. Link, Jr., utilized his knowledge of the automatic piano's pneumatic mechanism as the foundation for his invention of the Link flight trainer.

LINKWITZ, SIEGFRIED (23 NOV 1935–)

Born in Germany, Linkwitz studied electrical and electronic engineering at Darmstadt Technical University, Germany, 1955–1961, and received "Diplom Ingenieur fuer Nachrichtentechnik" degree in 1961. He went on to attend M.S.E.E. classes at Stanford University between 1962 and 1964, as part of Hewlett-Packard's honors cooperative program. He worked for Hewlett-Packard Co. (now Agilent) from 1961 to 1998, in R&D of radio frequency and microwave electronic test equipment, and also joined Audio Artistry Inc. as partner between 1993 and 1999.

While at HP, he worked on and was responsible for a number of test instruments, most notably the 8566A spectrum analyzer, which was the first fully automated and programmable test instrument with a frequency range from 20 Hz to 20 GHz. He also developed a well-known loudspeaker crossover together with R. Riley, known as Linkwitz-Riley crossover, and developed a novel biquad circuit topology, known as the Linkwitz transform, which is often used for woofer equalization. Linkwitz is a member of Institute of Electrical and Electronic Engineers and the Audio Engineering Society.

See also Loudspeaker

HOWARD FERSTLER

LINOPHONE

The name given to a phonograph cylinder that was used as a dictation device to cue linotype operators; described in *TMW* 15 Oct 1907. It was in use at the London plant of a magazine named *Automobile Owner*.

LIN-O-TONE

A one-piece horn with no seams and no joints. It was advertised in May 1909 as usable on the Fireside model and other cylinder record players.

LION, ALFRED (21 APR 1908–2 FEB 1987)

German-American executive/producer. Born in Berlin, Germany. Lion was already an avid jazz fan by the time he emigrated to the United States in 1938, and inaugurated Blue Note records shortly thereafter. Although the label initially concentrated on Dixieland and boogie-woogie recordings, Lion refocused the label to concentrate on more contemporary jazz in the late 1940s. Lion also acted as producer for most Blue Note releases until his retirement in 1967, and by allowing more rehearsal time and higher production standards than other producers, he helped his label earn its reputation as the premiere independent jazz label of the 1950s and 1960s.

CHRISTOPHER MEEDER

**LIORET, HENRI JULES
(26 JUNE 1848– 19 MAY 1938)**

French clockmaker and manufacturer, born in Moret-sur-Loing. His clocks won the bronze medal at the 1878 Paris Exposition, where Thomas Edison had his exhibit; it is possible that Lioret became interested at that time in sound recording. He gained several important patents in the field: French brevet d'invention #230,177 (18 May 1893, with additions of 28 Nov 1893 — covering the celluloid cylinder — and 5 Sep 1894), British patent #23,366 (1893), and U.S. patent #528,273 (filed 20 Dec 1893, granted 30 Oct 1894). He made a talking doll in 1893 for the Emile Jumeau doll manufacturer of Paris, sold successfully at 38 francs under the name of Bébé Jumeau. Having seen the Edison doll, Lioret improved on its weak points: the Edison cylinder could not be changed and it was too fragile. The Lioret doll operated with a spring mechanism and had unbreakable, interchangeable celluloid cylinders. In 1898 he used the mechanism in a talking clock. Visitors to Lioret's workshop at 18 rue Thibaud were greeted by a talking mechanical doorman. There was also a talking kiosk, developed by Lioret for advertising Chocolat Menier. His Lioretgraph No. 3 was a large weight-driven phonograph with oversized horn; he actually leased the Trocadéro auditorium in 1897 and brought in a substantial audience (to judge from a contemporary drawing) to admire it.

Lioret cylinders were duplicated by a complicated electroplating molding method. By 1900 he was able to produce a four-minute unbreakable record about 3 1/4 inches long, playable at 100 rpm on a phonograph — Lioret made these also, some weight-driven, with the trade name Lioretograph. He also made nonmolded brown wax cylinders, and vertical-cut discs. The Lambert Co. of Chicago purchased a Lioret patent and used it in defense against litigation

brought by Edison over the molding process. Lioret was in business until 1911. He also collaborated with Léon Gaumont and others in motion picture work, and then turned to landscape painting. He died in Paris. [Koenigsberg 1990; Marty 1979 is a well illustrated account; *TMR* 56–57 (February–April 1979), p. 1453, shows a phonograph and cylinders.]

LIPUMA, TONY (5 JULY 1936–)

Pop/jazz producer/label executive. LiPuma was born in Cleveland, Ohio, and began his career listening to and playing jazz. As a teenager, he got work as a jazz saxophonist in local bands, and then relocated to southern California in the mid-1960s. In 1968, he was hired as a staff producer for A&M, where he oversaw hits by the pop vocal group the Sandpipers and chanteuse Claudine Longet. He co-owned the Blue Thumb label in the early 1970s, producing a variety of acts including the retro-pop group Dan Hicks and His Hot Licks. In the 1970s he was hired by Warner Bros. but also worked as a freelancer, producing Barbra Streisand (soundtrack for *The Way We Were* [1974]), Dave Mason (*Alone Together* [1970]), and George Benson (the big selling *Breezin'* album [1976]), among many others. LiPuma produced Miles Davis's last pop-jazz albums for Warner Bros. (*Tutu* [1986], and *Amandla* [1987]). In 1990, he was hired by Elektra Records, where he oversaw the work of jazz-influenced pop stars like Anita Baker, David Sanborn, and Natalie Cole's homage to her father, the album *Unforgettable*. In 1995, he was appointed president of GRP and Impulse! Records, where he revived the Blue Thumb label, and in 1999 became president of the Verve Group (which subsumed GRP and other jazz labels owned by BMG). He has achieved recent success producing the jazz vocalist Diana Krall.

LIPPINCOTT, JESSE H (C. 1842–1894)

American recording industry executive. He apparently became interested in the audio business in 1887, when an associate, Thomas R. Lombard, was heading a syndicate that was negotiating with American Graphophone Co. to purchase sales rights for the graphophone. Lippincott, connected with a firm named American Electric Motor Co., was looking for a new industry for personal investment. By February 1888 it was he who led the negotiations with American Graphophone, and when a contract was signed on 29 Mar 1888 it was he who put up \$200,000 for the sales rights. Lippincott then went after the other industry giant, Thomas Edison. For some \$500,000 Lippincott purchased the stock of the Edison Phonograph Co. On 28 June 1888; he thereby gained

control over the major phonograph interests in the U.S., and set up a new firm to engage in the rental of machines for business use: this was the American Phonograph Co., soon renamed the North American Phonograph Co. Lippincott's total investment in the new industry he wanted to control was about \$1,329,000, including \$250,000 he had paid to buy the Gilliland Sales Co. from Ezra Gilliland and John C. Tomlinson.

North American sold territorial rights to 33 companies for the rental of Edison phonographs and "phonograph-graphophones" and the sale of supplies. Lippincott was, however, the personal licensee of the American Graphophone Co. He contracted to purchase 5,000 graphophone per year. His agreement with that firm also required him to pay it a royalty on all machines and supplies. He soon ran into financial difficulty, one reason being the slow production and shipment of machines from the plant of American Graphophone and the Edison Phonograph Works. Another problem was the tendency of the machines to break down easily and few trained technicians available to do repairs. But basically there was just not much interest in the business offices of America in exchanging live stenographers for dubious gadgets. Common concerns of the North American affiliated companies were aired at the first convention of the local companies, as they formed the National Phonograph Association, in Chicago in 1890. In the fall of 1890 Lippincott, unable to meet his obligation to purchase 5,000 graphophones per year in the context of weak sales and rentals, declined in health. He was stricken with paralysis, and gave up control of North American to Edison, its principal stockholder and creditor, before dying in 1894.

Within two years the use of the phonograph for business purposes had yielded priority to the new idea of entertainment, or as North American expressed it in the November 1892 *Phonogram*, "for social purposes." Lippincott, had he lived, would have seen his dream come to nothing, or nothing in the direction he expected it to follow. [Koenigsberg 1987; Proceedings 1974.]

LIPSHITZ, STANLEY (25 NOV 1943–)

Decidedly one of the more important academics involved with the concepts that make modern audio systems behave as they do, Lipshitz was educated in primary and secondary schools in Durban, South Africa, and went on to graduate with a B.Sc. (with honors) in applied mathematics from the University of Natal, Durban, in 1964. He then earned an M.Sc. in applied mathematics from the University of South Africa, Pretoria, in 1966, and then took a Ph.D. in mathematics from University of the Witwatersrand, in Johannesburg, in 1970. Shortly after graduation, he moved to Canada,

taking a position as professor of applied mathematics and physics at the University of Waterloo.

Lipshitz is one of the founding members of the audio research group at the University of Waterloo, which conducts research in many areas of audio and electroacoustics. His current interests include the mathematical theory of dithered quantizers and noise shapers (and their relation to stochastic resonance and chaos), physical acoustics, and active noise control. He has presented numerous technical papers, on a wide range of topics, at conferences both in North America and overseas, and has published numerous important papers on audio in the *Journal of the Audio Engineering Society*, the *Institute of Electrical and Electronics Engineers Transactions on Signal Processing*, the *Physical Review E*, and *Computing in Science and Engineering*. Lipshitz won an AES fellowship in 1982, and went on to win the society's silver medal in 1993, and also won the society's publication award in 1994. He was president of the AES in 1988–89, and is a member of the IEEE, the Acoustical Society of America, and the Canadian Acoustical Association.

See also **Loudspeaker**

HOWARD FERSTLER

LIQUID AUDIO

Digital file format and online music distributor. Launched in May of 1996, the Liquid Audio venture recruited computer-music veterans from Stanford University, audio manufacturer Ampex, and the Grateful Dead. Based on the idea that the imminent digital-music revolution would be nothing without legally licensed content and corresponding delivery technology that protected against online bootlegging, Liquid Audio provided record labels and artists a means of distributing music electronically without rampant loss of revenue. Perhaps surprisingly, the company's insistence on copy protection did not successfully attract the participation of major labels, which are involved in proprietary online distribution methods. Music retailers sometimes have been more threatened by Liquid Audio's distribution model than the labels, and Capitol Records withdrew its plan to prerelease a Duran Duran single in "Liquid" format after a threatened retailer boycott of the CD. Liquid Audio failed to become a standard for such distribution, and in 2002 the service went bankrupt. In early 2003, Anderson Merchandisers, a wholesaler of major-label recordings that services Wal-Mart and other retailers, purchased Liquid Audio's assets, with the support of the Universal Music Group. They hope to revive the format as a means of delivering audio files to consumers and to retailers.

BRAD HILL

LITERARY RECORDINGS

Literary recordings include poetry, prose stories, and plays. (For the purposes of this article, speeches and comic monologs are not included.) The earliest recordings of literature were not meant for publication. Edwin Booth made two cylinders in March 1890, in Chicago. Those recordings of a speech from *Hamlet* and of Othello's speech to the senate were made for his daughter, Edwina. More than 40 years passed before those cylinders were duplicated on a 78-rpm record for mass distribution. Henry Irving recorded two passages from Shakespeare, the opening soliloquy from *Richard III* and Wolsey's long speech to Cromwell at the end of Act II of *Henry VIII*, at the home of Henry M. Stanley, the British explorer, for the entertainment of the Stanleys and their friends. The cylinders were not discovered and made available to a wider audience until more than 60 years later (Gryphon #GR 900).

In 1899 Berliner became the first company to release a recording of an important Shakespearean performer, Ada Rehan. The sound quality of surviving examples is very poor, even on the rerecorded versions produced by the International Record Collector's Club in 1939 (IRCC #5000), but they still provide us an opportunity to hear the voice of an actress from the 19th century. The record is interesting as the first recording of a passage from *The Taming of the Shrew*, and also because it includes a passage from *The Country Girl* by William Wycherly, a Restoration playwright whose works were excluded from college textbooks until the second half of the 20th century because they were considered excessively bawdy.

The last important examples of early literary recording are the five recordings made by Ellen Terry for Victor in 1911. That studio time was set aside for this important actress would suggest a carefully prepared set of recordings. However, the selections seem quite impulsively chosen and carelessly executed. Nevertheless, her recording of Portia's mercy speech reveals why she gained fame in that role (Victor 64194). The earliest examples of excerpts prepared for public distribution were probably produced by Columbia. As early as 1893 Columbia had coin-operated machines in Washington, D.C., with a recording by an imitator of Edwin Booth doing Othello's speech to the senate. Unfortunately, no example of the Columbia recording is known to exist. The first surviving recording of a carefully prepared extract was made in 1902 for G&T by Tyrone Power, Sr. His two recordings of passages from *The Merchant of Venice* provide an impressive indication of the style of one of the most important actors of the turn of the century (Columbia GC 1229/30). Frank Burbeck, an actor who never gained great fame but who had a long and honorable career, made five recordings of passages from

Shakespeare. Among the other players who recorded carefully selected and prepared excerpts are Herbert Beerbohm-Tree, Ben Greet, Joseph Jefferson, and Henry Ainley. Special attention must be given to E.H. Sothern and Julia Marlowe, who produced 11 recordings for Victor in 1920 and 1921. Their carefully made recordings are among the first to use crowd noises and background music. Marlowe's performance of Juliet set the interpretation of that part for many decades, making the two sides given to the balcony scene of historical importance. Sothern's ponderous style is especially evident in his recordings of Antony's orations over the body of Caesar and his recording of Hamlet's soliloquy. Particularly noticeable is Sothern's use of the actor's tremolo, the vocal quavering that is used to suggest importance and dignity. The couple is shown to much better advantage in a scene between the Duke and Viola from *Twelfth Night* (Victor 74707; 1921).

Perhaps no Shakespearean actor has gained such fame on the basis of so few performances as John Barrymore. His 1920 production of *Richard III* and his 1922 production of *Hamlet* constituted his entire career on the Shakespearean stage. His readings of a soliloquy from *Hamlet* and a speech by Richard, duke of Gloucester, from Act III of *Henry VI Part Three* were later issued by Victor (#6827). In 1937 he starred in a series of 90-minute radio productions of Shakespearean plays. The recordings subsequently issued by Audio-Rarities of those performances are air checks that provide abundant evidence of Barrymore's carelessness in regard to meter but also his amazing vocal flexibility and ability to enter into a role. The recording of his *Twelfth Night*, in which he plays a number of voices, is exceptional (Audio Rarities LPA 2280/1). Barrymore used the actor's tremolo only with characters who are pretentious and contemptible. After Barrymore's first performances the serious use of the tremolo rapidly died out.

In the early 1930s F.C. Packard, a professor of English at Harvard University, met the son of Edwin Booth and learned of the two cylinders in the possession of Edwina Booth. After her death in 1936 he gained permission to duplicate the recording of the speech from *Othello*. Perhaps Packard's recognition of the value of this important recording led him to set about issuing recordings of poets reading their own works and of noted readers interpreting the poems of the past. The Harvard-Vocarium recordings resulted, a mine of our poetic heritage, containing the first recordings of W.H. Auden (#1272/3), T.S. Eliot (#P1206/7), and many others. The series was the model for others issued by Yale University, Stanford University, the Library of Congress, and Caedmon.

Four other sets of excerpts from the 1930s deserve special mention. The Otis Skinner and Cornelia Otis Skinner recordings from early in that decade are

particularly valuable (Victor 17762/4, 1811/3; reissued on Camden CAL-190). The lecture demonstration by Johnston Forbes-Robertson for the International Educational Society series shows the work of a modern master of the pause of suspension. Linguaphone issued what seems to be the first album of readings of poetry, *Shakespearean Records* (#EEG.28E/38E), initiating the recording career of John Gielgud, who has recorded literature over a longer period of time than any other performer. Columbia issued two albums entitled *The Voice of Poetry*, one with Gielgud (#M-419), the other with Edith Evans. About the same time as these albums were produced, five other recordings were released by an actor-director whose impact upon recordings of literature is unequalled by any other performer. Orson Welles, still in his early 20s, was catapulted to fame by his "anti-fascist" *Julius Caesar* produced at the Mercury Theater. In 1938 he memorialized that production in a five-record set (Columbia 325). It was not a recreation of the stage production. The performers were assigned different parts from those they had on the stage, and the play was greatly condensed. A piece of speech in one act was combined with a line from another act and another part; the entire murder scene from "The ides of March have come" to "Et tu Brute" lasted only 15 seconds. This was the first recording of a complete play in condensed form: it treated the recorded play as a new art form. After the production of this record and the shock of the radio production of *The War of the Worlds*, Welles was contacted by his prep school drama teacher, Roger Hill, who proposed to Welles the recording of each of the *Twelfth Night*, *Merchant of Venice*, *Julius Caesar*, and *Macbeth*. The four recordings were the first of full-length plays. They lacked the brilliance of Welles's short *Julius Caesar*, but they established the commercial viability of recording complete works. Of these four plays only the recording of *Julius Caesar* (Columbia C-10), was been reissued on LP (Entre EL-53).

The extent of the challenge the Mercury Theater recordings presented to the record industry was indicated a few years later when Victor issued *Macbeth* as a "Recordrama" (album #M 878). Stating that "it is neither practical nor necessarily desirable to record plays in their entirety," Victor separated the record sleeves with sheets containing photographs of scenes from the stage production and summaries of the events of play. The performances of Maurice Evans and Judith Anderson are impressive, but the first Recordrama was not followed by a second. Indeed, a year after Victor issued *Macbeth*, Columbia brought out *Othello* in three albums totaling 34 sides (#MM 554). The complete play had won the day; of course, the performances of Paul Robeson, Jose Ferrer, and Uta Hagen had something to do with the popularity of the set.

Early recordings of poetry included "Hiawatha" read by Harry Macdonough on a Lambert cylinder, and readings of Longfellow's "Paul Revere's Ride" and Thomas Buchanan Read's "The Rising of '76" by William Sterling Battis on a 12-inch Victor disc. More time bound — and therefore, in some ways, even more interesting — are Robert Hillyard's recordings of Sims's "Christmas Day in the Work-house," his recording of "The Littlest Girl" (drawn from Richard Harding Davis's story "Her First Appearance"), and Hillyard's own "A Fool There Was." These monologs are the sentimental ancestors of the more ironic and even satiric monodramas that made Ruth Draper an important figure in theater and which are preserved on *The Art of Ruth Draper*, an album first issued by RCA Victor in 1954 (#LM-1895), and then on five LP's by Spoken Arts. Edgar Davenport's reading of Deprez' "Laska" was issued both on an Edison cylinder (#9087; 1905) and on several disc labels. It is an excellent example of the sentimental narrative poem, a genre that became identified with Edgar Guest. Guest, who gained fame writing verse for newspapers, issued a number of recordings on the Victor label. "The Old Wooden Tub" (#45360-B), and "The Boy and the Flag" (#45341-B), are among the best. Mention should also be made of Robert Service, who gained fame as a storyteller in verse and who made only one record. However, a number of others, including the country singer Hank Snow, made recordings of his poems. Larry Allan Beck, who called himself the Bard of Alaska, demonstrated the vitality of the narrative verse tradition in the 1960s by issuing two vanity LPs of readings, including *Alaska, My Alaska* (Bard of Alaska AMA-001-4).

The appeal of the introspective lyric is documented in the recording of poetry as well as books of verse. Perhaps the most significant readings — if not the best poetry — are excerpts from Walter Benton's *This Is My Beloved* (1943). Recordings were issued in an album of three 78-rpm records by Atlantic (#312), a company known primarily for jazz recordings. The reader was John Dall. This recording was reissued on LP as Clarion 612. Another version was later produced with Alfred Ryder as the reader. In 1962 Laurence Harvey read a new version with background music by Herbie Mann; this was issued as Atlantic #1367. Then the singer Arthur Prysock did a reading with background music by Mort Garson, which was issued by MGM as Verve V6-5070. After mid-century many records were produced that provided readings of poems focused on the intimate details of the experience of love, nearly always from the male point of view and nearly always heterosexual. *For Colored Girls Who Have Considered Suicide When the Rainbow is Enuf*, by Ntozake Shange, recitations of introspective verse about the lives of women, was highly successful on the Broadway stage,

LITERARY RECORDINGS

and an effective recording was issued in 1976 (Buddah DDS 95007-OC).

Until the 1950s spoken word recordings were produced by the same companies that were issuing records of dance music and opera. Decca issued a number of recordings by Carl Sandburg as well as *Medea*, with Judith Anderson (#DAU 12; 1948), and *Death of a Salesman*, with Thomas Mitchell (#DAU 774; 1950). Columbia issued a reading from Stephen Vincent Benet's *The Murder of Lidice* (#M536; 1942), and Victor issued *Dorothy Parker — Selected Poems and Prose*, read by Ilka Chase (#M971). The major labels continued to produce literary recordings after the development of the LP. One of the most popular recordings was by the First Drama Quartette (Charles Boyer, Charles Laughton, Cedric Hardwicke, and Agnes Moorehead) doing *Don Juan in Hell*, a portion of George Bernard Shaw's *Man and Superman*. Even Atlantic, which rarely strayed from jazz, announced the Living Shakespeare Series and issued Margaret Webster's production of *Romeo and Juliet*, with Eva Le Gallienne, Dennis King, and Richard Waring (Atlantic 401; 1951). However, spoken word recordings have increasingly become the province of specialized producers, such as Spoken Arts, Argo, and Caedmon. Argo's *Great Actors of the Past* (#SW 510), issued in 1977, provided access to the recordings of Edwin Booth, Henry Irving, Ellen Terry, Herbert Beerbohm-Tree, Constant Coquelin, and others; it includes what may be the most powerful reading ever recorded, Sarah Bernhardt doing Phedre's speech in which she acknowledges her incestuous love. Caedmon's creation of the Theater Recording Society has resulted in an extraordinary collection of recordings, including classical plays of Sophocles and Aristophanes and contemporary plays. Also issued by Caedmon, the Shakespeare Recording Society's productions constitute one of the two great collections of Shakespeare's works. This collection should be compared to Works of Shakespeare performed by the Marlowe Dramatic Society and professional players, a series issued first by London and then by Argo. These two massive sets should put to rest questions regarding the desirability of issuing recordings of complete works, but that does not mean there is no place for abridgments. Two sets of abridgments of Shakespeare's plays deserve mention. For the series produced by Spoken Arts, three groups of players were used: the Swan Theater Players directed by John Blatchley, the players of the Dublin Gate Theater directed by Hinton Edwards, and a group called the Folio Theater Players directed by Christopher Casson. For these recordings, the duration of each play was reduced to 50 minutes by shortening the scenes in such a way as to produce a continuous story. A similar technique was used in Bernard Grebanier's Living Shakespeare series.

Near the turn of the 21st century the great development in literary recording was the result of cultural and technological change. We do not find another great series like the recordings of Shakespeare's works by the Marlowe Society and the Shakespeare Recording Society. However, the recorded book gained an importance it did not previously have. The great cultural change that brought about this development was the time people spent in motor vehicles; the great technological changes were development of the audio cassette, of the CD, of MP3, and other electronic forms.

The market has grown rapidly. In 1993 fewer than 2 million audio recordings were sold; in 2001 more than 3 1/2 million were sold. By the beginning of 2002, 166 major companies were producing audio recordings. Estimates of annual sales range from \$2.5 billion to \$4.5 billion. A survey by Audio Publishers Association found that more than one in five household listened to an audio book in 2001. Earful of Books became the first and largest chain of audiobook stores. The 457 Cracker Barrel restaurants stock about 200 titles at each location; the recordings may be bought or they may be returned to any Cracker Barrel restaurant for a fee. New markets were found, and new means of distribution were developed. Commuters were first recognized as a major market, but then truck drivers found audio books. *Roadstar Magazine* reported more than a third of long-haul truck drivers listen to audio books. The audio book rack is common in truck stops. Audio books became important for those with special educational needs, particularly young people with attention deficit disorder (ADD) or dyslexia. Audio Book Club first developed its Audio Passages as a book club devoted to Christian recordings, and with the success of that effort started another new club marketing Hispanic audio books. Books in Motion had produced more than 1,300 titles by the beginning of 2002; it rents its tapes and CDs at truck stops in one state and allows them to be returned in another state. Barefoot Books, which began as a publisher of children's books in England, began producing audio books for children and opened an office in Cambridge, Massachusetts.

In many instances the authors recorded the audio publication; Stephen King, who had recorded *Black House* after publishing it in print, even published *Riding the Bullet* as an audio book and did not have it printed. More recently, famous actors have been used; Julia Roberts did *The Nanny Diaries*. However, a number of people became famous as readers: e.g., Richard Allen (Brilliance Audio), John Lee (Recorded Books), Anna Fields (Blackstone Audio), Judith West (The Audio Partners), and William Dufres (BBC Audiobooks America). Jim Dale produced a number of voices to read all of the parts in *Harry Potter and*

the Order of the Phoenix, a recording that sold 575,000 copies in three days. Perhaps the best-known voice was that of Frank Muller; after he was injured in a motorcycle accident, Stephen King and others held a fundraiser for Muller. Most books have a single reader, but Full Cast Audio was formed to employ a number of voices to read a text.

With the development of the World Wide Web, it is not surprising that some sites are entirely devoted to audio books. Enthusiasts for audio books have created an online journal: <http://www.audiobookstoday.com>.

This article has focused on recordings of English and American literature by performers speaking English and from companies based in either Britain or America. Space does not permit attention to the extensive body of literary recordings produced in other countries. The first recording of a complete play was probably done in France. Italy has produced extensive recordings, including a complete version of Dante's *Divine Comedy*. Translations of passages from Shakespeare have been recorded in many lands, including the Soviet Union.

Regardless of the lack of attention given to recorded literature in academe, the body of material is large and growing. When Caedmon can expect to sell 100,000 copies of its most popular new issues, there is no reason to fear a decline in the production of audio recordings of literature. Only a little attention is needed to reveal that literary recordings are important commercially as well as valuable historically and artistically. [Bebb 1972 discusses recordings of individual actors; Whittington 1981.]

ROBERT J. O'BRIEN

LITTLE CHAMPION (LABEL)

A record issued by J.E. Hough, Ltd., in London from December 1909 to about March 1910. It was a nine-inch, vertical-cut disc, made of a new compound named Vitaroid; price was 1s. 3d. [Andrews 1988/6.]

LITTLE MARVEL (LABEL)

A record issued by the Aeolian Co., Ltd., in Britain during the early 1920s. It was sold through the Woolworth stores. Size of the disc was 5 3/8 inches, later increased to six inches. A nursery series was included. Masters from Little Marvel were used to make records for other British stores.

LITTLE POP (LABEL)

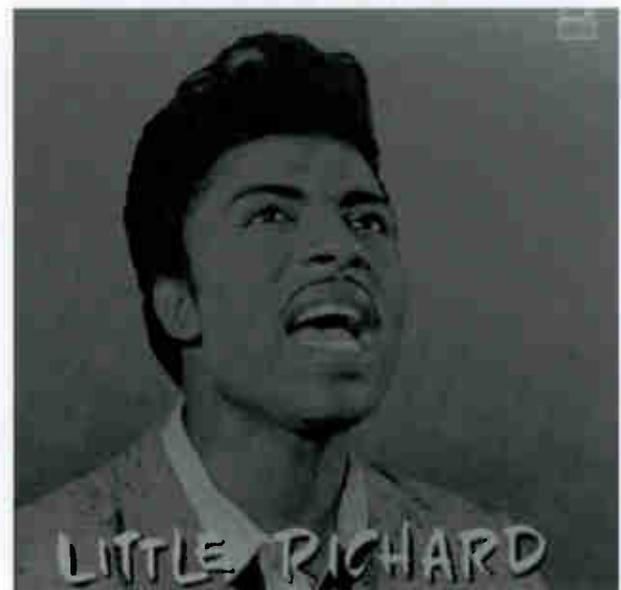
A small-sized British record, issued by the Sound Recording Co., Ltd., from December 1921 to June

1922. About 100 titles were released, at one shilling each. [Andrews 1988/6.]

LITTLE RICHARD (5 DEC 1932-)

One of the leading pioneers of early rock 'n' roll, Little Richard's frenetic singing style helped bring down the covering phenomenon, whereby the major labels assigned mainstream singers to record smoothed-over versions (often with sanitized lyrics) of original R&B hits geared to the pop charts. Although teen crooner Pat Boone garnered comparable sales with his awkward covers of two early Little Richard songs — "Tutti Frutti" (Dot 15443; 1956) and "Long Tall Sally" (Dot 15457; 1956) — Richard's remaining hits faced no competition in crossing over to a mainstream audience.

Born Richard Wayne Penniman in Macon, Georgia, his primary musical influences as a youth were singing in the church choir and playing saxophone in his high school band. When bluesman Buster Brown's singer failed to show up at a local concert, Richard — then age 14 — filled in. While touring with the band, he began wearing his trademark pompadour and was billed as "Little Richard" for the first time. He was working variety shows when Zenas Sears — a WGST, Atlanta, deejay — helped him get a contract with RCA. His first session on 16 Oct 1951 resulted in four recordings: "Every Hour" (a hit in the Georgia area due to on-the-air plugs by Sears), "Goin' to Get Rich Quick," "Taxi Blues," and "Why Did You Leave Me." He would cut four more tracks on 12 Jan 1952, but they failed to catch on with the public. He then



Little Richard Specialty album. Courtesy Frank Hoffmann

LITTLE TOTS' NURSERY TUNES (LABEL)

recorded eight songs (with his group the Tempo Toppers) on 25 Feb and 5 Oct 1953 for the Houston-based Peacock label, again with negligible results.

Little Richard spent the next couple of years touring the Southeast with his new backup band, the Upsetters. A tip from R&B singer Lloyd Price led him to send a demo tape to Specialty records in February 1955. Producer Bumps Blackwell sensed his potential for communicating the same kind of gospel-blues blend that had made Ray Charles a star. The first session produced "Tutti Frutti" (Specialty 561; 1955), which reached number two on the R&B chart (and number 17 on the pop listing despite the Boone cover). With this song, his style — a rave up approach punctuated by stream-of-consciousness beat jive — emerged fully realized. Over the next three years, Little Richard recorded a prodigious number of hits (mostly his own compositions), including "Long Tall Sally"/"Slippin' and Slidin'" (Specialty 572; 1956; #1 R&B, #6 pop/#2 R&B), "Rip It Up"/"Reddy Teddy" (Specialty 579; 1956; #1 R&B/#8 R&B), "She's Got It"/"Heebie Jeebies" (Specialty 584; 1956; #9 R&B/#7 R&B), "The Girl Can't Help It" (Specialty 591; 1956; #7 R&B), "Lucille"/"Send Me Some Lovin'" (Specialty 598; 1957; #1 R&B/#3 R&B), "Jenny, Jenny"/"Miss Ann" (Specialty 606; 1957; #2 R&B, #10 pop/#6 R&B), "Keep A Knockin'" (Specialty 611; 1957; #2 R&B, #8 pop), and "Good Golly, Miss Molly" (Specialty 624; 1958; #4 R&B, #10 pop). His popularity was reinforced by appearances in three early rock 'n' roll films: *Don't Knock the Rock*, *The Girl Can't Help It*, and *Mister Rock 'n' Roll*.

Despite his wild performing antics and gender-bending lifestyle, Little Richard felt a calling to become a preacher. By the late 1950s he was only performing religious music; however, he decided to return to rock music in 1963. Subsequent recordings for a variety of labels — including Vee-Jay, Okeh, Reprise, and Green Mountain — failed to generate more than moderate sales. By the early 1970s he was appearing in rock 'n' roll revival shows and expanding into non-musical endeavors. His critically acclaimed acting role in the 1986 motion picture, *Down and Out in Beverly Hills*, represented his most notable post-1950s artistic achievement. [White 1984.]

FRANK HOFFMANN

LITTLE TOTS' NURSERY TUNES (LABEL)

A British seven-inch disc issued in 1923–1924 by Plaza Music Co. (New York), handled in the U.K. by Bennett Samuel and Sons, Ltd. [Andrews 1988/6.]

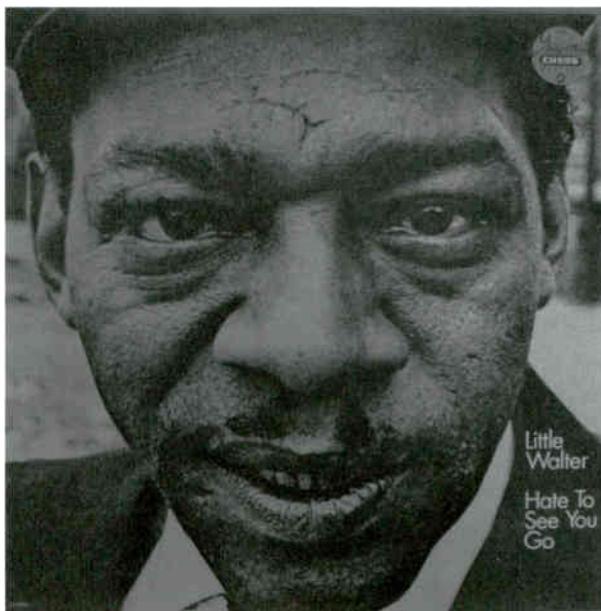


Early '20s 7-inch record issued by Regal/Plaza in the U.S. Courtesy Kurt Nauck/Nauck's Vintage Records

LITTLE WALTER

(1 MAY 1930–15 FEB 1968)

American blues singer and harmonica player, born Marion Walter Jacobs in Alexandria, Louisiana. He taught himself the harmonica, and learned to play it with great expressiveness. He recorded successfully for Leonard Chess in the 1950s, notably his biggest hit, "Juke" (Checker 758, 1952), followed by "Mean



Little Walter album cover. Courtesy Frank Hoffmann

Old World" (Checker 764; 1952), and "Blue Lights" (Checker 799; 1954). He and Muddy Waters made several distinguished duet records, including "All Night Long" (Chess 1509; 1952). Although Walter continued to record with Muddy Waters through the 1960s, as well as on his own, his career slumped due to his increasingly erratic behavior. He made several tours of Europe in the mid-1960s, but then died following a beating at the hands of police in 1968. Most of his original recordings have been repackaged on CD by MCA/Chess. His life has been chronicled in a well-crafted biography, *Blues with A Feeling: The Little Walter Story*, by Tony Glover, Scott Dirks, and Ward Gaines (2002).

LITTLE WONDER (LABEL)

A 5 1/2-inch American record produced by Henry Waterson between 1914 and 1919; the recording and pressing were done by Columbia. The records were lateral cut, with a playing time of one minute and 45 seconds; they sold for \$0.15. A new record player was designed for the Little Wonder record, but standard phonographs could also accommodate it. Artists were anonymous, and the records had no paper labels (title and number were etched into the central area). By July 1915 the sales list showed disc numbers up to #183. The discs offered good reproduction of dance music and vocals, at a selling price of \$0.10. [Blacker 1983/3–4 to 1986/4 is a label list; Rust 1978.]



Little Wonder issued 5 1/2-inch discs designed to be played on its special phonograph, marketed for children, during the mid-teens. Courtesy Kurt Nauck/Nauck's Vintage Records

LOCANTHI, BARTHOLOMEW NICHOLAS (BART)

LIVE RECORDING

A recording made at an actual public performance rather than in the studio. In August 1888, recordings of an organ at Westminster Abbey, and at the Crystal Palace in London, were undertaken by Colonel George Gouraud for the Edison Phonograph Co. to demonstrate the utility of the phonograph; parts of *Israel in Egypt* were inscribed. The Mapleson cylinders of 1901 were the earliest series of live recordings, and the first live recordings made in the U.S.

See also **Oldest Records**

LIVE STUDIO

SEE REVERBERATION

LIVE TO TWO TRACK

During recording, this usually involves using a direct feed from the recording microphones and amplifiers to a two-channel master, bypassing any mixing stages. It can also involve multiple microphones that are mixed to a two-track master during the recording process. This has the potential to deliver a cleaner, less-manipulated sound. However, if not done correctly, it can result in a recording that is possibly worse than what one would get by employing multiple microphone feeds, mixers, and equalizers, and doing methodical post-production editing to get the balances perfect. In the 1970s, Sheffield Records produced some demograde sound LP recordings from disc masters that were cut directly during a live, two-track feed.

HOWARD FERSTLER

LOCANTHI, BARTHOLOMEW NICHOLAS (BART) (1919–9 JAN 1994)

Born in White Plains, New York, Locanthi earned a B.S. degree in physics from California Institute of Technology in 1947, after his war service had split his educational experience into two parts. In the early 1950s, while working for the analog computer development group at Cal Tech, he published a paper on modeling loudspeaker performance via electrical equivalent circuits. Reprinted later in the Audio Engineering Society's journal, it became the foundation of most of the loudspeaker driver and enclosure programs available today.

From 1953 until 1960, he was a partner in Computer Engineering Associates, a company specializing in large-scale computer services, and in 1960, he joined James B. Lansing Corporation, where he served as vice president of engineering until 1970. During that time he engineered the designs of numerous JBL loudspeaker systems. In addition, he developed the "T-Circuit," an

LOFT RECORDINGS (LABEL)

output configuration for solid-state amplifiers that became a standard for the industry. After an association with Cetec Gauss, a manufacturer of professional sound components, he joined Pioneer North America in 1975, and continued with the company until 1986. During that time, he was responsible for the design of a number of loudspeaker drivers, as well as some of the company's digital technologies. After 1986, he formed his own consulting company, with Pioneer remaining his principle client. Locanthi was a member of the Acoustical Society of America, the Institute of Electrical and Electronics Engineers, the Society of Motion Picture and Television Engineers, and the Audio Engineering Society, which awarded him a fellowship in 1972, a silver medal in 1990, and a posthumous gold medal in 1996.

See also **Loudspeaker**

HOWARD FERSTLER

LOFT RECORDINGS (LABEL)

Founded in August 1998 by Roger Sherman. Loft was an outgrowth of a popular radio program, *The Organ Loft*, and continues to be headquartered in Seattle. Early releases from the label focused on the large collections of historic pipe organs in the Pacific Northwest, but Loft also recorded some of the best semiprofessional choirs of the region. Within its first two years, the company had produced almost 30 CDs, expanding its repertoire to include European organs and artists. Loft also became the exclusive importer of the Organeum (Germany), and Quilisma (UK) labels. In 2000, Loft spawned the ReZound label, devoted to recitals, reissues, and radio programs. With the acquisition of Gothic Records in late 2001, Loft has more than 140 titles. Gothic continues as a producer of "Organ and choral recordings of distinction," while the Loft label focuses more on early music, with a strong emphasis on keyboard and cutting-edge recording technology. [Website: www.loftrecordings.com.]

HOWARD FERSTLER

LOMAX, ALAN

(31 JAN 1915–19 JULY 2002)

American folklorist and folk singer, son of John Avery Lomax, born in Austin, Texas. He assisted his father in field work, and also studied at the University of Texas (B.A., 1936). From 1937 to 1942 he was assistant curator — to his father — of the Archive of Folk Song, Library of Congress. He collected folk songs in the Midwest and Southeast U.S. One of his important projects was to interview and record Jelly Roll Morton for the Library of Congress in 1938; he also recorded extensive interviews and performances for the Library

with Leadbelly and Woody Guthrie. He became director of folk music for Decca Record Co. after World War II, bringing that label to prominence in the field through the 1950s. Lomax also sang, and was heard on a 1958 LP from the Tradition label; then Kapp Records produced his album *Folk Song Saturday Night*. His *Southern Journey* series was issued by Atlantic Records in the late 1950s, and a similar series from the same trip was issued on Presitge. He performed on radio and at folk festivals. His books include collaborations with his father plus *Folk Songs of North America in the English Language* (1960), and *Hard Hitting Songs for Hard-Hit People*, with Woody Guthrie and Pete Seeger (1967).

Beginning in the mid-1990s, Rounder Records made an arrangement with the Lomax archives to reissue all of Lomax's field recordings on a projected 100-CD set; to date, several dozen CDs have appeared, including previously unissued material.

See also **Lomax, John Avery**

LOMAX, JOHN AVERY

(23 SEP 1867–26 JAN 1948)

American folklorist, born in Goodman, Mississippi. His family moved to Texas when he was an infant, and he grew up in the ambience of cowboy songs and western folklore. After early schooling at Granbury College, and seven years of teaching, he attended Chautauqua (New York) summer schools and then went to the University of Texas (B.A., 1897). Working as a university administrator and teacher, he continued graduate study and earned master's degrees from University of Texas and Harvard University. Supported by Harvard, he returned to Texas and made field recordings. He discovered songs such as "Git Along Little Dogies," and "Home on the Range," and published (with his son Alan Lomax) a collection, *Cowboy Songs and Other Frontier Ballads* (1910). A second collection appeared in 1919: *Songs of the Cattle Trail and Cow Camp*, but Lomax was able to give only a part of his time to folk song research, since he found it necessary to work in academic and banking positions. Finally, in 1932 he gained sufficient backing from the Macmillan Co. and from the Library of Congress to become a fulltime song collector, often assisted by his son Alan. He recorded more than 10,000 songs for the Archive of Folk Song at the Library of Congress, which he served as curator from 1934. The songs included his discoveries at an Arkansas penitentiary, "Rock Island Line" and "John Henry." Publication of his two collections, *American Ballads and Folk Songs* (1934) and *Our Singing Country* (1941) brought folk song into the American mainstream. His personal efforts achieved the release of Huddie Ledbetter (Leadbelly) from a Louisiana prison in 1933.

The two Lomaxes published *The Leadbelly Legend: A Collection of World-Famous Songs by Huddie Ledbetter and Negro Folk Songs as Sung by Lead Belly* (1936). Lomax was said to have traveled 300,000 miles in his field work. His last collection, in joint authorship with his son, was *Folk Song: U.S.A.* (1948). He also wrote an autobiography, *Adventures of a Ballad Hunter* (1947).

LOMBARD, THOMAS R

American recording industry executive. He was one of the organizers of the North American Phonograph Co., and served as president in 1893. A former mining prospector, he had worked with Jesse Lippincott, who planned and controlled the North American Phonograph Co.

LOMBARDO, GUY

(19 JUNE 1902–5 NOV 1977)

Canadian dance band leader, born Gaetano Lombardo in London, Ontario. He studied violin, and formed a family performing group in London around 1917. By 1923 the ensemble was playing in the U.S., and a year later they made records for Gennett. Among the family members in the group were Carmen (saxophone and vocal), Lebert (trumpet), Victor (clarinet and saxophone), and Rose Marie (vocal). Guy Lombardo was leader, playing the violin on occasion. A tremulous, dulcet sound was developed, based on saxophones playing rather untuned vibrato, accompanied by a tinkling piano. The formula was greatly successful in the Granada Cafe, Chicago, in 1927–1928, then at the Roosevelt Grill in New York, where the orchestra — known as the Royal Canadians — played for 33 years. New Year's Eve radio shows from the Roosevelt, and later from the Waldorf-Astoria Hotel, established the Lombardo orchestra as a national tradition, playing "Auld Lang Syne" at midnight. The song was one of the popular Lombardo records (Decca 2478; 1939). "Boo Hoo" was another acclaimed number (Victor 25522; 1937). "Sweetest Music this Side of Heaven" was the nickname of the orchestra, which remained in the public eye through the 1960s.

Lombardo recorded for several labels, primarily Columbia (1927–1932), Brunswick (1932–1934), Decca (1934–1935), Victor (1935–1938), and Decca again from 1938. Carmen Lombardo's unique vocal style, characterized by a frail uncertainty, was well exemplified on "Little Lady Make Believe" (Victor 25823; 1938), and "When You Wish upon a Star" (Decca 2969; 1940). Carmen wrote many pleasing songs, among them "Boo Hoo," "Confucius Say" (Decca 2917; 1939) and "There Won't Be a Shortage of Love" (Decca 4199; 1942). Carmen Lombardo died in 1971; Guy Lombardo died in Houston.



London label. Courtesy Frank Hoffmann

LONDON (LABEL)

The record name given to exports from Decca Record Co., Ltd., to the U.S. after World War II. In the U.K., the London label was used by Decca for 45 rpm, 78 rpm, and LPs; using material from American labels such as Atco, Atlantic, Cadence, Chess, Dot, Imperial, Liberty, Specialty, and Sun. The London label is still in use, for classical CDs.

LONDON PHONOGRAPH CO.

The firm operated by J.E. Hough in London from 1893 to 1896. It sold cylinders with the London Records label, as well as phonographs. Since the business was carried on in infringement of the rights in Edison patents and Bell-Tainter patents, legal action was taken by the patent owner, Edison Bell Phonograph Corp., Ltd. In October 1896 the London Phonograph Co. was enjoined, then renamed Edisonia, Ltd. [Andrews 1978/4.]

LONDON RECORDS (LABEL)

The cylinder record issued by the London Phonograph Co., a firm owned by J.E. Hough, from December 1893. Releases continued under new management (Edisonia, Ltd., then Edison Bell Consolidated Phonograph Co., Ltd.) until at least September 1900. Among the artists were George Gaskin and Russell Hunting. [Andrews; Andrews 1978/4.]

LONDON STEREOSCOPIC CO.

The British firm licensed to utilize the Edison patents in the U.K., established in 1878. It offered machines in various models, including hand cranks (one with a fly-wheel), and one operated by a falling weight.

LONG-PLAYING RECORD

The early commercial cylinders had a two-minute playing time, a span insufficient for rendition of a typical song or instrumental work. Efforts began to extend playing time, both through the production of larger cylinders (e.g., five-inch "concert records"), and through finer grooving. In 1895 Edison made cylinders with 400 threads per inch, 6.5 inches long; they played for eight minutes. Pathé in Paris made a cylinder 8 1/2 inches long (the Celeste) that played for four or five minutes.

Berliner's seven-inch discs of 1894 could play for two minutes. Various producers increased disc size: International Zonophone offered 10-inch discs in September 1901 in Europe, and in the U.S. Victor Monarchs in 10-inch size were sold in 1901. In 1903 discs of 12-inch diameter were marketed by G&T in the U.K. and the Victor Co. in the U.S. Pathé records in 1909 and Neophone records in 1905 reached 19 1/2-inches in diameter, but these were not available for long; in general the industry standardized with a 12-inch maximum.

Victor experimented in 1904 with a 14-inch disc that played for six minutes at a somewhat slower speed than 60 rpm, the ordinary record speed of the day. Columbia and Fonotipia had similar discs. None of these pioneer long-players were successful.

In Britain, the Marathon Records of 1912–1915 and the constant linear surface speed records of the World Record Co. were important advances. Marathon 12 inch discs could play as long as 16 1/2 minutes, and some 12-inch World Records could play more than 20 minutes. Vocalion Long-Playing Records used the World Record Co. process.

Brunswick announced in August 1925 its 40-minute (20 minutes per side) 12-inch electrically recorded discs; they had 500 grooves per inch.

The Edison 12-inch disc introduced in August 1926 could play 20 minutes per side, but it failed in the market because the grooves (450 per inch) were too thin for the heavy tone arms of the time, economic conditions dimmed interest in the purchase of new equipment needed to play the discs, and the repertoire was not ready to exploit the longer playing time. Victor failed with a 1931 long-play record — 33 1/3 rpm — for similar reasons.

In Britain an advance was made with the Broadcast label in 1927. Fine grooving made possible a playing time of three minutes on an eight-inch disc; later there

was a nine-inch disc, and then a 10-inch disc that could play up to six minutes.

Hit of the Week label introduced a tightly grooved 10-inch record in 1931 that played five or six minutes, but the extra time was not well used and the innovation was not impressive enough to forestall bankruptcy of the firm. The British counterpart label was Durium.

Columbia made 33 1/3-rpm records in 1932 for intermission music in motion picture theaters. The discs played from the center outward. A 12-inch record could play, like the later commercial LP, for 20 minutes.

The 33 1/3-rpm speed was found to be suitable also in adding sound when a motion picture film was projected, since a 20-inch diameter disc at that speed would cover the time used by one film reel, and gave respectable quality. Eventually that speed was employed by Columbia as it introduced the modern LP record, developed by Peter Goldmark and William S. Bachman, in 1948. It had between 250–400 grooves per inch, in contrast to the 96–125 grooves per inch of the standard 78-rpm record. Stylus diameter was 0.001 inch (one millimeter), and the stylus exerted only six grams of pressure, with a tip radius of less than 0.025 millimeters. This format became the new industry model, and remained so until the arrival of the compact disc (CD). [Evans, R. 1979 is a brief account of long-play development; Fagan 1981 lists all the Victor 1931 long-play discs; Goldmark 1949.]

See also **Columbia; Disc; Edison (Label); Instantaneous Recordings; Talking books; Transcription discs**

LOOPING

A mixing technique used by disc jockeys to extend the playing time of a song by blending two records of it into a continuous play.

LOPEZ, JENNIFER (24 JULY 1970–)

Born in the Bronx, New York, dancer-turned-actress-turned-recording star Lopez scored numerous major hits from the late 1990s, thanks to her high-profile star image and sexy dance-video performances. Lopez first attracted attention when she appeared as a dancing "Fly Girl" on the hit comedy series, *In Living Color*, which premiered in 1990. She made her film debut in *Money Train* in 1995, and two years later captured serious attention appearing as the slain Tejano singing star, Selena, in a made-for-TV film. Always wanting to be a singer, she released the album *On the 6* (named for the Bronx subway line she rode as a child) in 1999 (Epic Work 69351). Aided by major rap and pop producers, including Sean "Puffy" Combs (with whom

she would be romantically involved during 2000), and Emilio Estefan, Jr., the album was a major success, spawning hits with its first single, the number one "If You Had My Love" (Sony 79164), and the follow-up, "Waiting for the Night" (Sony 79292). Lopez followed quickly in 2001 with the album, *J. Lo* (Epic 63786), with the major hit, "Love Don't Cost A Thing" (Epic 70728). A remix version of the album was released in early 2002 to capitalize on her success, spawning the new single hit, a duet with Ja Rule on "Ain't It Funny." Seeking to broaden her appeal, she released *This Is Me — Then* (Sony 86231), in fall 2002, emphasizing ballads over dance tracks. The lead single, "Jenny from the Block" (Sony 79825), emphasizes her Bronx roots, claiming that, despite her fame and celebrity, she's still just a simple girl from New York.

CARL BENSON

LORD-ALGE, TOM (1963–)

A noted mixing engineer and two-time Grammy winner for engineering, Lord-Alge has worked on more than 150 albums since 1983. His credits include producing albums for Steven Winwood, REO Speedwagon, and Starship. He was engineer on albums for artists including Jeff Beck, TKA, REO Speedwagon, Sun City Artists, and Steve Winwood. He mixed albums by Earth Wind and Fire, Billy Joel, Fuel, Dave Matthews, Verve Pipe, the Rolling Stones, Dog's Eye View, Shawn Mullins, Bare Naked Ladies, Limp Bizkit, Marilyn Manson, Hole, Hanson, and Collective Soul among many others.

HOWARD FERSTLER

LOUDSPEAKER

Often referred to simply as a speaker. This article consists of nine sections, much of which relates to system bass reproduction:

1. Introduction and terminology.
2. Completely closed box woofer systems.
3. Bass reflex (vented) woofer systems.
4. Passive radiator woofer systems.
5. Transmission line woofer systems.
6. Aperiodic woofer systems.
7. Horn-loaded loudspeakers.
8. Electrostatic loudspeakers.
9. Multi-way systems, including tweeters, mid-ranges, and crossovers.

1. *Introduction.* The year 1925 heralded the most significant advance in the history of recorded sound, the commercial introduction of electrical recording and reproduction. Two technological developments

made electrical recording feasible: the transducer and the vacuum tube amplifier. The transducer made it possible to convert mechanical energy into electric current and vice versa. Electrical recording required two transducers: a microphone to convert sound vibrations into electricity, and an electrical disc cutting head to convert the electricity into a mechanical vibration that would cause a cutting stylus to cut a physical replica of the original sound wave into the record groove. On the reproduction end, a phonograph cartridge (pickup, as it was originally called), traced the mechanical picture contained in the record groove and converted the resulting vibration into electricity. Finally, the loudspeaker converted the electricity, after it was amplified, back into sound vibrations.

A microphone cannot provide sufficient voltage and current to feed a disc cutting head directly; the small signal from the microphone requires considerable amplification in order to drive the cutting apparatus. Similarly, the phonograph pickup is incapable of driving a loudspeaker. In both cases, the vacuum tube amplifier of the era provided the means of increasing the voltage and current of the electrical signal provided by the first transducer to a level sufficient to drive the second transducer. Today, solid-state amplifiers have generally replaced their tube counterparts.

The basic principles of the moving-coil electrodynamic loudspeaker, often referred to as the dynamic loudspeaker, were first patented in Germany in 1874 by Werner von Siemens. In Britain John William Rayleigh described radiation theory for a circular diaphragm mounted in a baffle in his *Theory of Sound* (1877). In 1898 British physicist Oliver Lodge received a patent for a sound reproducer consisting of a moving coil attached to a wooden board. The modern dynamic loudspeaker is generally credited to C.W. Rice and E.W. Kellogg, who produced a working model in 1925. The essential elements of a modern moving coil loudspeaker, which has changed very little in its basic operation since Rice and Kellogg, are a coil of wire (the voice coil) surrounded by a magnetic field and attached to a vibrating diaphragm or cone. The voice coil and the cone are suspended by the "spider" at the rear of the cone, and the flexible rim suspension (the surround) at the front. As electricity flows through the voice coil, the coil generates its own magnetic field which interacts with the field of the permanent magnet, causing the cone to move back and forth. During the early days of radio and electrical phonographs, single full-range loudspeakers, which attempted to reproduce the entire range of frequencies available on recordings, were commonplace. Since the 1950s, however, nearly all loudspeaker systems claiming to have high fidelity performance have used more than one speaker element to cover the entire audible frequency

LOUDSPEAKER

spectrum from 20 Hz to 20,000 Hz. The speaker enclosures described below are most commonly used with low frequency loudspeakers, normally called woofers. Separate speakers called midranges and tweeters are normally used for the middle and high frequency portions of the spectrum, and these individual loudspeaker components are often called drivers.

A moving-coil loudspeaker normally radiates sound from front and rear, since the loudspeaker frame (basket) is open in the back. When the loudspeaker cone moves forward, a compression of air is produced in front of it, and a rarefaction is produced behind it. Conversely, when the loudspeaker cone moves backward, a rarefaction is produced in front of the loudspeaker, along with a compression at the rear. Thus, the radiation of sound waves from the front and the back of the speaker cone are out of phase with each other. At low frequencies the wavelengths reproduced are quite long with respect to the size of the cone, and when the front and rear radiations meet, at the outer edge of the loudspeaker, cancellation occurs. This results in little low frequency output from the loudspeaker, despite large cone movement in this region.

Consequently, since the first use of dynamic loudspeakers, it has been important to somehow isolate the front radiation of the cone from the back radiation. The simplest method is to mount the loudspeaker on a large, flat baffle. The distance from the front of the speaker, around the baffle to the rear of the driver, determines the low frequency cutoff point for the system. When the distance is less than 1/4 wavelength of the frequency being reproduced, the output from the system is greatly reduced. Many early radio receivers and phonographs used flat-baffled loudspeakers, as well as the variant open back enclosure. Early radios and electric phonographs were often housed in five-sided wooden boxes that contained both the electronics and the loudspeaker. Open-back cabinets provided a reasonable distance between the front and rear of the driver, but with a much smaller front profile. Unfortunately, the baffle size required to handle really low frequencies satisfactorily would have been too large to be practical. Fully enclosed boxes were necessary to achieve accurate bass with a front baffle of manageable size, and a choice also had to be made regarding what kind of enclosure would be used.

There are two basic options available: the rear radiation can be completely absorbed inside the enclosure; or a portion of the rear radiation can emerge through a port or vent (or opening that is mass controlled by a dummy-radiator diaphragm), to reinforce the front radiation at low frequencies. The major types of loudspeaker enclosures are noted below, beginning with those that completely absorb the rear radiation of the driver.

2. *Completely closed box woofer systems.* The infinite-baffle enclosure was popular through the mid-1950s. A true infinite baffle would isolate the front radiation of the driver from the rear radiation at the lowest operating frequencies. Since it has never been possible to build a baffle of infinite size, such an enclosure was always approximated using a box of manageable proportions. One common approach to building an infinite baffle was to mount the driver on the wall of a room, in which case the room at the rear of the loudspeaker became the enclosure and the room at the front of the driver became the listening room. Very large, stand-alone enclosures, which approximated infinite baffles, were built by a number of manufacturers during this era. Bozak was a leading proponent of such enclosures, exemplified by its B-310 loudspeaker system. The B-310 contained four 12-inch woofers housed in an enclosure with an internal volume of nearly 18 cubic feet. Electrovoice manufactured a loudspeaker system known as the Patrician, the second version of which contained a single 30-inch woofer in an enclosure of comparable size.

In 1949, Harry F. Olson and J. Preston received a patent on what they called the air-suspension loudspeaker. This configuration involved mounting a woofer in a small, sealed enclosure in which the air became part of the cone's suspension. The RCA LC-1 loudspeaker system was the first commercial product based on the Olson and Preston patent. It is important to note that the woofers used by Olson were not substantially different than those used in large infinite baffles or open-back enclosures; they had relatively stiff suspensions, with fairly high free-air resonant frequencies. When such drivers are placed in a small enclosure, the system resonance will be even higher than that of the driver in free air, resulting in relatively weak low bass, unless extremely large woofers are used.

One of the most significant developments in the history of the high-fidelity loudspeaker occurred in 1953 when American designer Edgar Villchur built his first acoustic suspension loudspeaker. What distinguished Villchur's loudspeaker from Olson's air-suspension design was the use of an extremely high compliance woofer. By itself, the high compliance woofer had a very low free-air resonance frequency of less than 15 Hz. However, when it was placed in a sealed box of less than two cubic feet, an initial low-frequency rolloff point of 38 to 40 Hz was achieved. The trapped air inside the small, airtight enclosure provided most of the support for the woofer cone, and served as a restoring force for the cone at frequencies near system resonance. In Olson's air-suspension designs, the compliance of the air inside the enclosure was greater than that of the driver's suspension. In an acoustic suspension loudspeaker the situation would be reversed, with

the compliance of the air being less than that of the driver suspension. Prior to the development of the acoustic suspension loudspeaker, a low frequency cut-off of 38 Hz was unheard of in such a small enclosure. One problem with acoustic suspension loudspeakers is their relative electrical insensitivity, or lack of what is commonly called efficiency. That is, more amplifier power is required for a given playback level than with most larger woofer systems. As a result, a trend toward higher powered amplification began in the late 1950s.

These small-box systems were commonly called "bookshelf" loudspeakers and their introduction played a major role in public acceptance of stereophonic recording. When high fidelity enthusiasts contemplated converting their monaural systems to stereo, adding a second enormous enclosure to their living rooms was, in most cases, an unwelcome prospect. The compact size of the acoustic suspension loudspeakers made installing a pair of them considerably more practical. The original formulas for acoustic suspension loudspeaker design were developed by Tony Hoffmann. In 1972 the mathematics of closed box loudspeaker design was analyzed and described by Richard Small in a series of landmark articles that formed the basis for most later designs.

3. *Bass reflex (vented) woofer systems.* The bass reflex loudspeaker uses a fully enclosed box, except for a port or vent that may be located on the back, side, or even the bottom with certain subwoofer designs, with the port area with the latter configuration kept above the floor by small feet on the enclosure bottom. Some of the back radiation from the woofer cone emerges from the port in phase with the front radiation, reinforcing the low frequencies. The first experiments with ported loudspeaker enclosures were performed by A.L. Thuras of Bell Laboratories in 1930. His model was based on the Helmholtz resonator. The Thuras patent application (1932) described the interaction of the driver and the port. Similar work was done in the early 1930s by Voight in England and Olson in the United States; then in 1937 Jensen introduced the first modern bass reflex loudspeaker system.

Early bass reflex woofer systems had inaccurate low-frequency performance by today's standards, and their excessive output at resonance made them often sound boomy. Nevertheless, they were extremely popular during the days of low power amplifiers due to their relatively high electrical efficiency. During the 1950s more precise mathematical models were developed by L.L. Beranek, Bart Locanthi, R.H. Lyon, and J.F. Novak. However, the modern vented loudspeaker was first portrayed by Australian A.N. Thiele in 1961. Thiele described vented loudspeakers in terms of their electrical equivalent circuits, and showed that it was possible to achieve a smooth low frequency response that was equivalent to an ideal electrical high pass filter.

Thiele's work did not receive wide attention until 1971 when his paper was reprinted in the U.S. Richard Small did much to enhance the work of Thiele, showing that the vented loudspeaker was a fourth order high pass filter, and that the filter could be adjusted for a wide variety of mathematically predictable response characteristics. He also showed the effect of enclosure losses on the performance of the loudspeaker system, and presented the mathematics for matching an enclosure design to a specific driver, using the driver's electrical and mechanical specifications. These driver specifications are now universally known as Thiele/Small parameters. Modern terminology refers to the bass reflex as the design type that preceded Thiele and Small, and to the vented loudspeaker as the type that followed their work. Vented designs characteristically roll off their outputs much faster below the lower resonance point than acoustic suspension designs, and their woofers are also more prone have problems with extremely low frequency subresonance inputs than sealed-box systems. It is possible, however, to configure vented systems to go very deep into the low-bass range, and subwoofers built by Hsu and SVS have proven that point.

4. *Passive radiator woofer systems.* This category of loudspeakers is related to vented designs. A passive radiator configuration actually contains two woofers, one with the usual, powered voice coil and magnet structure, and the other without. The passive driver is acoustically coupled to the active loudspeaker at low frequencies, and the passive driver contributes as much to the output at low frequencies as the vent does in a vented design. One advantage of passive radiator systems is the absence of wind noise and pipe resonances sometimes found in vented systems. Harry F. Olson received the first patent on these systems in 1935, and followed his original work with research published in 1954. He referred to the passive drivers as "drone cones." An early commercial proponent of passive radiator systems was Polk Audio, an American firm based in Baltimore. The Sunfire Corporation has also produced some high-output, small subwoofers using the design. Some of their systems employed multiple 6 1/2-inch active drivers with much larger passive units.

5. *Transmission line woofer systems.* The transmission line loudspeaker is a refined descendant of the Stromberg-Carlson acoustic labyrinth, which was invented by Benjamin Olney in 1936. The acoustic labyrinth is a long pipe into which the back radiation of the woofer is loaded. The length of the pipe is normally a quarter wavelength of the woofer's free air resonant frequency, which produces a pressure node at resonance, controlling the cone motion of the woofer. Since the labyrinth is a completely open pipe, except

LOUDSPEAKER

for a lining of fiberglass, a substantial amount of sound emerges from the end of the tube.

The modern transmission line loudspeaker was first described by A.R. Bailey in 1965 (Bailey 1965; Galo 1982). Although superficially resembling the acoustic labyrinth, the transmission line operates quite differently. A classic transmission line is completely filled with absorbent material, either long fiber wool or Dacron polyester. That damping material acts as an acoustic low pass filter, effectively increasing the length of the line as the frequency drops. At the lowest operating frequencies the woofer is mass-loaded by the air in most of the length of the line. This results in excellent woofer control at low frequencies. The transmission line is a theoretically nonresonant enclosure, and the internal pressures found in closed box designs are nearly absent in a well-designed system. In a classic transmission line, all of the back radiation from the driver is absorbed in the line, but some variations on this concept have made use of a portion of the back radiation. A negative side effect, as with reflex systems, is the relatively poor control of the woofer cone below the system cut-off frequency. The transmission line is probably the least scientific of all present-day loudspeaker enclosures, and there are no hard and fast formulas for determining line length and stuffing density. Recent research by Robert Bullock and Peter Hillman (Bullock 1986; Hillman 1989) has led to a more precise understanding of the transmission line, but designs are not as mathematically predictable as they are for closed and vented boxes. Since 1965 only a handful of commercial designs have employed transmission lines, their relatively large size and complex internal construction making them somewhat expensive and impractical. Among home loudspeaker builders they have attained a kind of cult status. Irving M. Fried is the best known commercial proponent of the transmission line, having marketed many such systems under the brand names of IMF and Fried Products.

6. *Aperiodic woofer systems.* The aperiodic loudspeaker is a closed box system that contains a vent stuffed with damping material. The stuffing, usually foam or fiberglass, provides a pressure release for the system at low frequencies. The term aperiodic literally means an absence of resonances at any specific frequency or multiples thereof. Aperiodic damping is defined as "damping of such a high degree that the damped system, after disturbance, comes to rest without oscillation or hunting" (Turner 1988). In a standard acoustic suspension system the trapped air in the box is quite reactive, or springy, at very low frequencies. The reactive nature of the air will cause excessive cone excursion at system resonance. Adding an aperiodic vent to the system releases internal pressure at resonance, resulting in better control of the cone

motion at very low frequencies. The aperiodic loudspeaker offers some of the performance advantages of the transmission line in terms of excellent woofer control and a reduction in internal pressure at frequencies near system resonance, but with enclosures much more manageable in size. It is important to note that no sound emerges from an aperiodic vent, so this design does not resemble a vented loudspeaker in any way.

The first patent on such a loudspeaker enclosure was issued in 1936 to Marvel W. Scheldorf, an engineer for RCA; he described his invention as an acoustic resistance device. Scandinavian firms have shown the greatest interest in this concept. In 1969 Dynaco Corporation introduced the model A-25, the first in a series of aperiodic loudspeakers made for them in Denmark by Seas. Another Danish firm, Dynaudio, has also been an advocate of aperiodic loading. For many years it manufactured a device called a Variovent, which contained tightly packed fiberglass stuffing held in place by a plastic grill and frame. A third Danish firm, ScanSpeak, has manufactured a similar device. Audio Concepts, an American loudspeaker manufacturer based in La Crosse, Wisconsin, has also produced loudspeakers with aperiodic loading.

7. *Horn-loaded loudspeakers.* Since the first acoustic phonographs appeared, horns have been used as acoustic amplifiers or impedance-matching device. A horn does this by coupling the relatively small surface area of the radiator to the large volume of air in the room, with the size of the mouth opening determining the low frequency cutoff for the horn. Horn shapes on acoustic phonographs made prior to 1925 were determined largely by trial and error. No mathematical procedures had been developed for determining the size and rate of expansion between the throat and the mouth, and the horns usually had very uneven frequency response. In 1919 the American physicist Arthur G. Webster received a patent for the first exponential horn. As the name implies, the cross-sectional area of the horn increases exponentially with distance from the throat, resulting in a more uniform frequency response. Webster's work failed to have an impact on the phonograph industry until 1925, when acoustical recording was abandoned in favor of the electrical process. The Orthophonic Victrola was the first commercial phonograph to incorporate an exponential horn. It was also the first to use a folded horn design. An exponential horn with low frequency response adequate for the reproduction of electrical recordings required a large mouth opening, and consequently had to be quite long. The folded horn reduced the size to manageable proportions.

The first experiments with horns coupled to dynamic loudspeakers were conducted by Rice and Kellog in 1925. Because of the very high efficiency of

horn-loaded loudspeakers, they were highly effective where large rooms had to be filled with a high volume of sound. This made them especially suitable for use in talking motion picture theaters, since the vacuum tube amplifiers available at that time had limited power output capability. Although horn systems were used extensively in theaters during the 1930s, their large dimensions made them impractical for home use, since woofer horns had to be quite large. That situation changed in the middle 1940s when American engineer Paul W. Klipsch invented the corner-horn woofer system, a complex folded design in which the walls of the room form the mouth of the horn. The Klipschorn loudspeaker in production today is still based on the original model, and it also uses a horn midrange and tweeter to fill out the remainder of the audible spectrum. (Klipsch was not the first engineer to advocate corner placement of loudspeakers. The first corner loudspeaker patent application was made by M. Weil in 1925, and his patent was issued in 1931.) Today, Klipsch is the only major manufacturer of home high fidelity loudspeakers that continues to advocate horn and corner-horn designs over all other types. However, due to their exceptionally high efficiency, horn systems continue to be the preferred loudspeakers for sound reinforcement and motion picture applications.

8. *Electrostatic loudspeakers.* Unlike the dynamic speaker, an electrostatic loudspeaker does not make use of electromagnetism. Instead, it uses a thin plastic sheet stretched over a rectangular frame as the vibrating diaphragm. The plastic sheet is coated with a conductive material, connected to a high voltage power supply that charges the diaphragm to a potential of several thousand volts negative DC. Suspended on either side of the plastic diaphragm are a pair of metal screens, called stators, to which the audio signal is applied. The output from the amplifier is connected, through a transformer, to the two screens, allowing it to interact electrostatically with the polarities of the signals on the screens. When the audio signal on the front screen is positive, the signal on the rear screen will be negative. The negatively charged diaphragm will be attracted toward the positively charged screen, and repelled by the negative screen. When the audio signal reverses polarity, the opposite will occur, with the diaphragm moving back toward the rear (positive) screen and away from the front (negative) screen.

As with the moving-coil systems previously discussed, the output from the two sides of the diaphragm will be out of phase with respect to each other, and because of efficiency requirements panels slated for bass-response duty are usually not installed in an enclosure. Consequently, there can be low-bass cancellation problems. How significant this can be will depend upon the size of the panel area, and how low in

bass the designer wants the system to operate. As a result, electrostatic panels that are slated for use as bass reproducers are usually very large, floor-standing arrangements. Smaller electrostatic elements, configured for midrange and high-frequency reproduction, are often used in conjunction with the large, bass panels, or even with dynamic woofer systems.

Indeed, the earliest electrostatic loudspeakers were small units used only for high frequency reproduction. They were normally used in conjunction with a conventional dynamic woofer forming a two-way package. During the 1920s there was a considerable amount of experimentation with electrostatic loudspeakers, particularly in Britain and Germany, but there were few commercial products. Among the first was the Kyle condenser loudspeaker, which was used by Peerless in a radio receiver introduced around 1930. The Automatic Musical Instrument Co. used one of the first electrostatic loudspeakers in a jukebox, also introduced in 1930. These early electrostatic speakers employed a single screen, in front of the diaphragm, and were enclosed at the rear. Hence, they were not dipoles. The first modern dipole electrostatic loudspeaker was the Quad, introduced in 1958 by Acoustical Manufacturing Co., Ltd. The following year KLH introduced the Model 9 electrostatic loudspeaker, with two tall dipole speakers held at a fixed angle by a pair of brackets. A stereo installation, therefore, required the use of four panels.

Because of the extremely low mass of the plastic diaphragm, electrostatic loudspeakers are capable of exceptional clarity and inner detail in the midrange and high frequencies. However, as has been noted, since electrostatic speakers often suffer from a lack of extreme low bass, many designs use a conventional dynamic woofer system, coupled to electrostatic elements for the midrange and high frequencies. Martin Logan is noted for building such systems.

A related category is the planar loudspeaker. It is nearly identical in radiation concept to an electrostatic, having a large, thin, vertically oriented plastic diaphragm as the vibrating element. However, planar speakers use conventional magnetic principles, and are, therefore, dynamic loudspeakers. Thin wires are embedded into the plastic diaphragm, forming the equivalent of a voice coil stretched out lengthwise. Magnetic strips are placed in the front and back of the diaphragm, where the stators would be in an electrostatic loudspeaker. Magnetic rather than electrostatic interaction causes the diaphragm to vibrate. Magneplan, a Minnesota firm, is the best-known manufacturer of planar-magnetic loudspeakers. Its first such speaker, designed by company founder Jim Winey, was the Magneplanar Tympani I of 1971. It contained three tall panels that operated as dipoles.

Most electrostatic and planar-type loudspeaker systems have their driver elements arranged vertically or in vertical arrays, allowing the system to behave as a tall "line source." In some larger systems the tall, narrow driver or array of drivers may reach nearly from floor to ceiling. In a 1986 paper presented at the 81st Audio Engineering Society Convention, mathematician Stanley Lipshitz showed that the acoustic radiation of line-source speaker systems of finite length could exhibit significant direct listening field anomalies at midrange and treble frequencies, because the total surface area of the tall line could not be the same distance from a point receptor like the ear. Therefore, since large-panel systems are nearly always going to put the listener predominantly in the direct listening field, rather than in the reverberant listening field, where the signals will blend to an average, comb-filtering artifacts will exist. Nevertheless, many audio enthusiasts still strongly prefer the sound of such systems.

9. *Multi-way loudspeakers.* As early as 1925, Rice and Kellogg realized that the very large loudspeakers suitable for low frequency reproduction were far from optimum for reproducing the midrange and high frequencies. Their first multiway system, developed that year, consisted of three horn-loaded drivers, each dedicated to a limited portion of the frequency spectrum. There was little practical use for such a system until the sound motion picture industry was formed, since most early electric phonographs and radios used single drivers to cover the entire available range. In 1934 Shearer and Hilliard built the first modern two-way horn loudspeaker system for the MGM studios in Culver City, California. James B. Lansing also built such systems.

Until the late 1950s, multiway systems for home use employed either small direct radiator cone drivers for the midrange and treble (a direct radiator is a loudspeaker that radiates directly into the room, without any horn loading to improve efficiency), or cone drivers with horns attached. Then, in 1958, Edgar Villchur introduced the first commercially viable dome tweeter, bringing several advantages over the cone drivers previously used, not the least of which was increased efficiency and power handling for the size of the radiator. In addition, because of its physical shape, the dome was more rigid than the cone, resulting in less distortion at high frequencies. In addition, the small size of the dome (typically one inch or less in today's systems) results in much wider dispersion at high frequencies, giving a uniform frequency response in a large number of listening positions. By the mid-1960s, dome drivers had also become common for midrange reproduction, although cone designs continue to be popular into the 1990s and beyond with many designers. In the early 1970s, Roy

Allison designed a variant on the dome tweeter that exhibited even wider dispersion characteristics.

Today's high performance multiway dynamic loudspeaker systems usually employ small dome drivers as tweeters, and either dome or cone drivers for the midrange. Dome drivers are typically manufactured as sealed, self-contained units, and do not require the construction of any enclosure. Cone midrange drivers, typically four to five inches in diameter, but sometimes larger, are not sealed at the rear and will normally require some kind of subenclosure that can be incorporated into the complete system. Subenclosures for midrange drivers can be either closed, aperiodic, or vented boxes, depending on the driver used and the preference of the system designer. Transmission line loading, though less popular, has also been used effectively with midrange loudspeakers.

Multiway loudspeaker systems require the use of a combination of filters that together form the crossover network. In a two-way system, a low-pass filter feeds the low frequencies to the woofer and a high-pass filter sends the high frequencies to the tweeter. A three-way system contains both of these filters, plus a band-pass filter to feed the middle portion of the frequency spectrum to a dedicated midrange driver. The earliest multiway crossover networks were based on the theories of Bell Telephone Laboratory engineers G.A. Campbell and O.J. Zobel. Their crossovers were known as constant-K and M-derived designs, in which each filter section was designed individually, matching electrical impedance to the other sections. The constant-K and M-derived filters were replaced by Butterworth filters in the 1950s. Butterworth filters, using calculus-based network theory, were designed as a whole, allowing simpler and more precise matching of the filter sections.

A crossover that uses filters rolling off at the rate of six decibels per octave outside of the passband (first order, 6dB/octave) yields minimum phase response across the entire spectrum, but this rate of attenuation is not sufficient to ensure low distortion with many drivers. In 1971 Richard Small indicated that a 12dB/octave roll-off was the minimum necessary in order to reduce driver distortion. Since the 12dB/octave (second order) crossover has both amplitude and phase problems, at least in the direct listening field, many engineers in agreement with Small's premise have sought higher rates of attenuation. Siegfried Linkwitz introduced the 24dB/octave (fourth order) all-pass crossovers in 1976. Known as Linkwitz-Riley crossovers, they have received wide acceptance, particularly with subwoofer systems, due to their symmetrical vertical radiation pattern.

The effects of improper time alignment between crossover-controlled speaker elements were analyzed

in 1956 by C.P. Boegli. Time alignment of the drivers in a multiway system has become a concern of some speaker-system manufacturers during the past two decades, particularly high-end designers like John Dunlavy. However, there is no consensus today among loudspeaker engineers as to the relative importance of flat amplitude response versus time alignment of drivers and minimum-phase response across the audible spectrum. Nor is there consensus on which type of crossover roll-off characteristic is best, with excellent sounding systems making use of a variety of different crossover designs. Every loudspeaker system is the result of compromises, and every engineer has a preference regarding which compromises to make.

The personal computer has revolutionized loudspeaker design during the past decade, and is now considered an essential tool for loudspeaker engineers and manufacturers. A large quantity of software has been written for both crossover and enclosure design, bringing sophisticated loudspeaker design within the reach of the nonmathematician, while enabling those who are mathematically inclined to work in a fraction of the time that would otherwise be required. With an appropriate interface card and software, the computer can also function as a test and measurement system. The Maximum-Length Sequence System Analyzer (MLSSA), developed and marketed by DRA Laboratories, is an example, and has become a de facto standard for loudspeaker measurements.

The authors wish to express their gratitude to C. Victor Campos for providing a large quantity of unpublished historical information on the acoustic suspension loudspeaker. [Badmaieff 1966; Bailey 1965; Borwick 1988; Bullock 1986; Dickason 1987; Eargle 1977; Galo 1982; Hillman 1989; Linkwitz 1976; Olson, H. 1947; Olson, H. 1954; Small 1972; Small 1973; Thiele 1971; Turner 1988; Villchur 1965; White 1987.]

REV. HOWARD FERSTLER

LOUDSPEAKER IMAGING

In studios and home-listening rooms, particularly as it relates to traditional two-speaker stereo, it is the ability of those speakers to form a realistic sound stage up front, with precise instrumental and/or vocal localization. In fact, imaging is often more dependent upon recording techniques than speaker system design or listening-room acoustics, and it remains important even with multichannel, surround-sound audio technologies.

See also **Head-Related Transfer Function (HRTF); Sweet Spot; Stereophonic Recording**

HOWARD FERSTLER

LOUISIANA FIVE

One of the pioneer jazz groups, active in 1918–1920. Members were Alcide Nunez, clarinet; Charlie Panelli, trombone; Joe Cawley, piano; Karl Berger, banjo; and Anton Lada, drums (and leader). They recorded for Emerson in December 1918, making five sides; the first was “Heart Sickness Blues” (9150). In 1919 they continued with Emerson, and also made three Edison Diamond Discs (beginning with “Foot Warmer” and “B-Hap-E”: 50569, also on Blue Amberol cylinders 3843, 3789). There were also some Columbias and Okehs; then the group returned to Emerson for its final sessions, in December 1919 and January 1920. Rust says that a Lyric record of September 1920, although carrying the Louisiana Five identification, was “almost certainly... made by a different personnel.” [Dethlefsen 1991 has a photo of the group, p. 56; Rust 1969.]

LOUISIANA PHONOGRAPH CO.

A New Orleans firm established ca. 1891 as one of the affiliates of the North American Phonograph Co. The company took an independent stance, and not only leased business machines but sold cylinders and phonographs, leased coin-ops, and made records for sale. In 1891 it was making about \$500 a month from each coin-op on location. The firm’s own records featured Paoletti’s Southern Band, performing marches, waltzes, polkas, and the like. And there was a series of “Brudder Rasmus Sermons” delivered by Louis Vasnier (“very humorous,” stated one advertisement, and “faithful reproductions of a dusky style of pulpit oratory that is rapidly passing away”). H.T. Howard was president of the firm in 1891–1893.

LOUNGE MUSIC

Lounge originated in prosperous 1950s suburbia; it was not so much an identifiable musical style as it was a soundtrack to the swinging lifestyle enjoyed by corporate junior executives and upwardly mobile young couples. Their music had to conducive to social functions such as formal dinners, informal backyard barbecues, card games, and pool parties. It had to be upbeat, but — as background music — not too much of a distraction. It had to be a comfortable fit for people of various backgrounds attempting to fit in, while exuding a veneer of sophistication (e.g., smoothed-over exotica manufactured from countless world music traditions) in tune with one’s choice of attire, car, and domicile.

The most popular strains of lounge in the post-World War II decade included the suave mood music of Jackie Gleason and Mantovani; the Latin-tinged pop of Perez Prado and Xavier Cugat; the ethnic exotica of Yma Sumac, Les Baxter, and Martin Denny; and the stereo



Kitschy lounge music album issued by Capitol in the late '50s. Courtesy Frank Hoffmann

band music recorded to capitalize on the panoramic range of this newly-emerging medium. The latter category was best exemplified by the hit recordings of Enoch Light and the Light Brigade, whose *Persuasive Percussion* (Command 800; 1960; #1 13 weeks; gold record) unleashed a long string of percussive audio effects LPs. In addition to stereo, these artists — and the countless imitators they spawned — played a key role in popularizing the record album configuration.

The more serious tone of the late 1960s signaled the demise of such patently frivolous fare. However, the nostalgia boom of the late 1980s fueled a revival of interest in lounge, or “space-age bachelor pad music,” as it was sometimes termed. A host of designer record labels specializing in the genre sprang up, including Velvetene and Leisure Lab (a subsidiary of BMG). In addition to reissuing the material of obscure artists from lounge’s first wave (e.g., Esquivel), these companies introduced new acts such as Combustible Edison, Semi-Gloss, and Velvetene Monster. Since the early 1990s, lounge music has been sufficiently prominent to merit its own section in high-volume record stores. Furthermore, many websites have arisen devoted to the style, its history and culture, often including audio samples.

FRANK HOFFMANN

LOVIN' SPOONFUL

Founded by singer/songwriter John Sebastian and lead guitarist Zal Yanovsky, the New York-based Lovin’

Spoonful evolved from playing jug band music to folk rock prior to its first release, the Top 10 hit “Do You Believe In Magic” (Kama Sutra 201; 1965). Due to first-rate musicianship and Sebastian’s extraordinary composing skills, the band’s records — dubbed “good time music” by the music press — were consistent bestsellers between 1965–1968. During that span, the Spoonful released eight hit albums — including the soundtracks to Woody Allen’s *What’s Up, Tiger Lily?* (Kama Sutra 8053; 1966), and Francis Ford Coppola’s *You’re a Big Boy Now* (Kama Sutra 8058; 1967) — and charted 13 singles, most notably “Daydream” (Kama Sutra 208; 1966), “Did You Ever Have To Make Up Your Mind?” (Kama Sutra 209; 1966), and “Summer In the City” (Kama Sutra 211; 1966; #1).

Bad publicity surrounding the arrest of Yanovsky and bassist Steve Boone for drug possession in 1967 resulted in waning popularity and the dissolution of the group the following year. In 1968, Jerry Jester replaced Yanovsky in the band for their final album, *Everything Playing* (Kama Sutra 8061). Drummer Joe Butler formed a new edition of the Spoonful for a final album in 1969 without Sebastian. The resulting album sold poorly, however, and Butler moved on to Broadway acting and sound editing in Hollywood. Boosted by his Woodstock Festival performance, Sebastian enjoyed a moderately successful solo career. His “Welcome Back” (Reprise 1349; 1976), the theme song for TV’s *Welcome Back Kotter*, reached number one on *Billboard’s Hot 100*.

The original group members reunited to perform “Do You Believe in Magic” in the Paul Simon film, *One Trick Pony* (1980). Boone, Butler, and sometime member Jerry Yester began touring as the Spoonful in 1991. Sebastian recorded sporadically through the 1980s and 1990s as a solo artist, and then formed his own John Sebastian Jug Band in the late 1990s along with Geoff Muldaur and other survivors of the blues and folk revival of the 1960s. The Spoonful was inducted into the Rock and Roll Hall of Fame in 2000, performing one song during the ceremony. [Romanowski and George-Warren 1995.]

FRANK HOFFMANN

LOWE, CHARLES P.

American vaudeville and concert performer on xylophone and bells. He recorded widely in the 1890s and early 1900s, beginning with the New Jersey Phonograph Co. in 1892. Between 1896 and 1900 he made 28 xylophone cylinders for Columbia, beginning with “Home, Sweet Home” (#12,000), and including a variety of pieces such as “Carnival of Venice,” “Charleston Blues,” and “Cordelia Polka.” He started

with Victor in September 1900 with "Carnival of Venice" (#V-205) on the xylophone, and continued with the label to November 1904, making a total of 35 records. Lowe also worked for other labels until he quit recording in about 1905. [Brooks 1979.]

LP RECORD

SEE LONG-PLAYING RECORD

LOWE, MALCOLM

SEE KLH CORPORATION; KLOSS, HENRY; STOCKHAM, THOMAS

LUBINSKY, HERMAN

SEE SAVOY RECORDS (LABEL)

LUBOFF, NORMAN (14 MAY 1917–22 SEP 1987)

Norman Luboff was born in Chicago, Illinois. He grew up in that area during the peak of radio, the 1930s-1940s, and got his musical start in Chicago singing and writing for radio advertising. Luboff put together small groups for recording gigs and kept honing his arranging/composing skills. He moved to southern California in 1948 at the age of 31, signing with Warner Brothers to begin writing film scores for some of their projects. By the mid-1950s he had moved into an inner circle of Hollywood talent so that he knew the best studio singers and instrumentalists. Luboff was ready to begin his professional career as founder-arranger-leader of the Norman Luboff Choir. At first the group did back-up choral effect for singing "stars," but they soon joined the first ranks with one of their earliest and most memorable albums, *Songs of the West* (Columbia 657; 1955). The Luboff arrangement of "Oh, Bury Me Not on the Lone Prairie" soon became a mainstay for glee clubs, male choruses, and male quartets.

In 1964 Luboff showed his broad range of stylistic skills as they brought out their album *On the Country Side* with favorites such as "Your Cheatin' Heart," "Tennessee Waltz," and "You Are My Sunshine." He always seemed comfortable with stylistic variety, moving easily from show biz, to Latin pop, folk, blues, sacred or drinking songs. He avoided showy effects for more substantial elements such as tone quality, shadings, diction, and blend. In later years, he kept busy with his publishing company, Walton, and his new specialty: Scandinavian choral music. He and his singers are remembered for their ultra-smooth mellowness

well suited for soft, sentimental songs. Luboff was active until his death due to cancer in 1987.

VAL HICKS

LUCKY 13 PHONOGRAPH CO.

A New York firm. It was established in 1915, as manufacturer of the Cleartone and Lucky 13 lines of disc players, in 33 different models. Advertising in *TMW* continued through November 1919. The company may have changed its name to the Cleartone Phonograph Co. in 1920, which manufactured equipment and issued records on the Cleartone label (see separate entry).

LUDGATERECORDS (LABEL)

A British record issued from 1921 to 1924, offering dance and popular music. The owner was Dollond and Co., Ltd., a very old scientific optics firm. Records were drawn from the stock of the Universal Music Co., Ltd., which held the Gennettmatrices that had belonged to Invicta Record Co., Ltd. (Invicta had exchanged certain matrices with the Starr Piano Co.), and Vocalion material that had come through the Aeolian Co., Ltd., and then the Vocalion Gramophone Co., Ltd.

FRANK ANDREWS

LUDWIG, ROBERT (1944–)

One of the most important mastering engineers in the recording business, Ludwig graduated from the Eastman School of Music, in Rochester, New York, in 1966, earning a bachelor of music degree. He also holds a master of music degree from Eastman in performance (trumpet) and music literature. While at Eastman he was an announcer at a commercial classical radio station, worked in the school's recording department, and did independent recording. Later, he played principal trumpet with the Utica Symphony Orchestra. His big recording-business break occurred when Phil Ramone, who directed Eastman's first recording workshop, hired Ludwig to work at his studio, A&R Recording, in New York. While working there, he learned the art of mastering, with Ramone as his mentor. Later, he moved to Sterling Sound shortly after it's incorporation and became vice president. After seven years at Sterling, Ludwig moved to Masterdisk Corporation where he was vice president and chief engineer. In January 1993 he opened his own business, Gateway Mastering Studios, in Portland, Maine.

Ludwig has mastered 13 RIAA Diamondaward albums and countless gold and platinum records, won numerous *Pro Sound News* mastering awards and

LUNCEFORD, JIMMIE

won *Mix* magazine's TEC award for "Creative Achievement, Mastering Engineer" 10 times. In addition, he has personally won the TEC award 10 times, and his company, Gateway Mastering and DVD has won the TEC award for mastering studio work five times. He was also the first person to be honored with the Les Paul award for "...individuals who have set the highest standards of excellence in recording and sound production over a period of many years." In 1997, Ludwig's mastering studio was the first in the world to offer DVD authoring, and they were also the first to be able to create DVD-Audio 0.9 spec discs. Gateway is a complete authoring facility doing DVD video, audio, graphic design, and state-of-the-art video compression. Ludwig is a member of SPARS and NARAS, was active in the New York section of the Audio Engineering Society, and was a past chairman of the New York section. He has been the keynote speaker at the SPARS BizTech convention in Chicago, and has been a panelist or guest speaker at SPARS (New York, Chicago, and Montreal), and at consumer electronic shows, NARAS, Society of Broadcast Engineers, MPGA, Audio Engineering Society, the RIAA, and many other conferences. He has been a guest lecturer at State University of New York campuses in Purchase and Fredonia, as well as at the University of Connecticut, the Institute of Audio Research in New York City, the University of Miami, the University of Massachusetts at Lowell, the University of Southern Maine, Full Sail School for Recording Arts, and many times at Berklee College of Music in Boston. He has also been a guest instructor at McGill University, the Banff Centre for Performing Arts, and the University of Iowa. He has written numerous technical articles for professional magazines and has often been interviewed in consumer audio magazines. Feature articles on Ludwig and his studio have appeared in the *Portland Press Herald*, *USA Today*, *The New York Times*, and the *Associated Press* wire for 1,500 newspapers nationwide. Ludwig is listed in *Who's Who in Finance and Industry*, *Who's Who in the East*, and *Who's Who in Entertainment*.

HOWARD FERSTLER

LUNCEFORD, JIMMIE (6 JUNE 1902–12 JULY 1947)

American jazz saxophonist and big band leader, born James Melvin Lunceford in Fulton, Missouri. He learned the saxophone, trombone, flute, and guitar as a youth, and performed while attending Fisk University. In 1929 he organized his own band. The ensemble benefited from Sy Oliver's arrangements in 1933–1939, and created a powerful swing effect.

Willie Smith led the reed section, and Oliver led the trumpets. The band had an important Cotton Club engagement in 1934, gaining acclaim for the hot style of numbers such as "White Heat" (Victor 24586; 1934), and Lunceford's theme song, "Jazznocracy" (Victor 24522; 1934). Lunceford had made two Victor sides earlier, in Memphis in 1930,; but 1934 marked the start of his long series of regular recordings. He was one of the early Decca artists, making hits with "Organ Grinder's Swing" (#908; 1935), and "Margie" (#1617; 1938). In 1939 the band recorded for Vocalion, then in 1940 for Columbia. They were back with Decca in 1941, at the peak of their popularity, then declined in public interest, along with most of the big bands, after the World War II. Lunceford died in Seaside, Oregon.

LUNDVALL, BRUCE (1935–)

Born in Englewood, New Jersey, Lundvall has been a leading producer and label executive in jazz music for more than four decades. After attending college, Lundvall served in the army and then joined Columbia Records in July 1960. He became vice president of marketing for the label in 1969, vice president and general manager of the Columbia Label six years later, and then, in 1976, president of Columbia's U.S. label. He signed many key jazz performers to Columbia during this period, including Return to Forever, Wynton Marsalis, and Dexter Gordon. In 1982, Lundvall joined Elektra to found the new Elektra/Musician label for jazz acts, signing Bobby McFerrin, Woody Shaw, and Bill Evans. A year later he was made president of the newly formed Elektra/Asylum/Nonesuch label group. In 1984, EMI invited him to run the revived Blue Note label as well as to create a new R&B/jazz label, Manhattan. He signed Natalie Cole and rock/pop singer Richard Marx to Manhattan, and Bobby McFerrin, Dexter Gordon, and Dianne Reeves, among others, to Blue Note. In 1988, Lundvall was named East Coast manager of Capitol Records and president of Blue Note, as well as heading his own Metro Blue label in the Capitol group. In addition, Lundvall has held several key positions in industry organizations and been honored with many awards for his years of service to jazz and the music industry. Recent Blue Note signings include Cassandra Wilson and Don Byron.

CARL BENSON

LUNIVERSE RECORDS

Luniverse Records was formed in 1956 by two struggling songwriters, Bill Buchanan and Dickie

Goodman. Unable to sell their songs to established artists, they came up with an audio collage that recreated the radio drama "The War of The Worlds" — only as a comedy record.

Their record, "The Flying Saucer," featured Goodman as a mobile reporter asking people about what they would do if a Martian landed on earth. Buchanan was heard on the disc as a title-mangling disc jockey (allegedly based on Alan Freed). The only other components of the record, apart from Goodman and Buchanan, were snippets of popular songs, their lyrics clipped out of context and popular songs of the time. One of the biggest novelty hits of 1956, "The Flying Saucer" also became the first song to "sample" other artists' work.

Originally, Buchanan and Goodman planned to call their record company Universe Records. But when they discovered another Universe Records existed, the parodists marked an "L" on more than 2,000 45-rpm and 78-rpm records that had already been pressed, and Luniverse Records was born.

Many of the artists, labels and publishing companies whose work appeared in "The Flying Saucer," eventually sued Buchanan and Goodman for claims of copyright infringement. The magistrate hearing the case, Judge Henry Clay Greenberg, sided with Buchanan and Goodman, writing in his decision: "The defendants [Buchanan and Goodman] artfully and cleverly have devised interesting novelty records which make use of portions of records of successful performers under exclusive contract with the plaintiffs and others... the court is not able to determine whether or not the defendants have exceeded the bounds of permissible fair competition."

Buchanan and Goodman eventually released two other snippet discs, a self-parody called "Buchanan and Goodman on Trial," and a commercial snippet record called "The Banana Boat Song (Day-O)." But by 1957, Bill Buchanan left the partnership to pursue other interests. Dickie Goodman continued to make snippet records under the Buchanan and Goodman name, teaming with WMCA radio personality Paul Sherman for songs like "Santa and the Satellite," and "Flying Saucer Goes West."

Luniverse also licensed recordings made by the Del-Vikings before the group's song "Come Go with Me" became a major hit. While the Luniverse Del-Vikings album, *Come Go with the Del-Vikings*, does feature an early version of "Come Go with Me," is notable in that the lineup featured on the album jacket's front cover consisted of current members of the band, many of whom did not sing on the original early tapes. Original pressings of *Come Go with the Del-Vikings* have eight songs; pirated copies have 10 or 12 songs.

Luniverse ceased operations in 1959. In 1997, Jon Goodman (Dickie Goodman's son) resurrected the label, reissuing the Del-Vikings album and his father's comedy records on a series of CDs.

CHUCK MILLER

LYNN, LORETTA (14 APR 1935—)

Thanks in part to the popular biopic, *Coal Miner's Daughter* (1980), based on her best-selling autobiography, Loretta Lynn is the best known female vocalist in country music history. This recognition, however, is also a byproduct of her lengthy run as a hit-making artist. Furthermore, she wrote many of her classic recordings despite little formal education.

Born Loretta Webb in rural Butcher's Hollow, Kentucky, at age 13 she married 19-year-old Oliver "Moonshine" Lynn. The couple moved to Custer, Washington, where Loretta had four children by age 17. While helping to fill the family coffers by doing other people's laundry and sometimes picking strawberries with migrant workers, she began writing songs using a Sears, Roebuck, and Co. guitar. Her husband advised her to turn professional, arranging dates in local performing venues as her manager.

Lynn recorded her first song, "Honky Tonk Girl" (Zero 1011; 1960), for the California-based Zero label as an 18-year-old. Lynn and her husband promoted the disc by visiting country radio stations across the nation; as a result, it reached number 14 on the country charts. Shortly thereafter, in October 1960, she appeared on the *Grand Ole Opry* for the first time; she would be invited on as a full-time performer in 1962. In the meantime, she became a touring member of the Wilburn Brothers Show from 1960 to 1968 and secured a recording contract with Decca Records.

Following her first Top 10 country song, the Owen Bradley-produced "Success" (Decca 31384; 1962; #6), the hits came at sporadic intervals. However, Lynn was rarely off the charts for the next two decades following the release of the classic "Don't Come Home A'Drinkin' (With Lovin' on Your Mind) (Decca 32045; 1966; #1). Other number one singles included "Coal Miner's Daughter" (Decca 32749; 1970; #83 pop), "After the Fire Is Gone" (Decca 32776; 1971; #56 pop; with Conway Twitty), "Louisiana Woman, Mississippi Man" (MCA 40079; 1973; with Conway Twitty), and "Out of My Head and Back in My Bed" (MCA 40832; 1977). Her down-home demeanor, uncompromising treatment of themes vitally important to her fans, and plaintive vocals have earned her the title "Queen of Country Music."

Lynn became a pop culture phenomenon when her autobiography, written with the assistance of *New York*

LYNNE, JEFF

Times reporter George Vecsey, *Coal Miner's Daughter*, was one of the Top 10 selling books of 1976. The 1980 film version starred Sissy Spacek, who earned an Oscar for best actress on the strength of her performance (which included singing the Lynn songs appearing on the soundtrack). Lynn's mainstream popularity was further cemented by a series of network TV appearances, including *Fantasy Island*, *The Dukes of Hazzard*, and *The Muppet Show*.

Lynn is now an institution within the Nashville Establishment. She was the first female artist to win the Country Music Association's entertainer of the year award (1972), and has won both the CMA female vocalist of the year and vocal duo of the year awards on three different occasions. She is also the owner of various successful business ventures, including the entire town of Hurricane Mills, Tennessee, her current place of residence.

FRANK HOFFMANN

LYNNE, JEFF

SEE *ELECTRIC LIGHT ORCHESTRA (ELO)*

LYNYRD SKYNYRD

One of the leading exponents of southern rock, Lynyrd Skynyrd melded the country blues roots of their native region with the free-form jamming pioneered by British bands such as the Cream, Traffic, and Free. Although most identified with Ronnie Van Zant's gritty, soulful vocals, the group also help popularize — along with regional compatriots the Allman Brothers — the triple-pronged lead guitar format.

The band's beginnings can be traced back in 1966, when Van Zant formed the Jacksonville, Florida-based My Backyard, whose personnel included guitarists Gary Rossington and Allen Collins, drummer Bob Burns, and bassist Larry Junstrom. Initially attempting to create an American version of the Rolling Stones, Van Zant shifted his focus after hearing the Allman Brothers's music. Taking the name of a school gym teacher who had harassed them over their long hair (with slight modifications to avoid legal complications), Lynyrd Skynyrd — augmented by the additions of former Strawberry Alarm Clock guitarist Ed King, pianist Billy Powell, and bassist Leon Wilkeson, who replaced Junstrom — caught the attention of music industry entrepreneur Al Kooper. He signed them to his MCA-backed Sounds of the South label and produced their debut album, *Pronounced Leh-nerd Skin-nerd* (MCA 363; 1973; #27). The work — powered by such AOR-friendly cuts as the blistering guitar showcase, "Free Bird," the earthy working-class anthem, "Simple Man,"



Lynyrd Skynyrd in an eerily appropriate album cover. Courtesy Frank Hoffmann

and the barroom rave-up, "Gimme Three Steps" — established Lynyrd Skynyrd as a redneck alternative to the Allmans's hippie image. However, follow-up albums — including *Second Helping* (MCA 413; 1974; #12), *Nuthin' Fancy* (MCA 2137; 1975; #9), and *Gimme Back My Bullets* (MCA 2170; 1976; #20) — revealed the band to be a patchwork of contradictions; the reactionary polemics of "Sweet Home Alabama" (MCA 40258; 1974; #8) served as a contrast to the anti-gun song, "Saturday Night Special" (MCA 40416; 1975; #27), and "The Ballad of Curtis Lowe," a moving tribute to a Black bluesman.

Lynyrd Skynyrd was abruptly disbanded following a 20 Oct 1977 tour plane crash that claimed the lives of band members Van Zant, and Steve and Cassie Gaines. The recently released LP, *Street Survivors* (MCA 3029; 1977; #5), was reissued with a cover that removed the flames surrounding the band photograph (the original artwork remains highly collectable). Most of the remaining personnel formed the Rossington-Collins Band. Lynyrd Skynyrd reformed in 1987 (featuring lead vocals by Ronnie's brother, Johnny, formerly of 0.38 Special) for a memorial tour that was documented by a live album, *Southern by the Grace of God* (MCA 8027; 1988; #68). The band got together again on a permanent basis in 1991, touring and releasing albums on a regular basis. For those feeling that the contemporary edition lacks the intensity of former group, MCA has issued a steady stream of retrospective material.

FRANK HOFFMANN

LYRADION MANUFACTURING CO.

An Indiana firm, located in Mishawaka. It marketed a radio-phonograph console, wired for its own receiver or for Westinghouse receivers, in 1923. *TMW* reported the firm had declared bankruptcy in April 1924.

LYRAPHONE CO. OF AMERICA

An American firm, first advertising as the Lyraphone Co., New York, in 1915. In July 1917, by then renamed Lyraphone Co. of America, it had offices in New York with a factory in Brooklyn. It was located in Newark, New Jersey, from August 1919 to early 1921. With the acquisition of the American Piston Ring Co., Lyraphone moved part of its operations into that firm's factory in New York, in May 1921. The company produced three labels, Lyraphone, Lyric Record, and Lyric. It also sold a circular gramophone with a rubber tone arm.

Lyric Records were announced in July 1917, vertical cut, in 10- and 12-inch sizes. A thousand titles were available by September, including material in 17 languages. Most of the offerings were popular songs and dance music, but there were some classical items. Mario Rodolfi sang "E lucevan le stelle" on #7102. And in 1919 the president, M.J. Samuels, announced that the visiting Sistine Chapel Quartette (from the Sistine Choir of the Vatican) would record for Lyric Records.

Around 1919 the label name was changed to Lyric, and the record label was redesigned. It was identified as lateral cut.



The Lyric label was issued by the Lyraphone Co. from about 1917–1920. Courtesy Kurt Nauck/Nauck's Vintage Records

A Canadian factory opened in Toronto in April 1920. Another label, Lyraphone, was introduced ca. 1921, using Paramount material. On 24 Oct 1921 Lyraphone went into receivership, but operations continued for some time. [Rust 1978.]

LYRIC (LABEL)

Records made to order by Estella Mann's Lyric Phonograph Co., New York, the principal performers being her Lyric Trio, in 1898. Other offerings included band and violin selections, and talking records by Harry B. Norman.

See also Lyraphone Co. of America

LYRIC MALE QUARTET

The name taken for certain Edison Diamond Disc recordings by the Shannon Four.

LYRIC QUARTET

A mixed vocal group that recorded for Victor in 1906–1918. Members were Harry Macdonough, tenor; Elise Stevenson, soprano (replaced by Olive Kline in 1910); Corinne Morgan, contralto (replaced by Elsie Baker in 1910); and Frank C. Stanley, bass (died in 1910; replaced by William F. Hooley or Reinald Werrenrath). There were 38 numbers by the quartet in the 1917 Victor catalog, displaying their varied repertoire. "Asleep in Jesus" (#17389), "Gloria" from Mozart's 12th Mass (#31589), "My Bonnie Lass She Smileth" (#18146), and "You're in Love" (#18260), are among the selections. Most of the records were still listed in the 1922 catalog, but all had been cut out by 1927.

LYRIC RECORD (LABEL)

SEE LYRAPHONE Co. OF AMERICA; LYRIC (LABEL)

LYRIC STREET RECORDS

An imprint of Walt Disney Records that focuses on popular country acts, founded in the late 1990s. Important artists include SHEDAISY, Aaron Tippin, and Rascal Flatts. [Website: www.lyricstreet.com.]

CARL BENSON

LYRIC TRIO (I)

A mixed vocal group that recorded for several cylinder labels from ca. 1898. It was perhaps the first recorded

LYRIC TRIO (II)

trio with a female voice. Original members were Estella Louise Mann, mezzo-soprano; John C. Havens, tenor; and William F. Hooley, bass. Cylinders were made for the Babson Brothers Co., Chicago, ca. 1898 (listed in their 1899 catalog), then for Columbia ca. 1899. Later, the group worked for Edison (as the Original Lyric Trio), Berliner, Victor (1900–1901), and others to ca. 1901. Singers on the first Victors were Grace Spencer, Harry Macdonough, and Hooley. While most of the material performed was light opera and popular material, the trio did venture into grand

opera; for example, Edison #7385 was a trio from *Faust*. [Brooks 1979.]

LYRIC TRIO (II)

A male group that recorded for Columbia in 1914–1915, unusual in having only high voices. Members were Will Oakland, countertenor, and Albert Campbell and Henry Burr, tenors. Two of their numbers were “Dear Love Days” (#39467; 1915), and “Everything Reminds Me of that Old Sweetheart of Mine” (#39468; 1915).

