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SME: Invitation to Music Listeners

See Page 25





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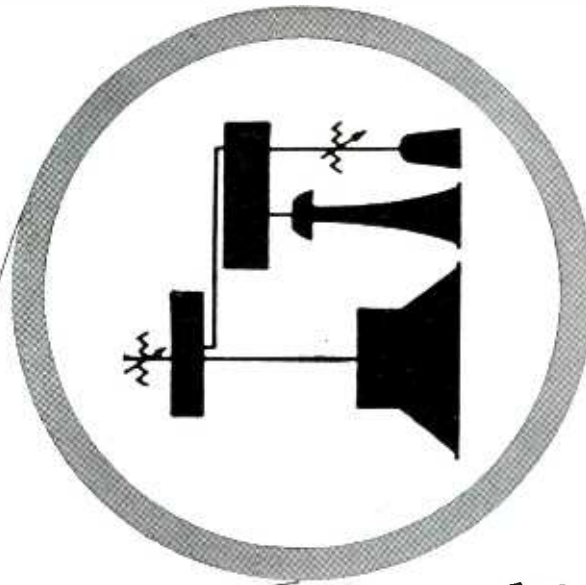
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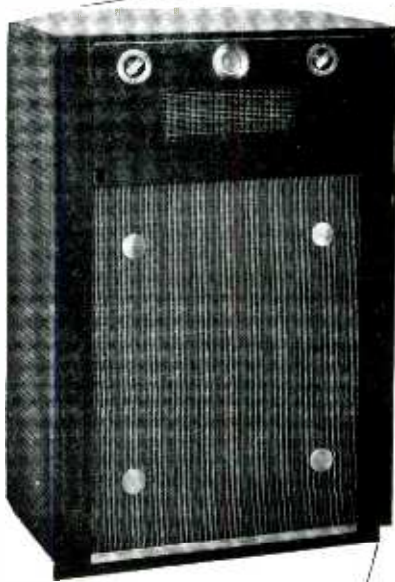


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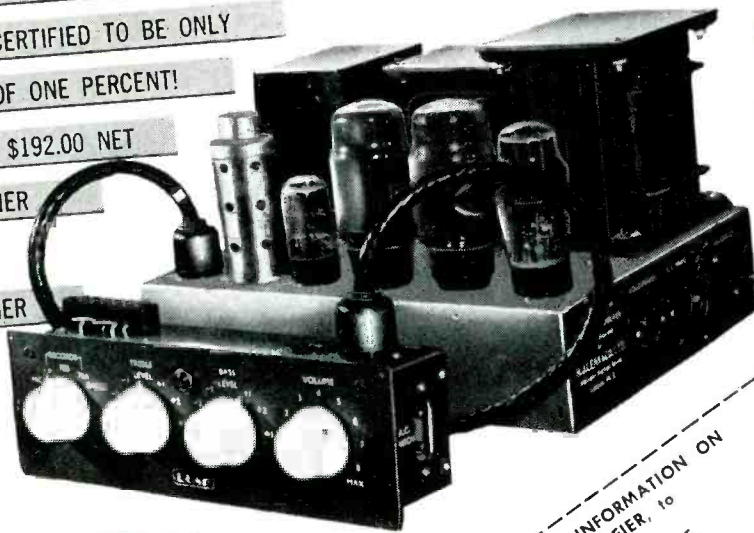
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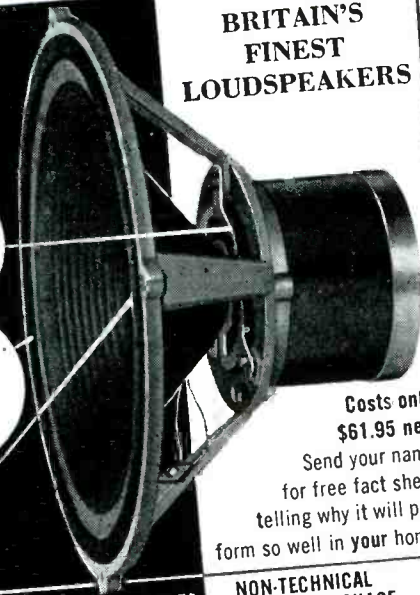
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Aluminum voice coil... extended range without "peaking"

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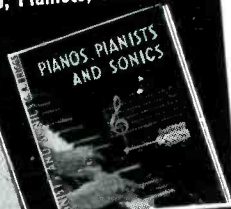
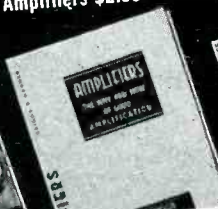
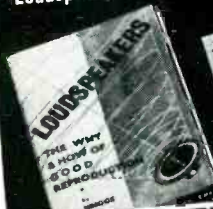
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**HEAVY DRIVE SHAFT:**

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Drive shaft for 33 1/3 rpm and 45 rpm is heavy, thus obtaining more consistent quality at critical low speeds. Wows and wavers eliminated.

**TRIPLE SPEED SWITCH:**

Speed changes are clearly marked, easily made. The RC-80 plays 33 1/3, 45 and 78 rpm. Records are placed on the player and simple settings made. Action is then completely automatic, including automatic shut-off after last record of any size.

**CONVENIENT START-STOP-REJECT LEVER:**

Start, stop and reject lever are combined and located conveniently away from tone arm.

**PUSHER TYPE PLATFORM:**

Adjusts simply to 7"-10"-12" records regardless of diameter or size of spindle hole. No record changing mechanism has been developed to equal the performance of the precision pusher platform. For records with standard center holes, the pusher platform is the only method that gives positive guide record operation.

**PULL-AWAY IDLER WHEEL:**

Avoids flattening or drive wheel when changer is not operating.

**AUTOMATIC STOP:**

Insures positive and unfailing action at end of any type record.

**BALANCE-MOUNTED TONE ARM:**

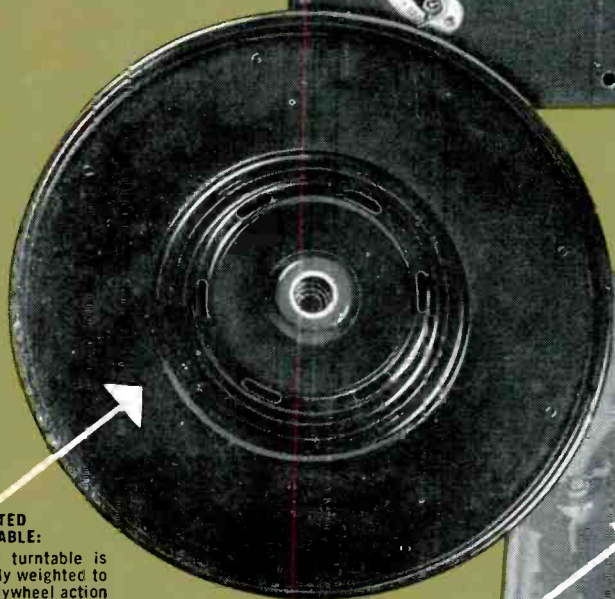
Parallel lift tone arm construction guarantees true tangent tracking. Disturbing resonance eliminated.

**INTERCHANGEABLE PLUG-IN HEADS:**

Carefully engineered to accommodate user's choice of crystal or magnetic cartridges for standard and micro-groove reproduction, such as Astatic, Pickering, Audak and GE twist models.

# GARRARD

## WORLD'S FINEST RECORD CHANGER



**WEIGHTED TURNTABLE:**  
RC-80 turntable is heavily weighted to give flywheel action so that any variations in the drive motor are not reflected in record reproduction. No turntable rumble.

**HEAVY DUTY SILENT 4-POLE MOTOR WITH ABSOLUTELY NO RUMBLE:**

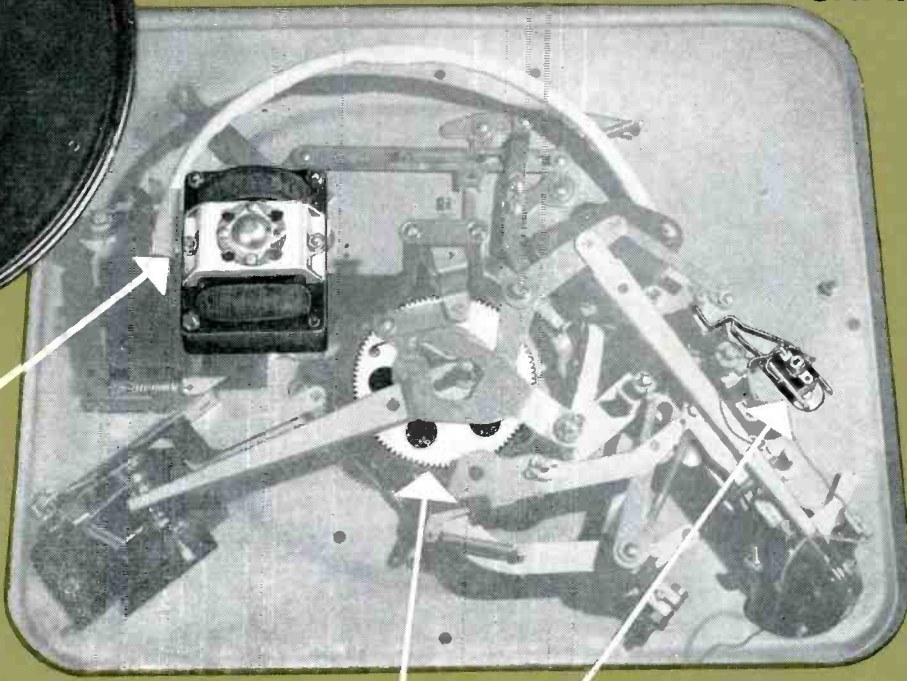
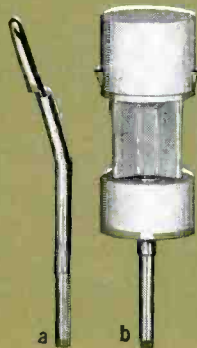
Speed maintained throughout a wide variation in line voltage. There is no appreciable speed variation operating unit "cold" with a full load or "hot" with one record, regardless of weight, thickness or diameter of records.

**IMPORTANT!**

Only a 4-pole motor can assure no hum when used with sensitive magnetic pickups.

**TWO INTERCHANGEABLE SPINDLES:**

Easily inserted, the two Garrard Spindles accommodate all records as they were made to be played. (If user prefers one spindle can be used throughout simply by plugging center hole of 45 rpm records.) a: Typical Garrard spindle for standard center holes. b: Easily inserted wide spindle, for 45 rpm records, remains stationary when record is played. Only a small collar revolves, assuring longer center hole and record wear.



**PRECISION GROUND GEARS**

Perfectly meshed to insure constant smooth action and years of service.

**MUTING SWITCH:**

No sound while changer operates on run-in or run-off grooves. Continuity of music undisturbed by noises.

**WATCH-LIKE CONSTRUCTION**

All parts are precision made, fastidiously assembled and simple to adjust.

A complete stock of replacement parts is readily available to all Garrard owners.

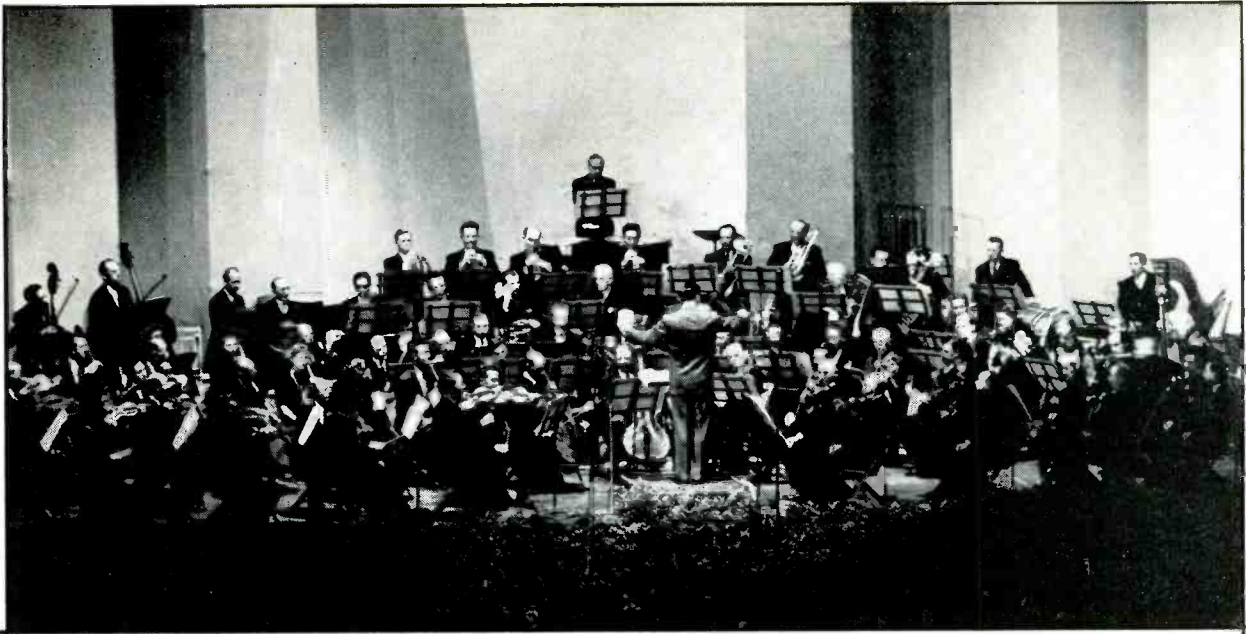
For an excellent description of what to look for in a record changer, we recommend the section devoted to changers in the new book "High-Fidelity Simplified", published by John F. Rider.

ON DISPLAY AT THE AUDIO FAIR • GARRARD RECORD CHANGER • MANUAL RECORD PLAYER MODEL M • STYLUS PRESSURE GAUGE • LEAK "POINT ONE" AMPLIFIER AND PRE-AMPLIFIER • WHARFEDALE LOUDSPEAKERS—5", 8", 10", 12" • KT66 TUBES • R-J SPEAKER ENCLOSURES: SINGLE BOOK SHELF MODEL, DOUBLE BOOK SHELF MODEL, FLOOR MODEL.

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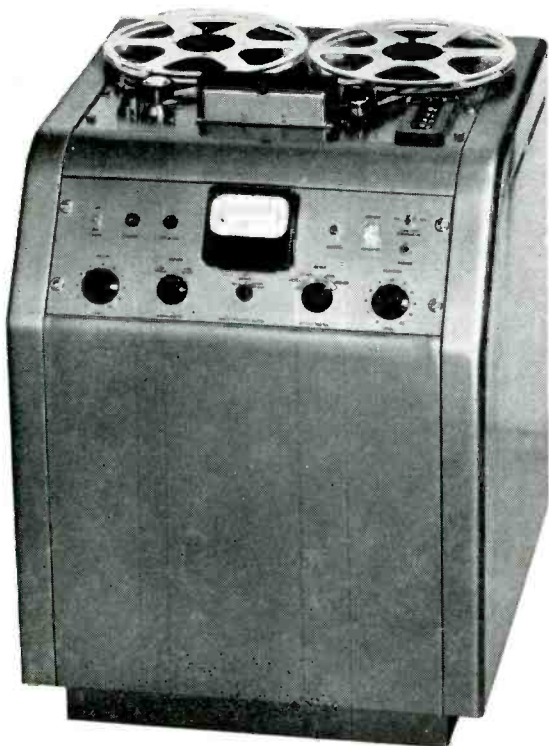
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\* Perfect fidelity is possible — but like tone it is achieved only on a fine instrument. For the conservatory or school, an AMPEX can record and reveal every gradation of improvement as a pupil develops firmness and tone — or as a band, orchestra or choir attains unity and brilliance. The utter realism of the sound is its inspiring quality and its value.

\* *Perfect fidelity — AMPEX reproduces sound perfectly within the perceptive range of the human ear.*

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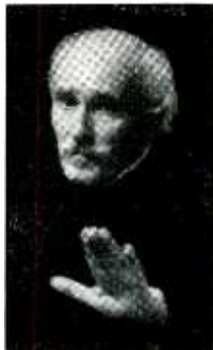
# AMPEX

**MAGNETIC RECORDERS**

AMPEX ELECTRIC CORPORATION • 934 CHARTER STREET • REDWOOD CITY, CALIFORNIA



ON THE COVER



this issue is the man who probably should be called *phonography's* Man of the Year. In his own 86th year, Arturo Toscanini has played 23 recording dates with the NBC Symphony. At least one of them lasted nine hours. Among works he put on tape were eight major symphonies. Apart from the fact that this would be a taxing schedule for a man a half-century younger, there has been general agreement among his musicians and listeners that, at 85, the Maestro is better, deeper and more daring in his interpretation than he ever was. RCA Victor recently released some of his 1951-52 recordings, notably the Beethoven First and Ninth Symphonies, the Prokofieff "Classical" and the Brahms Fourth. Others already taped will be forthcoming and there is no indication that Toscanini intends to stop making new ones. This year may well see a Beethoven *Missa Solemnis* or a Brahms *Deutsches Requiem* from his baton. The Maestro, who once despised recording as a medium, now takes great interest in it, thanks in part to the phenomenon called high fidelity, which has invaded the Toscanini household in major force. Indeed, the Maestro, like lesser mortals, has even been heard bragging of his equipment.

**Next Issue.** The softer the material of which a record is made, the harder should be the stylus which plays it — otherwise it will lose its polished smoothness and start gouging the grooves. Thus, when vinyl plastic, softer than shellac, began to dominate recording, everyone began to talk of diamond styli. Everyone knew diamonds wore better than, say, sapphires or precious metal tips, but not just how much better. One writer claimed a 10 to one advantage, another 100 to one. Next issue Maximilian Weil, president of the Audak Company, who has been making phonograph tone-heads since many of us were in knee-breeches, presents the findings of a study of diamond styli which ranges back ten whole years. If it doesn't finally settle the diamond question, for the customer trying to decide which stylus will save him money, nothing will.

**Branch Offices (advertising only):** NEW YORK, Room 1209, 6 East 39th Street. Phone: MURRAY Hill 5-6332. Fred C. Michalove, *Eastern Manager*. CHICAGO, 426 North Pine Avenue. Phone: COLUMBUS 1-1779. Charles Kline, *Western Manager*. LOS ANGELES, 1052 West 6th Street. Phone: MICHIGAN 1732. Edward Brand, *West Coast Mgr.* Published by: AUDIOCOM, INC. at Great Barrington, Mass. Tel. Great Barrington 1300.

HIGH-FIDELITY is issued bi-monthly in January, March, May, July, September and November. Single copies \$1.00—Subscription rate: \$10.00 for three years, \$5.00 for one year in the U. S. A., its Possessions, and Canada. In all other countries: \$6.00 for one year, \$13.00 for three years.

Editorial contributions will be welcomed by the Editor. Payment for articles accepted will be arranged prior to publication. Contributions will be neither acknowledged nor returned unless accompanied by adequate postage, packing, and directions, nor will HIGH-FIDELITY Magazine be responsible for their safe handling in its office or in transit.

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# High-Fidelity

THE MAGAZINE FOR MUSIC LISTENERS

Volume 2 Number 3

November-December 1952

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CHARLES FOWLER, Editor

JOHN M. CONLY, Associate Editor

MILTON B. SLEEPER, Publisher

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# AS THE EDITOR SEES IT

ACCORDING to custom, this should be a significant editorial. It is the time of the year — Audio Fair time — when it seems to be expected of editors that they shall contemplate with nostalgia the past, summarize succinctly the amazing present, and forecast (with accuracy?) the even more amazing future.

Unfortunately, perhaps, we derive a certain enjoyment from *not* doing what is expected of us. Hence we resolved not to write a significant editorial. But, since all people are not as perverse as we (the editorial *we* certainly makes for peculiar sentence structure, doesn't it? . . . another custom we shall have to break sometime) we cast around for a valid excuse for not being significant.

Which leads us to wonder, what *is* significant about "Audio Fair Time"? Why has the end of October been accepted as the end of the fiscal year of audio-dom?

That shows you how customs get started, how times change without people being aware.

Some years ago there was held in New York City an exhibit of audio equipment to which the public was cordially invited and which it cordially attended, somewhat en masse. The following year, the shindig was repeated and attended by the public, considerably en masse-r. The year after that, it was done again and was bigger and better than ever. Somewhere in this process the feeling crept in that Audio Fair Time in New York City was the completion of a cycle, a significant moment, the end of a fiscal (or something) year.

Now, New York is a remarkable and influential place. If it completes a year, then one tends to take for granted that the rest of the world completes a year. What is significant in New York is equally so the world 'round.

It comes as an unpleasant surprise to find that in our search for an excuse for being insignificant, we are in danger of becoming significant. For in thinking about the question, what is significant about Audio Fair Time, we find that we are thinking about the wrong thing — and that in insignificance is significance, alas!

Because *New York* Audio Fair Time is no longer a world phenomenon, but a local one. Certainly, an all-important event locally, but during the past months, there have been equally exciting gatherings of hi-fi equipment, duly attended by great globs of the public, in a dozen cities throughout the Country. For instance, just as this is being written, Philadelphia audiophiles are glowing with the success of their second audio show, which drew an attendance somewhere around the 4,000 figure.

We do not want our subscribers and friends in New York to think that we would belittle their show; anything which attracts 15,000 people is most decidedly important. But we would rather have them think on what they have, quite literally, started. We would like them to generate a little glow over the fact that this time of the year is no longer special except in New York, that the phenomenon of high fidelity is no longer an East Coast hot house plant, but a fantastically healthy growth which spans the continent and even the oceans.

LET US now turn our attention to matters which may indeed become highly significant: binaural sound, tape, and disks, the last-mentioned being discussed for the first time, by Emory Cook, in this issue, page 33.

There has been much ado during the past year about binaural sound, as recorded and reproduced from tapes. Though more and more audiophiles have tape equipment at their disposal, the size of the potential market is questionable because of the cost of the necessary reproducing equipment. Binaural disks, on the other hand, call for a relatively small expenditure, particularly if an extra amplifier and speaker have been left over from a previous system.

Just what the future may be for binaural sound is open to debate. As a matter of fact, our Associate Editor and we have (. . . now, *that* is the straw that breaks the editorial camel's back; let's start that sentence over) John Conly and I have spent a good deal of time discussing the matter and can come to no firm conclusion because so much depends on the attitude of record and equipment manufacturers. We do agree that binaural disks could well become of major importance and be *the* way to record and reproduce music in the reasonably near future.

Or, the whole idea can fizzle after a brief flash of interest on the part of the inveterate-experimenter group.

It depends on whether manufacturers decide to look upon binaural as a promotion stunt or as a serious step forward toward enjoyable listening. Only time can finally answer that question, but while time is taking its course, we at HIGH-FIDELITY will do all we can to help readers achieve the added enjoyment possible through binaural tapes and disks.

C. F.



the superb

# Patrician



“—no other speaker system offered such cleanliness of sound over so long a range.”

*“It (the PATRICIAN) is paramount primarily by the excellence of its balanced frequencies: no other speaker-system offered such cleanliness of sound over so long a range. It trumpets a vibrant vitality of timbre altogether unique in the reproduction of music.”\**

The Electro-Voice Klipsch PATRICIAN drew this unreserved commendation from Mr. C. G. Burke of The Saturday Review, recognized authority on High-Fidelity sound reproduction, as the result of critical tests he conducted before a “jury” of 26 audio-philés and manufacturers.

With its unique, separate, 4-way system, the PATRICIAN provides a sweep and brilliance of reproduction that is unsurpassed. No other speaker system produces such low inter-modulation and transient distortion. *“It is the finest system manufactured regardless of price,”* owners report.

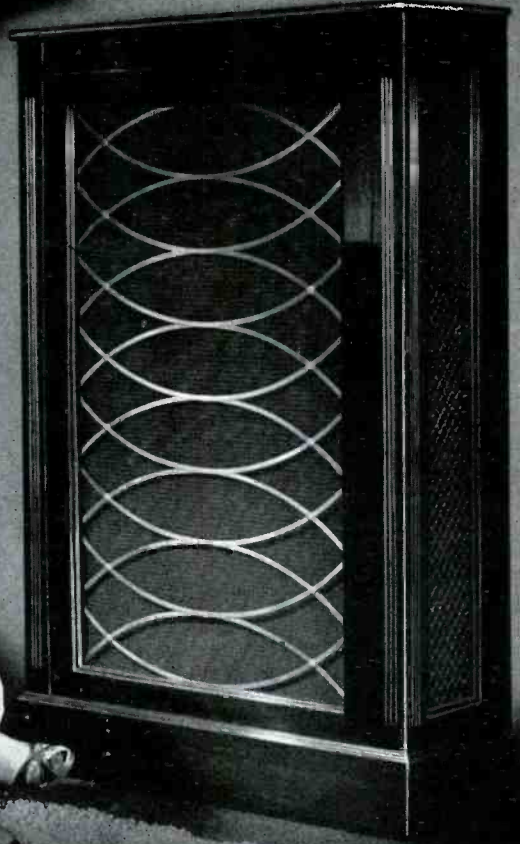
The PATRICIAN utilizes a scaled-up version of the Klipsch “K” type reproducer, housing an 18-inch E-V low-frequency driver (18WK) designed for the first three octaves, to 200 cps. A 12-inch E-V driver unit (Model 12W) takes over from the first crossover at 200 cps., to 600 cps. This bass driving section is the largest, most highly developed now available.

From 600 to 3,500 cps. the PATRICIAN uses the T25 E-V midrange driver which exhausts into a 600-cycle cellular horn. It permits fullest transmission of music in the vital “presence” range—imparting to the listener the same exciting aural adventure as that experienced in the concert hall. Only the PATRICIAN gives this range maximum scope with a special driver unit.

Octaves from 3,500 cps. through those extending beyond the range of human hearing, are reproduced by two high-frequency drivers (E-V Models T10 and SP-8BT) which complement each other for maximum efficiency and clarity.

Each driving unit in the PATRICIAN receives only those frequencies for which it was designed, through the E-V Model X2635 4-way crossover network.

Since the PATRICIAN will be played at sound levels acceptable in the living or music room, E-V has developed in this instrument a reproducing characteristic which augments tones between 3,000 and 6,000 cps., offsetting human ear discrepancy at low sound pressures. The result is a naturalness of reproduction unparalleled in the art.



The PATRICIAN is made of finest hardwoods with hand-rubbed finish in either Mahogany or Blonde Korina veneer. Grill cloth is “bronze” Lumite with Mahogany finish and “ocru” with Korina finish.

DIMENSIONS: 60" H x 41" W x 29½" D  
WEIGHT: 400 lbs. net, 470 lbs. shipping  
PRICE: List, \$1,212.50; Audio-ophile Net, \$726.50

\*Page 208, The Saturday Review Home Book of Recorded Music and Sound Reproduction.  
†Licensed under Klipsch Patents No. 2310243 and No. 2373692.

## Electro-Voice Inc.,

425 Carroll Street, Buchanan, Michigan

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ONLY THE  
**Collaro**  
 INTERMIX 3/522  
 HAS ALL THESE  
 HIGH FIDELITY

FEATURES:

- Intermixes 10 and 12 inch Records at All Speeds.
- Steady, Constant Speeds — No Rumble or Wow.
- Weighted, Rubber-matted, Rim-driven Turntable.
- Four Pole Motor with Self-aligning Oilite Bearings.
- No Hum Pickup.
- Molded Rubber Drives—No Belts to Slip or Replace.
- Stylus Pressure Adjustment — Tracks at as little as 3 grams.
- Absolutely Jam-proof Operation.
- Automatic Muting Switch.
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- Automatic Shut-off after Last Record.
- Tone Arm Clamp for Portable Applications.

Base Dimensions: 14 3/4" x 12 1/4"  
 Depth Below Base: 2 1/2"

LIST PRICE \$65.00

Audio engineers and audio enthusiasts all agree that the quality of any sound reproducing system is the sum total of all of its components units. One weak link in the chain dooms the entire system to mediocrity.

In a record reproducing system, the record changer is the first consideration. If high fidelity is to be attained, the record changer should be the finest obtainable.

Consider the COLLARO. The COLLARO Intermix 3/522 was planned for perfection, and was engineered to the most exacting quality standards. It is truly the high fidelity record changer, and the perfect complement to any high fidelity system.



Model 3/522  
**Collaro**  
*Fully Automatic* INTERMIX  
**3-SPEED**  
**RECORD CHANGER**  
 FOR 7, 10, AND 12 INCH RECORDS

Model 3/521 Fully Automatic  
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 LIST PRICE \$54.50

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 for High Fidelity Record Reproduction

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## AUTHORitatively Speaking

In the 32 ivory colored pages of our Records and Music Section this issue are three new names which will recur there frequently and are worth noting: Emma Dickson Sheehy, David Randolph and James Hinton.

Emma Dickson Sheehy spends most of her time teaching graduate students at Teachers College, Columbia, (mostly teachers themselves) how to interest children in music, wherein she has had long classroom experience herself. As well as articles touching on this subject in *Mademoiselle*, *Today's Woman*, *Science Illustrated* and *Better Living*, she has written one book, *There's Music in Children* (Henry Holt), co-authored another, *At Home With Children*, and is at work on a third. She is record reviewer for *Parent's Magazine*. Her initial effort for HIGH-FIDELITY, a guide to shopping for children's records, begins on page 62.

A man people love to write to is David Randolph who has received more than 26,000 letters since 1946, when he began, on New York's municipal radio station, WNYC, a program called *Music for the Connoisseur*. (Among his fans: Clifton Fadiman, Alec Templeton, Deems Taylor, Louis Untermeyer.) Young Mr. Randolph has served as commentator and/or script writer, at one time or another, for almost any major musical network broadcast series you care to name. He also writes record reviews for *Better Living* magazine, gives concert-lecture series with The Little Orchestra Society, New York, (sold out for 1952-53), guest-conducts the Desoff Choir and directs his own group, the Randolph Singers. The latter have made three Concert Hall Society and two Westminster LP's. In his spare time, Randolph produces educational films, teaches conducting at the Dalcroze School and — as of this issue — reviews records for HIGH-FIDELITY.

Spring before last, James Hinton, Jr. began a review for *Musical America*: "In 20 years of hearing performances of *Il Trovatore* . . ." Then he crossed it out; it looked silly. The fact is, he heard his first *Trovatore* when he was 8, which makes him 29 now, and something of a prodigy. At least, he began his writing career in places where most American typewriter-flailers would be pleased to end theirs — at the *New Yorker* and the *New York Times*. From the latter he migrated to *Musical America* as an associate editor, then became managing editor. A Georgian, raised in a musical family, he had an early yen to be a singer. In fact, he was a singer, till his teens impinged and his voice changed (into something horrid to hear, he explains), practically forcing him to become a critic. At that, he is probably the only music critic in the nation who has been able to supplement his income by giving tennis lessons (he calls this living off two rackets at once). His newest racket: writing for HIGH-FIDELITY a column entitled *In One Ear*, p. 65, and reviews of records relevant to one of his two major addictions: opera. His other addiction: peanut butter sandwiches. J. C.

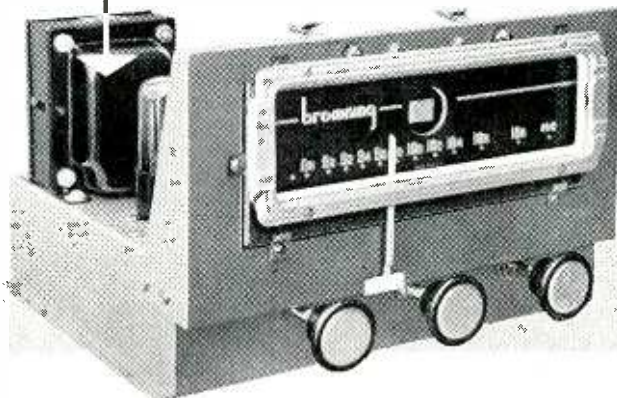
# Browning

announces

the new

## RV-31 FM TUNER

for those who expect the exceptional



Browning FM and FM-AM tuners have long been recognized as the choice of outstanding audio engineers, when the utmost in performance is demanded. So when we improve them, we can honestly say that we are *adding virtues* rather than correcting faults.

### Here's what has been added:

- New, all-triode RF section, for extremely low noise level.
- Higher sensitivity — 3 microvolts for 20 db. quieting, instead of more than 6 microvolts as before. This is desirable in fringe areas and in noisy urban locations.
- Cathode follower output stage, to feed any high-fidelity amplifier at low impedance. For those "remote" installations, this will minimize hum difficulty and high-frequency loss through cable capacitance.
- Power outlets at the rear of the chassis, for convenience in making connections to amplifier and turntable.
- A newly designed edgelifghted dial in modern style, with knobs and escutcheon in black and silver.

And here's what has been kept: true Armstrong FM circuit — selectable AFC, which can be switched out at will — drift-free operation without AFC — sensitive tuning indicator, for precision tuning with AFC switched out, and quick tuning using AFC — audio inputs for phono, TV, and recorder, for selection by a panel switch and connection to the audio amplifier — self-contained power supply — small dimensions (6½" x 11" x 9") for easy mounting in limited space.

Ask your distributor of high-fidelity sound equipment for a demonstration. And read the discussion of Browning tuners in HIGH FIDELITY SIMPLIFIED, by Harold D. Weiler — available at all sound studios.



**BROWNING**  
Laboratories, Inc.  
Winchester, Mass.

ENGINEERED FOR ENGINEERS



**W**hether you plan to build a complete home music system or simply desire to replace a presently inadequate amplifier in your custom installation or console radio-phonograph, don't miss your chance to hear a Bell masterpiece in action.

Bell radio-phono amplifiers are designed with *you* in mind. Completely functional in every respect, they are versatile enough to fit any custom installation . . . flexible enough to match perfectly with all other high fidelity components. Inputs, outputs, and the like are readily accessible and clearly labeled. Multiple convenience power outlets on the amplifier chassis allow you to control your complete system with one master power switch.

You may choose Model 2145-A, with its near-magic remote control; or Model 2200, with its advanced compensating and record equalization features; or Model 2122-B, more versatile than many more costly units. In any event, if it's Bell — it's the best! See your dealer or write today for free Bulletin 52-7.

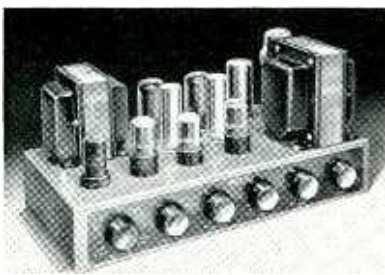
## **BELL HIGH FIDELITY AMPLIFIERS**

*-a complete line - in power, price or preference*



**Model 2122-B**

A popular, low-priced model with inputs for radio, crystal pickup, and two magnetic pickups, selected by three-position switch. Separate bass, treble, and volume controls give full selectivity of tone for best performance. Output: 10 watts at less than 3% distortion, with peak of 15 watts. Frequency response plus or minus 3/4 db, 30 to 15,000 cycles.



**Model 2200**

Superlative quality in a medium-priced unit. Power output 20 watts at less than .3% distortion — peak power, 35 watts. Frequency response plus or minus 1/2 db from 20 to 20,000 cycles. Seven inputs. Equalizer switch for all types of records; separate, continuously variable bass and treble; and compensated volume control afford unequalled listening pleasure.



**Model 2145-A**

An all-triode, 100% feedback amplifier of laboratory quality, coupled with an attractive remote control unit that gives you armchair selection of phono or AM-FM radio and full control of tone and volume. Six inputs — two AC outlets. Frequency response plus or minus 1/4 db from 20 to 30,000 cycles. Less than .2 of 1% distortion at 10 watts. Peak power: 30 watts.



### **BELL SOUND SYSTEMS, Inc.**

555-57 MARION ROAD, COLUMBUS 7, OHIO

Export Office: 401 Broadway, New York 13, N. Y.



## Noted with Interest

### In Memoriam

Subhead on this item should be along the lines of: Here lieth C, O'ercome in battle dure by upstart K. Further elucidation might indicate that the battle was alphabetic and phonographic, for it has to do with how one spells a common synonym for a phonograph record.

It seems that left-handed people spell it disc, whereas right-handed ones spell it disk, the left and right handedness being related to the position of the C and the K on the typewriter keyboard. So far, HIGH-FIDELITY has been left-handed. We have been under considerable pressure to become right-handed, but probably would not have succumbed had it not been for the following contribution, penned in an ebullient moment by writer-critic (and right-handed) C. G. Burke:

The Odor's Stale  
or  
Whisc Away the Musc

Editor! The nagging pencil on your desc Meseems intent to masc a portion of my tasc,

Pervert my spelling smugly by an arabesc.

Alone a casc has given me the nerve to asc —  
(That is, a flasc therefrom of whiscy)  
lets me risc

The gnashing tusc, the duscly wrath  
where does not basc

An editorial clemency: What's wrong with disk?

We have put on a minor search for support for our left-handed attitude, but without success. The dictionary, usually one of our best friends, set us back with this brief comment: "Disc n. 1. disk."

We shall endeavor to accept defeat in a sportsmanlike spirit, and will henceforth spell it "disk". Readers are asc'd to bear with us, however, and not get diskouraged if an okkasional disc kreesps in for the next kouple of issues. Habits are hard to breac.

### Ailing but not Dead

It certainly does seem, at times, as if there were forces at work to kill off the high fidelity broadcasting medium, FM. FM has been beset by bad luck and bad timing, or both, a score of times. Nevertheless, it keeps on going, and its many battles for survival seem to strengthen rather than weaken it.

All the same, we noted with a grunt the following item, in the September 15th issue of *Advertising Age*:

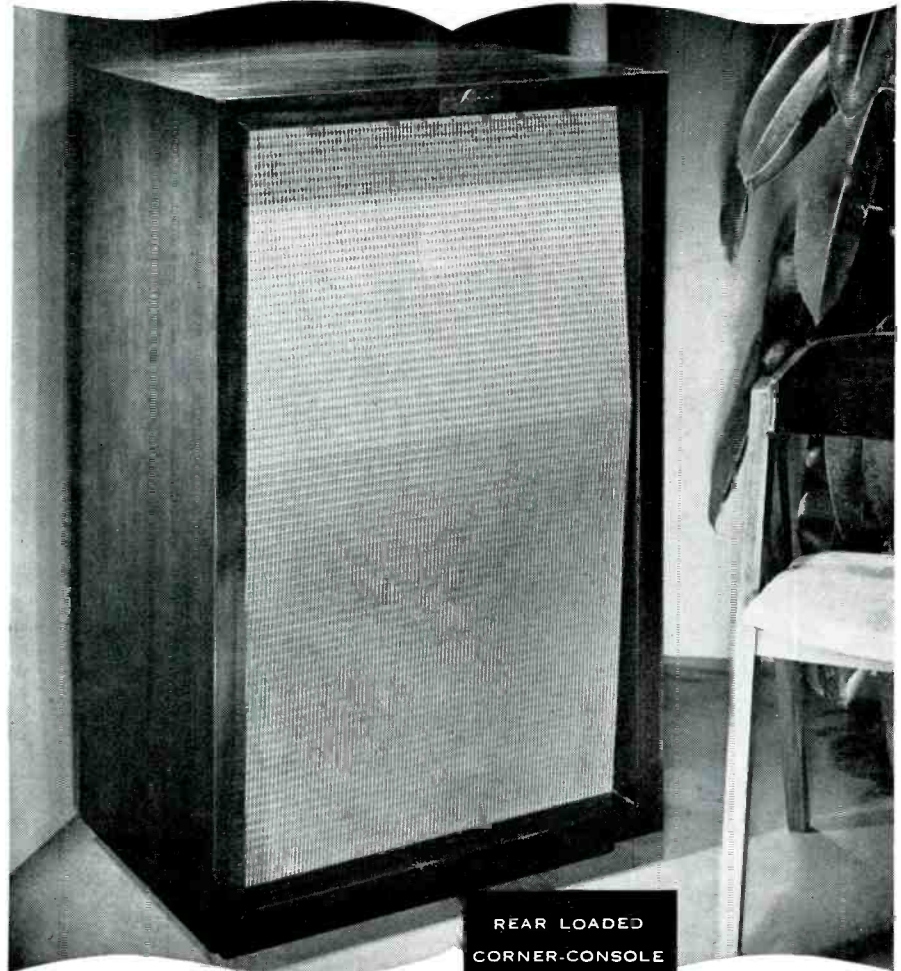
"PHILADELPHIA, Sept. 10—Plans for an FM set promotion drive here in October were abandoned today when radio distributors said they would not be able to cooperate.

"The drive was to be patterned on FM promotions previously conducted in North Carolina, Wisconsin and the District of Columbia under sponsorship of local groups, the National Assn. of Radio and Television Broadcasters and the Radio-Television Manufacturers Assn.

*Continued on page 13*

# Incomparable!

these 2 magnificent new enclosures by Jim Lansing



REAR LOADED  
CORNER-CONSOLE  
ENCLOSURE

Available in Mahogany, Piqueverna blond and Unliiy gray.

## Exquisitely Designed

and finished all over, this versatile enclosure can be used against a flat wall or as a corner enclosure.

A 6' true exponential horn and large mouth opening give full, uniform reproduction of the low frequencies. When

used with the Jim Lansing two-way speaker system, the smooth, more even highs produced by the Koustical Lens,

make this a truly outstanding unit.

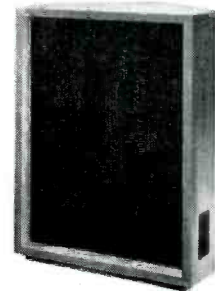
A single D130 speaker may also be used, since the cone speaker operates as a direct radiator above the acoustic crossover.

See and hear these truly incomparable speakers at your audio dealers today.

# Jim Lansing

JAMES B. LANSING SOUND, INC.

2439 FLETCHER DRIVE, LOS ANGELES 39, CALIFORNIA



FULL FRONT-LOADED  
CORNER ENCLOSURE

The two basic methods of loading loud speakers on the low end have been incorporated in this magnificent horn enclosure in a unique way. Both low frequency units are fully and uniformly loaded to well below 35 cycles. The uniform full-base response is blended smoothly into the higher frequencies with the revolutionary Jim Lansing Koustical Lens.



"The Revere Tape Recorder has given the truest reproduction of my voice I have heard. It is a remarkable instrument."

*Elena Nikolaidi*

**ELENA NIKOLAIDI**—brilliant contralto from Athens, has been acclaimed "the finest singing voice since Flagstad." As singer for the Metropolitan Opera, soloist on the concert stage, and recording artist with the Columbia Symphony, Miss Nikolaidi has opened a new realm of artistry, possessing exceptional range, flawless tone, and unique dramatic abilities. Prior to her New York debut in 1949, she was protegee of Bruno Walter, and famous throughout Europe for her performances with the Vienna Opera.



## Famous Artists Choose Revere Recorder

Great musical artists rely on the Revere Tape Recorder for rehearsing their performances—knowing it records with maximum fidelity... with the clean highs and clear lows of life itself. They hear their performances *exactly* as their audience will hear them! Why not follow their example and use the Revere Tape Recorder for *your own* musical advancement.

### The New REVERE

### "Balanced-Tone" TAPE RECORDER

A proud achievement of recording brilliance! To hear the new Revere "BALANCED-TONE" Tape Recorder is an unforgettable experience. Each delicate sound, every musical note, is reproduced with amazing depth of tone, breadth of range, and height of realism heretofore obtainable only with professional

broadcast equipment. Yet, it is extremely simple to operate. Note these outstanding features incorporated in the new Revere:

**"Balanced-Tone" Control** provides professional, high fidelity tonal quality.

**Exclusive Index Counter** permits instant location of any part of a recorded reel.

**Automatic Key-Controls** record, play, or stop recorder instantly.

**High Speed Forward and Rewind Lever**—no backlash or tearing of tape.

Add to these such important advantages as two full hours of recording on each reel, lightweight portability, magnificent styling, glamorous beauty, low price—and you'll agree the new Revere "BALANCED-TONE" Tape Recorder is in a class by itself. See it at your dealer now!



- Model T-700—Complete with microphone, radio attachment cord, 2 reels (one with tape) and carrying case... \$225.00
- Model TR-800—Same as above with built-in radio... \$250.00
- Model T-10—Studio Model, Speed 7.50... \$235.00
- Model TR-20—Same with built-in Radio... \$260.00
- Model T-100—Standard, 1-hour play... \$169.50
- Model T-500—DeLuxe, 2-hour play... \$179.50

REVERE CAMERA COMPANY • CHICAGO 16, ILLINOIS



**NOTED WITH INTEREST**

*Continued from page 11*

"Broadcasters of the area had already pledged to contribute over \$100,000 worth of time for the Philadelphia campaign and had received advance assurance of cooperation from distributors.

"But when a meeting assembled here this afternoon to complete preparations for the drive, distributor representatives said they could not participate because they will be occupied during October with preparations for the Christmas trade.

"Broadcasters say the drive will be postponed indefinitely, and will not be revived until distributors pledge cooperation and offer a specific date for the campaign."

**Oh! For the Simple Life!**

Pity the poor chap who sells replacement styli! And also, pity the poor chap who sells phonograph records!

On the one hand, we have a newly issued Needle Wall Chart, provided by Jensen Industries to help dealers pick the correct replacement stylus for their customers. The chart is 8 inches wide and 22 inches long and is crammed with small print. Believe it or not, in order to stock a complete line and meet all replacement emergencies, the dealer must carry 124 Jensen needles, plus about half as many again which are now available with diamond tips!

And on the other hand . . . we commented in the previous issue about the growing complexities of the record industry, what with three speeds, microgrooves, macrogrooves, minigrooves, and three common sizes. We also commented on the new RCA-Victor "extended play" 45 rpm. disks.

So . . . under date of September 29, we received a publicity release headlined: "Columbia Records to issue extended play 45 rpm. single disk series" which went on to say that, beginning October 6th, Columbia would release 7-inch 45's which provide up to eight minutes of music, featuring classical, popular, hillbilly and children's selections.

Say, what happened to those 16 rpm. records which we heard rumors about a while ago? And how about someone coming along with a stationary record which would play indefinitely?

**Dept. of Further Information**

Speaking of styli brings us back to our discussion in the last issue, in a "Tested in the Home" report, of the new G-E RPX-052 cartridge. We mentioned that this new cartridge had not been dignified with any special name.

Well, after the issue was off the presses and peace and quiet reigned once more, we sat down to read the advertising pages. There, right on Page 80, was the RPX-052, looking beautiful in full color, and serene in the dignity of a special name: Golden Treasure.

Give us time. We'll catch up some day. Might even find a moment to wander around to our advertising department and mutter, Well, boys and girls, what tricks are you going to pull on us this time?

*Continued on page 21*

**You can't buy better performance at any price!**



**First wide range diamond-and-sapphire combination delivers frequency response from 30 to 15,000 cycles. Tracks all 3 speeds at 6 to 8 grams**

**T**HIS new 1-mil diamond and 3-mil sapphire\* stylus assembly lengthens the life of your records and delivers tone reproduction *unsurpassed by any make on the market.*

The replaceable stylus is of the famous G-E "Baton" design. Multiple damping blocks filter out harmonic distortion, needle talk and needle scratch. There are no moving parts in this cartridge — nothing to

wear out. Remember—when you replace a stylus assembly in a General Electric cartridge, you replace every component that is affected by age or wear. A new stylus assembly means, in effect, a new pickup.

Ask your G-E dealer about the Golden Treasure cartridge, or write us for the nearest source of supply. *General Electric Company, Electronics Park, Syracuse, New York.*

*\*Synthetic*

**Send for these new catalogs . . .**

General Electric Company, Section 54112  
Electronics Park, Syracuse, New York

Please send me the items checked:

- Phono Accessory Catalog
- Wide Range Stylus Folder

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_



# THE MOST WANTED REPRODUCER

For, it is a fact, that of the thousands of AUDAX users, more than 70% bought the AUDAX POLYPHASE, even though they already owned other makes of pick-ups.

The revolutionary new records are so true to the original that almost any pick-up is bound to give some results . . . but — it takes a reproducer of the highest order, one sensitized to the nth degree . . . a CHROMATIC POLYPHASE — to bring out every subtle shading, every nuance so essential to the real music of which these discs are capable.

*One single magnetic unit plays all home records  
—replaceable Sapphire or Diamond styli.*



*Available to fit the new compass-pivoted AUDAX arms and to fit record changer.*

Never before such LISTENING-QUALITY, such FAITHFUL REPRODUCTION, but . . . — YOU and only YOU can decide what sounds best and most pleasing. Therefore . . . SEE and HEAR POLYPHASE and — YOU be the judge.

*Be sure to obtain a copy of 1953 ELECTRONIC PHONO FACTS from your distributor.*

## **AUDAK COMPANY**

500 Fifth Avenue New York 36

*"Creator of Fine Audio-Electronic apparatus for over 25 years."*

---

*"The Standard by Which Others Are Judged and Valued."*

---



## Readers' Forum

SIR:

For several years now we have seen a rash of articles on the "Williamson" amplifier, most written by persons in the employ of American transformer manufacturers, and leaving poor Mr. Williamson out in the cold!

I have built one of these amplifiers, promoted the building of a half-dozen, and it does seem to be about the best I have seen, and without special or expensive components.

The original and supplemental articles by Mr. Williamson were reprinted in a pamphlet by *Wireless World* together with an admirable article on a preamplifier and a tone control. Unfortunately these were designed around the Mullard Ef37A and I do not seem to be able to discover an exact American equivalent.

All this is preparatory to my suggestion, which is that you contact Mr. D. T. N. Williamson, now with the Ferranti Research Laboratories, and obtain permission to publish his series of articles with, if possible, the preamp and tone control re-designed for some American-type tube, otherwise perhaps you could induce someone in New York to import the Mullard Ef37A tubes and also the Partridge output transformers.

I think it would be well worth your while in reader interest. Even after building the amplifier, several of my friends have gone to the trouble of obtaining the pamphlet from Iliffe & Sons Ltd., at three and sixpence merely because it covered so much more ground and explained possible difficulties. I think you will find many interested in the preamp and tone control, especially if it can be built with easily obtainable tubes.

D. M. Bender

Englewood, Colorado

1) We approve the idea, too, but Mr. Williamson advised us some time ago that he was frankly too busy; 2) the *Wireless World* pamphlet is available from HIGH-FIDELITY'S Book Department for \$1 (No. 94); 3) the Partridge output transformer is available from several jobbers in this Country; and 4) how about someone bringing in the Ef37A? Thanks Mr. Bender for giving us an opportunity to get all these matters off our chest at once.

SIR:

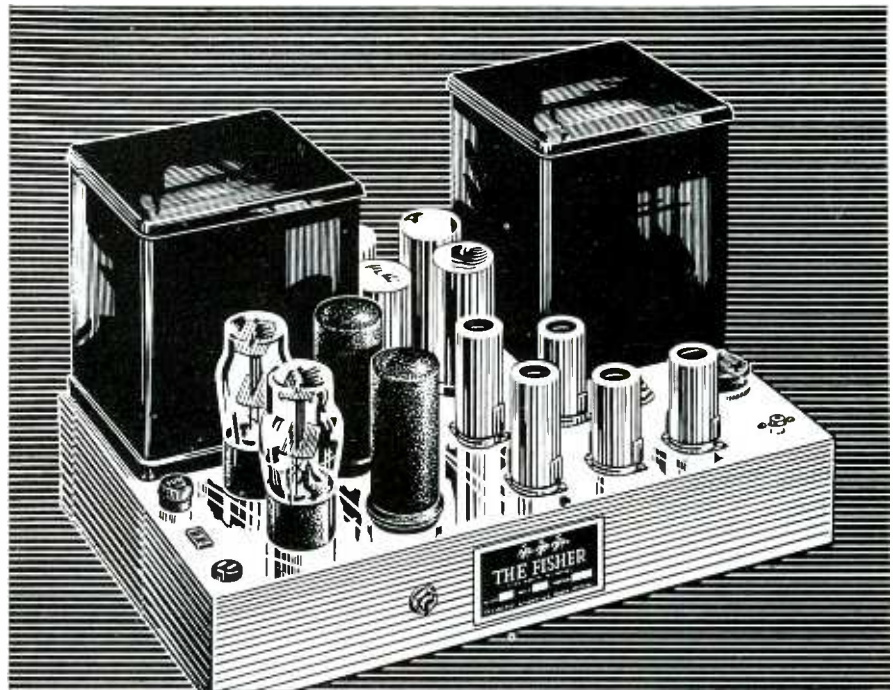
In the Spring issue there were several associated ideas expressed which I feel merit further consideration.

In "Noted With Interest", you print a copy of a letter to Columbia Records from Subscriber George Burnside about factory-sealed records.

Mr. Burke's fine review of available Beethoven records contains in the preface a remark that he did not mention surface noise in his individual reviews, as he might have gotten a defective pressing.

It seems that there are a few companies that consistently produce smooth, quite pressings, while others are spotty from one lot to another. Since it has been demon-

*Continued on page 17*



**TOMORROW'S AUDIO TODAY!**

# FISHER

## All-Triode Amplifier

AND

## Master Audio Control

■ THE FISHER Laboratory Standard Amplifier is, beyond a shadow of a doubt, *the world's finest all-triode amplifier* — and yet moderately priced. **FEATURES IN BRIEF:** High output — less than .3% harmonic distortion at 40 watts (.08% at 10 watts.) Intermodulation distortion below 8/10% at 40 watts. Uniform response within .1 db, 20-20,000 cycles; 1 db, 5 to 100,000 cycles. Hum and noise better than 92 db below full output. Quality components, beautiful workmanship. ■ THE FISHER Master Audio Control can be used with *any* amplifier. Intermodulation distortion is virtually unmeasurable; complete, professional phonograph equalization settings and tone controls; genuine F-M loudness control; 5 inputs and 5 independent input level controls; cathode follower outputs. Self-powered.

*Write for illustrated brochure and full specifications.*

**FISHER RADIO CORPORATION · 45 E. 47th ST., N.Y.**





**NOW**  
**the 215 series**  
**CARTRIDGES**

by Fairchild

with ...

**HIGH**  
**COMPLIANCE**

*the all important factor*

**But how will this pickup sound better to you . . . ?**

- You will hear *HIGH VOLUME PIANO CHORDS* with a clear character never before experienced. Extreme low mass of moving assembly, high compliance and unique damping are the reasons.
- You will wonder what happened to "NEEDLE TALK".
- You will hear *LOW FREQUENCIES* you did not know existed on some of your choice records.
- You will notice the absence of bass concentration at one frequency caused by arm resonance, since high compliance precludes arm excitation.
- You will hear lower apparent *SURFACE NOISE* because of the smooth linearity of its extended range.
- And you will experience a new freedom from *LISTENING FATIGUE* obviating your desire to attenuate the higher frequencies. This important factor results from the complete elimination of tracking distortion at the most severe commercial levels of modulation.

**COMPLIANCE :**

- |   |                             |
|---|-----------------------------|
| 1. Reduces Record Wear                                  | 4. Reduces Record Hiss      |
| 2. Reduces Stylus Wear                                  | 5. Reduces Arm Resonance    |
| 3. Reduces 'Needle Talk'                                | 6. Improves Low Frequencies |
| 7. And above all, eliminates <u>Tracking Distortion</u> |                             |

*The 215 series Fairchild pickup cartridge is the result of recent extensive re-engineering of the 200 series units to further improve performance and insure uniformity of production. They are now available.*

The Fairchild pickup cartridge is of the MOVING COIL design, the only true linear transducer.

Every Fairchild cartridge is equipped with the finest diamond stylus. No other material is acceptable.

The Fairchild cartridge, conforming to standard dimensions, can be used to replace any modern pickup you are now using.

- 215B . . . . 2.5 mil stylus tip . . . \$42.50
- 215C . . . . 3.0 mil stylus tip . . . 42.50
- 215A . . . . 1.0 mil LP stylus . . . 47.50
- 216A . . . . for Vertical Transcriptions . . . . . 50.00

**VISIT THE SOUND DEPARTMENT OF YOUR RADIO PARTS JOBBER, OR WRITE US DIRECT.**

**FAIRCHILD RECORDING EQUIPMENT**

154TH STREET & SEVENTH AVENUE, WHITESTONE, NEW YORK



## READERS' FORUM

*Continued from page 15*

strated that quiet pressings can be the accepted thing from some companies, the art was progressed to a point where the same quality could be expected from all producers.

Rather ironical is the fact that in Mr. Burnside's letter to Columbia, he requested a copy of their much publicized High Fidelity Audition record, a promotion for their opera recordings. The irony arises because I happened to have a chance to unpack and play for the first time two copies of this audition record. One would think that this would be an ideal way to find out just how good a Columbia recording could be, since it was a special record and arrived direct from the factory. However, both copies were played on the same system, one after the other. If the first sample were the only record of Columbia manufacture that I had ever heard, I am sure that I would have hesitated to purchase any of their products for a long time. The second was at least up to par for Columbia.

It would appear that factory-sealed records are not the answer until the inspection methods of the factory are able to ensure only high quality products, or the standards of some of the manufacturers raised. I can see Mr. Burke's reasons for not wanting to defame a particular issue on the basis of a single pressing but, also, when such details on surface are included, one can learn which companies produce the better quality more consistently.

Also, if a manufacturer were to get a number of reviews of his product all berating the surfaces, he just might do something about it.

I realize full well the damage that can be wrought by the poor demonstrators in most record stores but, if one is not able to find which edition of a number he may personally prefer by this method, he is entirely dependent on hearing the record somewhere or using a published review as the basis for his choice. After all, there is nothing less objective than preferences in music.

A privileged few have arrangements with their dealers to take home the various records and bring back those that they don't care for. This is indeed a nice system, but it hardly could be extended to all. Rather, we should all try to put some pressure on the dealers to supply high quality reproducing equipment, and to keep it (especially the styli) in good shape.

*Karl C. Thomas*

State College, Penna.

SIR:

Let me congratulate you on your Spring issue of HIGH-FIDELITY. The Beethoven review article was, to my mind, the outstanding feature in it. In years of poring over reviews I have seldom come across a set of them where one felt that one really knew what the reviewer was talking about as clearly as here.

I must disagree with the letter in this issue from my fellow-townsmen, who feels that your reviews should say less about the content and more about the engineering.

*Continued on page 19*

IF YOU DO NOT  
COUNT THE COST

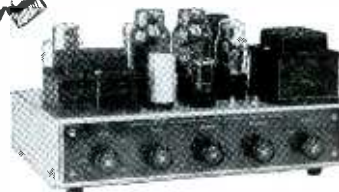
→

**h. h. Scott**  
**amplifiers are still the best**



**1st choice, remote-control amplifiers:**  
H. H. Scott, type 214-A

\$193.75



**1st choice, single-chassis amplifiers:**  
H. H. Scott, type 210-B

\$224.00

A strong statement? Actually it is based on impartial tests of high fidelity equipment by experts of unquestioned authority.

C. G. Burke, with a jury of critical listeners, tested, compared, and rated leading equipment for the new SATURDAY REVIEW HOME BOOK OF RECORDED MUSIC AND SOUND REPRODUCTION. Five music systems in different price categories were selected, each category listing equipment judged to be best in that price class. And H. H. Scott amplifiers are rated "1st choice" in all three top systems.

Price was no object in System I — musical performance alone was the criterion. Yet in System III — well within reach of most of us who count our dollars — an amplifier by H. H. Scott is still given top place.

May we suggest that you yourself appraise the method and results of these impressively complete, most authoritative comparison tests. For real help in selecting equipment, read the discussion in the SATURDAY REVIEW HOME BOOK OF RECORDED MUSIC AND SOUND REPRODUCTION.

**FREE BOOKLET**  
"Controls and the Amplifier"

**HERMON HOSMER SCOTT, INC.**  
"PACKAGED ENGINEERING"  
385 PUTNAM AVE. • CAMBRIDGE 39, MASS.

# PERFECT TRACKING



... with no tone arm resonance



**New *Gray* 108-B Arm for all records has new suspension principle**

Perfect tracking of records and virtual elimination of tone arm resonances are only two advantages of this versatile, specially-designed arm — the finest yet developed! It satisfies every requirement of LP reproduction, permits instant changing from 78 r.p.m. to LP (micro-groove) or

45 r.p.m. and *assures correct stylus pressure automatically*. GE or Pickering magnetic pickup cartridges are interchangeable and slip into place quickly and easily. Maintains perfect contact with bad records, accommodates records up to 16" in diameter.



## **106-SP Transcription Arm —**

Assures fidelity of tone for every speed record. Three cartridge slides furnished enable GE 1-mil, 2½ or 3-mil, or Pickering cartridges to be slipped into position instantly, with no tools or solder. Low vertical inertia, precisely adjustable stylus pressure.

## **AUDIO FAIR OF NEW YORK**

Be sure to see the Gray exhibit of high-fidelity tone arms and equalizers—and hear their superb performance.

Room 503, Hotel New Yorker

Please write for bulletin RE-11 describing the above equipment.

# **GRAY RESEARCH**

**and Development Co., Inc., Hilliard St., Manchester, Conn.**

Division of The GRAY MANUFACTURING COMPANY—Originators of the Gray Telephone Pay Station and the Gray Audograph



*Walter E. Ostrowski*  
President



READERS' FORUM

Continued from page 17

We must not forget that the first purpose of a recording is to preserve as faithfully as possible a memorable performance for our listening pleasure and esthetic enjoyment, and that high fidelity is merely the means to this end and not an end in itself.

Thus I was particularly pleased with Mr. Burke's clear statements which allowed the reader to judge for himself how the various factors of recording technique and performance were weighed to arrive at the final ranking.

I felt that the occasional references to old 78 classics were very much to the point, especially since the Weingartner symphonies mentioned have since appeared on LP. I would like to see more-frequent comparisons with the older "definitive" versions, as many of us know them well and find a comment on the relative merits of the new interpretation and the old particularly informative.

Since quite a few Beethoven pieces have appeared since this article went to press, I sincerely hope that you will continue the practice found on p. 53 and add a postscript on the Weingartner and Kempff recordings, etc., in the next issue.

In short, the reviews alone made the issue worthwhile for me, although I found many of the other articles very stimulating, including the "Noted With Interest" column.

Alex P. Hull, Jr.

Charlottesville, Virginia

SIR:

My hat is off to Mr. Burke's monumental work on Beethoven's music and to the magazine's "Records on Review" Department: which fills a long felt need, saves your readers money; and what is most appreciated — many disappointments in record buying. Also enjoy the easy reading of the different colored paper. More power to this department and maybe you should send a free introductory copy of this Spring issue of the magazine to each one of the record makers. Maybe they don't know yet what has happened (your magazine in the hi-fi world).

Could eulogize more but you are too busy so will sign off. Lots of luck. We need you.

Fred W. Finlay

Kansas City, Mo.

Thanks, Mr. Finlay. We've received many letters of appreciation for C. G. Burke's colossal work on Beethoven. Readers will be glad to know that his series will be continued.

SIR:

A couple of ideas here for your magazine: A "Why Don't They?" Column, suggesting minor improvements in recording practice. Two suggested items:

a) Why Don't They: Issue long-playing albums in manual sequence for those audiophiles who have transcription turntables, and are required to go through a lot of extra

Continued on page 98

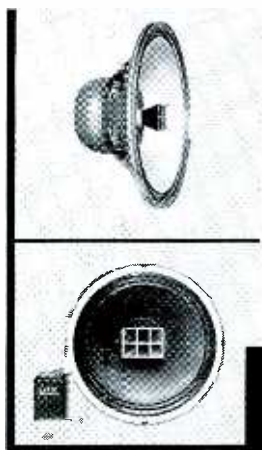


Since the introduction of the original 604 speaker in 1943 the Altec 604 "duplex" has been known to all as the finest loudspeaker that money can buy. Now, after years of continuing research, the new Altec 604C "duplex" is here to set even higher standards for audio reproduction... for the 604C will faithfully reproduce tones from 30 to 22,000 cycles and handle 50 watts of peak power! Listen to the amazing Altec 604C soon. Your ears will agree it's the finest loudspeaker in the world.

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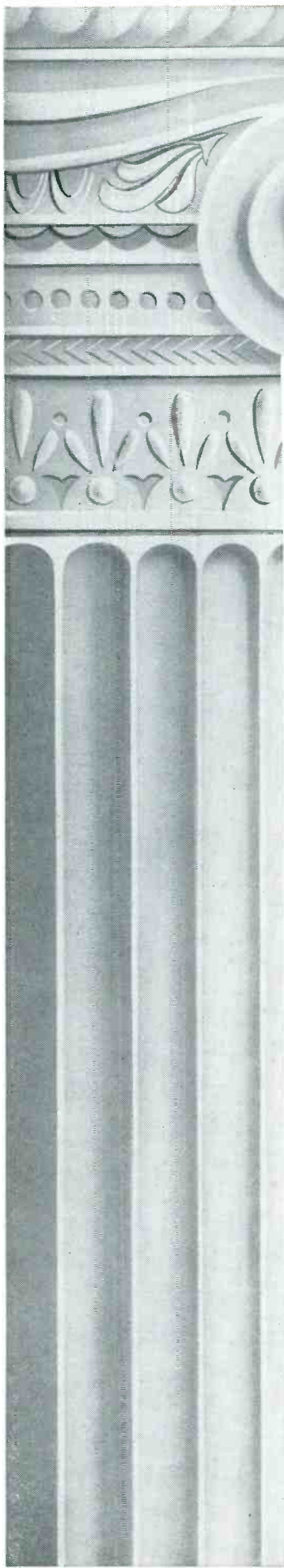
Power rating ..... 35 watts (50 watts peak)  
 Network impedance ..... 16 ohms  
 Maximum diameter ..... 15 1/8 inches  
 Maximum depth ..... 11 1/8 inches  
 Weight with network ..... 40 pounds

Don't forget to listen to these new members of the "duplex" line, the 12" 601A and the 15" 602A. They are designed especially for the home.

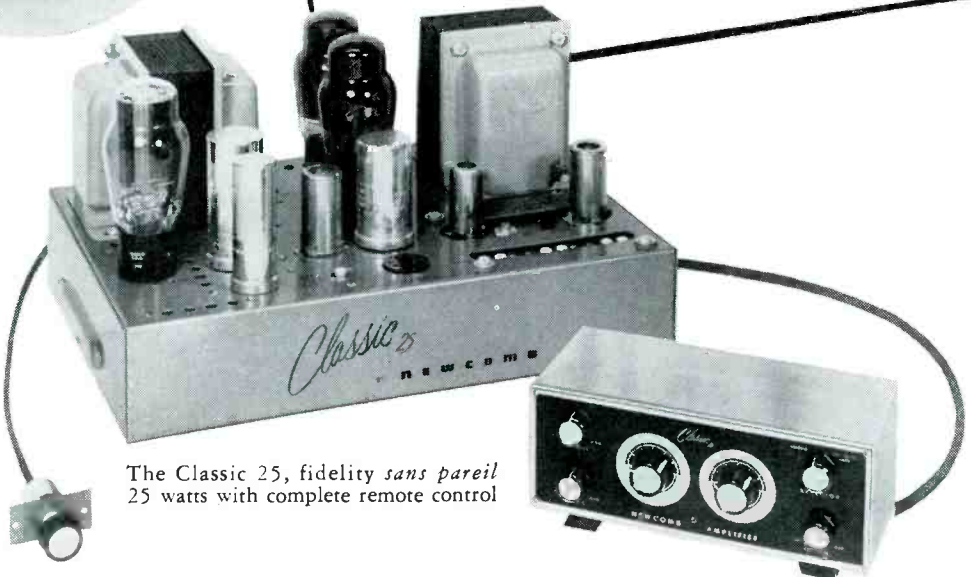


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Designed exclusively for the connoisseur of music who wants to hear *all* of it, just as it was recorded . . . eight completely new custom home music amplifiers that not only sound better but are easier to install.

There is nothing, short of live music itself, to compare with the brilliant, clear, full-bodied tones of the Classic 25, the star of this amazing new series of fine amplifiers. Its galaxy of features include a remote control beautifully finished in rich, brushed brass, a dramatic accent to even the most tastefully appointed interiors. Distortion is reduced to the lowest limits of measurement, yet reserve power has not been sacrificed. Frequency response extends from below 10 to over 100,000 cycles. New

"Audi-balance" achieves perfect balance of output tubes in seconds. Exclusive "Adjust-a-panel" extends control shafts instantly for cabinet mounting. Six inputs are provided for radio, TV, tape recorder, crystal and magnetic (2) pickups. "Fletcher-Munson" compensated volume control maintains perfect aural balance. A cross-over selector simplifies attainment of correct playback response, includes foreign and domestic frequencies and the new A.E.S. standard.

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8 completely new amplifiers priced from \$39.50 to \$269.50 audiophile net.



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## NOTED WITH INTEREST

*Continued from page 13*

### New Sound Studios

More and more dealers in high fidelity equipment are separating their sound demonstration rooms from their general stock sales rooms. One of the latest is Radio Electric Service of Philadelphia, which has just completed an ultra-modern studio adjoining the main store at 7th and Arch Streets. The studio is divided into three sections, one each for commercial sound equipment, for recorders, and for hi-fi. Philadelphians, and those thereabouts, should drop in for an inspection tour; look up Austin K. Gutman, manager of the sound department.

Another new sound studio, this time in Washington, D. C., is that of Electronic Wholesalers at 2345 Sherman Avenue, N. W. This is a particularly noteworthy showroom because it represents a combined effort on the part of many dealers, operating through their wholesaler, to give customers the widest possible selection of equipment.

### West Coast Audio Show

Plans are already under way for a big, high fidelity equipment show to be held in Los Angeles on February 5, 6, and 7. Complete details are not available at press time, but West Coast readers should mark these dates on their calendars, and watch for full information in the January issue of HIGH-FIDELITY.

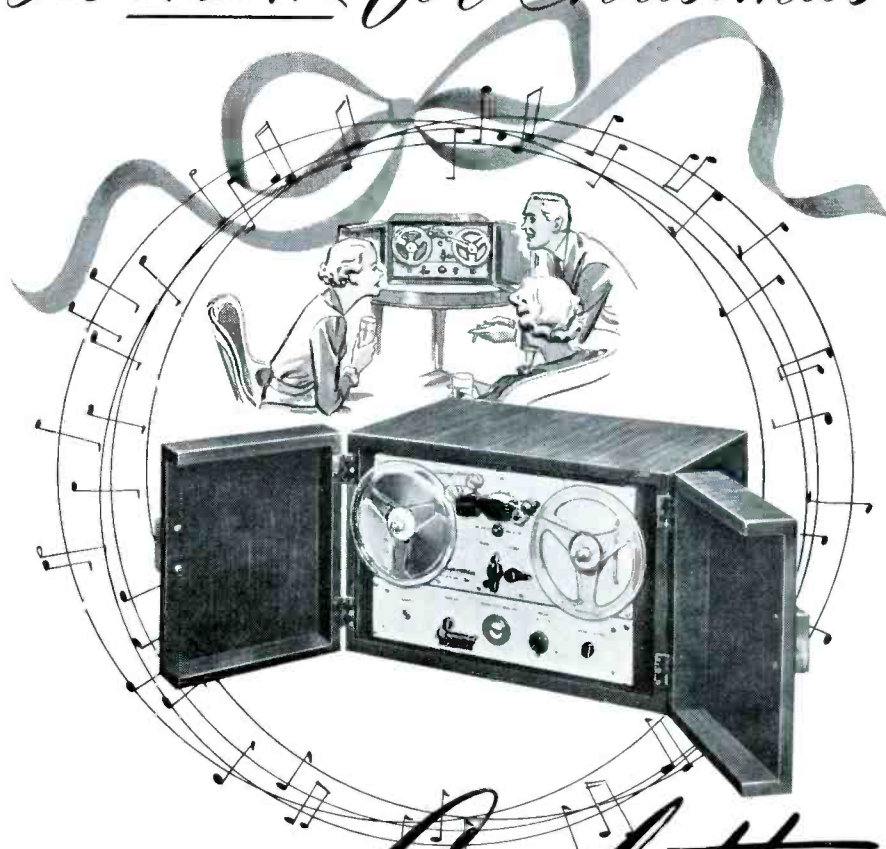
### For Two-Eared Listeners

As this issue makes its appearance, FM listeners in and around New York will be hunting up their bedroom AM receivers and placing them carefully just so many feet to the right or left of their FM receivers. Purpose: to hear a stereophonic, or binaural, broadcast. Plans at press time were to celebrate the Audio Fair with at least two binaural broadcasts, originating as parts of Fred Grunfeld's *Music Magazine* program on WQXR (AM and FM) at 9:05 p.m. Wednesday and Thursday, October 29 and 30. The live music on the two-channel broadcast will be performed by the WQXR string quartet and chamber orchestra. There may also be a twin-track tape recording (Vox-Magnecord) of the Vienna Symphony Orchestra. There were tentative plans for at least one more binaural transmission, either Tuesday night or Saturday night, or both, by another New York station, featuring some jazz and some organ music, both live and through Ampex tape recording and disks made by Emory Cook, an article by whom on this very subject appears elsewhere in the pages of this issue.

### Erratum: Dividing Networks

A small, but very important, change should be made in Fig. F, page 74 of HIGH-FIDELITY Vol. 2, No. 2: The two coils at the left are correctly labeled L<sub>1</sub>; both the coils at the right should be labeled L<sub>2</sub> — one now being incorrectly tagged L<sub>1</sub>.

# It's HEAR for Christmas



## magne Cordette

### professional tape recorders for home and office

Give your family the realistic brilliance of high fidelity tape recordings right in your own home! Your favorite AM and FM radio programs—the voices of your children and family friends — can be faithfully preserved and replayed for your listening pleasure. Professional in quality, yet priced within reach, MagneCordette

represents the utmost in magnetic recording for the home.

Start a family "sound library" today, for enjoyment in the years ahead.



*New* For the first time, Magnecordings by Vox, finest tape recordings by world-famous artists for replaying on your MagneCordette! Greater fidelity and tonal purity than could ever be obtained on disc recording! Hear them at your Magnecord dealer's.



The magne Cordette comes in a rich blond or rich, dark mahogany finish cabinet, to match any decor. Priced at only \$385. For a demonstration, see your Classified Telephone directory under "Recorders."

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Chicago 10, Illinois

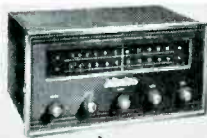
Hear them all at the "Audio Fair"—Hotel New Yorker, Oct. 29—Nov. 1

# hallicrafters

# Super Fidelity

A NEW PRECISION *AM/FM* TUNER AND AMPLIFIER

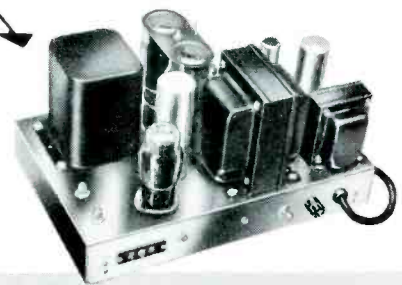
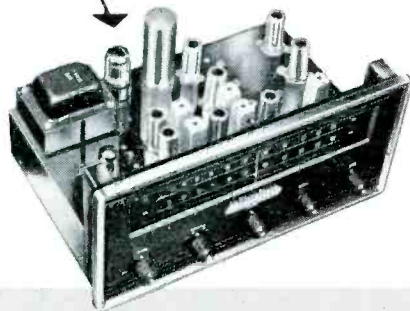
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## Sensation of the Audio Fair!

Now... Great "Command Performance" Music in Your Home!  
Every Sound Humanly Audible...

Distortion-Free, without A.F.C.



### AM-FM TUNER (ST-83)

Hallicrafters Super-Fidelity AM-FM Tuner enables you to hear every sound audible to the human ear... "like a complete orchestra giving a Command Performance in your own home!"

It's the first such tuner to carry the U/L Seal of Approval. Temperature-compensated oscillator does away with need for A.F.C. Input jacks for phonograph, television, tape recorders, etc.

### AMPLIFIER (A-84)

The most critical ear will find Hallicrafters Super-Fidelity Amplifier the perfect "mate" for your AM-FM Tuner. Guaranteed frequency range, 10 to 100,000 cycles per second, at 10 watts.

The Super-Fidelity Amplifier utilizes a new output transformer which gives you the widest range ever produced heretofore. And harmonic distortion is less than 0.25% at 10 watts level! Also, U/L-Approved and completely encased for your protection.

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## IMPORTANT BOOKS

**The World's Encyclopedia of Recorded Music**, by Francis F. Clough and G. J. Cuming. 890 pages, 6¾ by 9¾. The London Gramophone Corporation, in association with Sidgwick and Jackson, Ltd., London. 1952. \$17.50.

The authors of this vast omnibus give credit for example and inspiration to R. D. Darrell, compiler of the 1936 *Gramophone Shop Encyclopedia*, and they cannot have started work long after he finished.

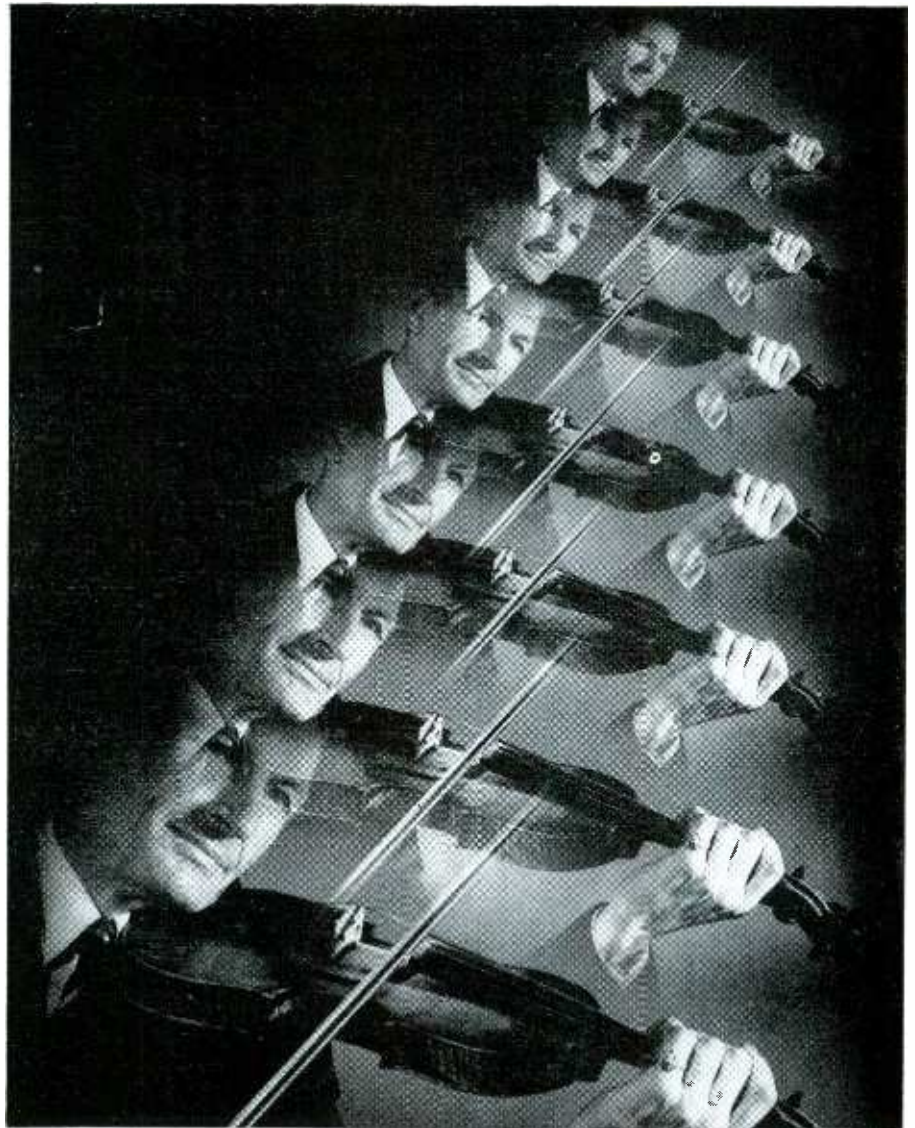
Their object was to list and identify every record of "permanent" and "worth-while interest" since the beginning of electrical recording up to April 1950. They do include a few pre-1925 records, but attempt to be exhaustive only for the years 1925-1950. It might have made slightly more sense if they had left all reference to microgroove disks for future supplements, since the LP and 45 situation has changed drastically since they went to print, and no one will use their book for reference to microgroove recording anyway.

Their work is indeed definitive for the period they cover and in the categories of records they cover. They encountered some obvious difficulties here, and solved them largely by the process of wholesale omission. For instance, they listed wholly by composer, except for a few anthologies. The result is that the book simply leaves out such things as folk music, despite the fact that many people would consider *Green-sleeves*, for example, a good deal more "worth-while" and "permanent" than Sergius Liapounov's Caucasian dance *Lezhinka*. They also excluded what they considered "popular" music. So there is no Stephen Foster, no Noel Coward, no W. C. Handy nor Cole Porter. Leroy Anderson gets in the book for his arrangement for fiddle of a trifle by Faure, nor for his own witty "Pops" compositions. It is easy to carp, of course; it wasn't easy to put this giant book together, and many a record collector and music librarian is going to greet it with tears of joy.

**Music and Imagination**, by Aaron Copland. 116 pages, 5½ by 8¼. Harvard University Press. Cambridge, Mass. 1952. \$2.75.

Aaron Copland, one of America's best and liveliest composers, can write English almost as well as he can write music. And he knows a little bit about almost everything, all of which makes this a book to be read for pleasure by any music lover. Copland has a number of piquant ideas. "The sensitive amateur," he says, "just because he lacks the prejudices and preconceptions of the professional musician, is sometimes a surer guide to the true quality of a piece of music." Of conductors, he says there are five kinds. There is the one who is carried away by his music, and the one who makes a public spectacle of himself by pretending

*Continued on page 128*



*Ewing Galloway*

for faithful reproduction—

Whether you prefer disk or magnetic recordings for your high fidelity system, your choice of phonograph needles, recording tape, or recording wire, is important . . . As important to you as the essential components in your system . . . That's why so many high fidelity fans prefer Fidelitone—products manufactured to precise standards of performance as well as design.

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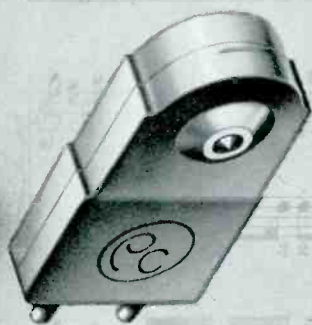
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## PICKERING

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of the works of the masters*



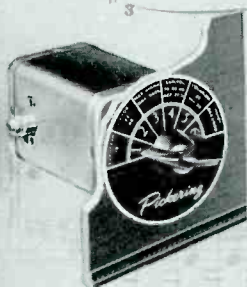
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# S M E

## The Society of Music Enthusiasts

In the previous issue of HIGH-FIDELITY, we announced the first beginnings of the Society of Music Enthusiasts. Now, with the publication of the Society By-Laws, the Chapter Charter Agreement, and the Basic Chapter By-Laws on the following pages, we can "get down to business." Because By-Laws are traditionally dull affairs, let's review briefly the salient points of organization membership, aims, and history to date.

### Organization

The fundamental unit of the Society is the local chapter, which consists of twenty or more SME members. Each chapter elects one delegate to the National Council, of the Society; such delegates have a voting strength on the Council of one per twenty members of his Chapter.

In addition to the National Council, an Advisory Council has been set up, composed of leaders from all fields related to the interests of the Society. Specific provision has been made in the By-Laws for representation of the fields of music, broadcasting, recording, manufacturing, and education. The Advisory Council is strictly advisory; its members have no vote except as they may also be members of local chapters of the Society.

### Officers

The officers of the Society are Chairman, Vice-chairman, Secretary, and Comptroller. In addition, a Managing Director serves as administrative chief and as liaison between the Society and HIGH-FIDELITY for the all-important purpose of keeping the wheels moving.

That is the basic organization of the Society. It may seem rudimentary; it is. The existing By-Laws are primarily a framework on which the organization can be built as it grows.

### Memberships

There have been established six classes of membership: full member, member-at-large, family member, life, honorary, and affiliate members. Full members and members-at-large are identical in that both enjoy full voting and other privileges, but a full member also belongs to a local Chapter, whereas a member-at-large does not. Family members are persons in the immediate family of a member; those over 16 pay one-half the regular membership dues, those under 16, no dues. Provision has also been made for affiliate memberships, with restricted privileges, should the Society wish to coordinate its ac-

tivities with other organizations and groups sharing its interests and aims.

Members may change from one chapter to another, at will, and a "members-at-large" automatically becomes a "full member" upon joining a chapter.

### The Society's Official Organ

The By-Laws call for the publication of an official organ, called the *Baton*, which will carry news and articles of interest to members. Full members, members-at-large, life and honorary members receive the *Baton* upon payment of dues. In the case of members who are also subscribers to HIGH-FIDELITY, the *Baton* will be bound into their copies of the Magazine. It will be mailed separately to those who are not subscribers.

### Dues

Basic dues are \$3.00 per year, which includes receipt of the *Baton*. Because an economy can be effected by binding the *Baton* into HIGH-FIDELITY, the saving is passed along to subscriber-members in the form of a reduction in dues to \$2.00 a year.

### Past, Present, and Future

The idea of the SME was born in April, in the minds of Lawrence Epstein, of University Loudspeakers, and your Editor—during a long telephone conversation which ended with an "All right, let's see if we can get this thing rolling." During the next few months, every person in sight was asked for opinions and suggestions. It was during the Audio show in Chicago that a third extremely enthusiastic supporter was found: Ronald Lowdermilk, of the Radio and Television Section of the U. S. Office of Education. During the ensuing months, the skeleton was put together, to be finalized by publication in this issue of HIGH-FIDELITY.

To date, two offices have been filled: Mr. Epstein will serve Managing Director and Mr. Lowdermilk has accepted appointment as Chairman of the National Council.

Others, contacted with a view to their serving on the Advisory Council, have expressed their whole-hearted desire to help and support the Society, but final announcement of the members of the Advisory Council must be withheld until after official publication of the By-Laws.

The immediate work ahead is to get chapters started. Here again, dozens of groups are awaiting publication of the By-Laws and the Chapter Charter Agreement so that

they can apply formally. Complete information will be published in the first issue of the *Baton*, and individuals joining the Society will be advised (if they so request) of the existence of Chapters in their respective cities.

A second phase of work ahead is a study of the membership applications to determine the type of program

material which will be of most immediate interest. Once again, reception of the idea of the SME has been extraordinary: almost every group or concern which has been approached in regard to the SME has volunteered full cooperation in the preparation of tapes, disks, and other program materials for distribution among the local chapters.

# By-Laws of the Society of Music Enthusiasts

## Article I: NAME

The name of the organization shall be: Society of Music Enthusiasts

## Article II: AIMS

It is the purpose of the Society to:

*Section 1:* Stimulate interest in the subject of music in all its forms for the benefit of all persons everywhere whether or not members of the Society.

*Section 2:* Encourage a better understanding of the creation, interpretation, rendition and reproduction of music through programs of planned educational and related activities, demonstrations and discussions.

*Section 3:* Provide for the exchange and development of information and knowledge pertinent to the aims of the Society among its members, chapters, and other organizations.

*Section 4:* Provide members of the Society guidance in the technical means of attaining "high fidelity" reproduction of music.

## Article III: STRUCTURE

The organizational structure of the Society shall be as follows:

*Section 1:* Office of the Managing Director, to carry out the management and national affairs of the Society and perform the administrative headquarters functions of the Society; to co-ordinate and regulate Society activities; to serve as liaison between the sponsor, the Society, and other affiliated or participating organizations; and to help

achieve the aims of the Society.

*Section 2:* Advisory Council, comprising representatives from the fields of Music, Broadcasting, Recording, Manufacturing, Education, the National Chairman and such other individuals as the Managing Director, who shall preside at all meetings, may appoint. Tenure of the Council shall be in periods of one year and its members shall serve voluntarily in an advisory capacity to the Society and be completely without any obligation whatever to the Society.

*Section 3:* National Council, consisting of the Society's elected officers and one delegate from each authorized Society Chapter to represent and reflect the opinions of the general membership.

*Section 4:* Chapters, comprising persons who are members of the Society.

## Article IV: OFFICERS

*Section 1:* The executive officer of the Society shall be a Managing Director appointed by the sponsor, Audiocom, Inc.

*Section 2:* The elected officers of the Society shall comprise:

(A) A National Chairman who shall preside at meetings of the National Council and see that all Society directives and all valid resolutions of the National Council are carried into effect.

(B) A Vice-Chairman who shall assist the National Chairman with his work and who in the absence or disability of the Chairman shall perform the duties and exercise the

powers of the Chairman, and will perform such other duties as the Chairman or National Council shall prescribe.

(C) A Secretary who shall attend all meetings of the National Council and record the minutes of all proceedings in a book to be kept for that purpose, with copy to the Managing Director. The Secretary shall perform such other duties as may be prescribed by the National Chairman or National Council.

(D) A Comptroller who shall work with the Office of the Managing Director to keep full and accurate accounts of receipts and disbursements in books belonging to the Society. He shall render to the National Council, whenever they shall require it, an account of all or any Society financial transactions.

## Article V: TERMS OF OFFICE

*Section 1:* The National Chairman, Vice Chairman, Secretary and Comptroller shall hold their office for a period of two years and until their successors shall qualify.

*Section 2:* Officers of the National Council may succeed themselves as many times as they may be re-elected to office.

## Article VI: MEMBERSHIP

*Section 1:* Membership in the Society shall be open to all citizens of the United States and all persons of any nationality considered

*Continued on next page*

APPLICATION FOR MEMBERSHIP IN THE SOCIETY OF MUSIC ENTHUSIASTS					
NAME <span style="float: right;">PLEASE PRINT CLEARLY</span>					
ADDRESS					
CITY		ZONE		STATE	
I hereby apply for membership in the Society of Music Enthusiasts and agree to abide by its By-Laws					
SIGNATURE					
If application is to include family members 16 or over, state relationship of each: _____ DATE _____					
CHECK ( )		CASH ( )		M. O. ( ) FOR \$..... ENCLOSED	
NO.	DATE	ENTD	HF	CL	CHAP
To help in planning programs and in preparing material, please give us as much of the following information as possible:					
What is your business or profession? .....					
To what other societies, organizations, or clubs devoted to interests similar to the SME, do you now belong? .....					
What musical instruments, if any, do you play? .....					
Do you participate in musical activities: frequently ( ) occasionally ( ) seldom ( )					
If, so, please specify type of activity. ....					
How many concerts or musical events have you attended in the past 12 months? .....					
Please number the following types of music in order of preference:					
symphony ( ) chamber ( ) opera ( ) popular ( ) jazz ( ) show music ( ) instrumental ( ) choral ( ) vocal ( ) other. ....					
Do you have a high fidelity phonograph or radio system? .....					
If so, did you install and connect it yourself? ..... Have you built any audio equipment yourself? .....					
In which of two basic types of SME programs and material would you be most interested: on music ( ) on sound reproduction ( )					
Would you like to be advised of the formation of an SME Chapter in your vicinity? .....					



friendly to the United States Government. Membership in the Society will be approved by the Office of the Managing Director upon fulfillment of all requirements prescribed by the Society and the Managing Director.

*Section 2:* Memberships shall be authorized as follows:

(A) Full member: a person who has been approved for membership in the Society and has been accepted by a chapter of his choice.

(B) Member-at-large: a person who has been approved for membership but does not elect to join a chapter.

(C) Life member: a person who has been so appointed by the National Council for meritorious work or achievement in the Society.

(D) Family member: a person in the immediate family (wife, husband, mother, father, daughter or son) of a member of the Society designated in Paragraphs A, B, and C of this Section.

(E) Affiliate member: a person who is a member of any organization with which The Society of Music Enthusiasts has become affiliated.

(F) Honorary member: a person who has been appointed by the National Council for meritorious work or achievement in the field of music and/or reproduction of music deemed to be an important contribution toward the progress or development of the art and of benefit to the members of the Society and to the general public.

*Section 3:* Rights and privileges of membership are as follows:

(A) The rights and privileges enjoyed in the Society by all members designated in Paragraphs A, B and C of Section 2 shall be equal.

(B) Life members and Honorary members shall not be required to pay entrance fees, renewal fees, or dues or assessments, if any.

(C) Affiliated members shall have rights and privileges as provided by the National Council and Managing Director.

(D) Family members as set forth in Section 2 herein shall be of two categories.

1. Persons 16 years of age or over who shall have met membership requirements, except that their membership fees shall be paid at the rate of one-half the amount in effect and their privileges may be limited by the National Council and Managing Director.

2. Persons under 16 years of age who shall not be required to pay entrance or renewal fees and whose privileges shall be limited and regulated by the National Council and Managing Director.

#### Article VII: DUES

*Section 1:* Annual fee for full membership in the Society shall be \$3.00, payable in advance in full, and to include receipt of the official Society organ, the *SME Baton*.

*Section 2:* Persons who are members of the Society and who subscribe to *High-Fidelity Magazine* will receive the special *SME* edition of *High-Fidelity Magazine* which includes the *Baton* and shall enjoy full membership in the Society for \$2.00 annually, payable in advance in full.

*Section 3:* Persons who are members of the Society and who later subscribe to *High-Fidelity Magazine* shall be entitled to full membership in the Society at the rate of \$2.00, upon next renewal of annual mem-

bership in the Society and for as long as subscription to *High-Fidelity Magazine* shall be continued.

*Section 4:* Persons who are subscribers to *High-Fidelity Magazine* and who later become members of the Society shall pay \$2.00 membership fee, payable in advance in full.

#### Article VIII: CHAPTERS

*Section 1:* A chapter may be formed by twenty or more members in good standing of the Society by executing the Chapter Charter Agreement and approval of the Managing Director.

*Section 2:* A member may transfer to any other existing or new chapter by notifying the office of the Managing Director in writing and by complying with procedure as may be established by the local Chapter, if any, of which he is a member.

#### Article IX: OFFICIAL ORGAN

*Section 1:* The official organ of the Society shall be known as the *SME Baton* and shall be produced, published and distributed for the Society by Audiocom, Inc. at a cost not to exceed actual cost of issues sent to members who are not subscribers to *High-Fidelity Magazine*.

*Section 2:* *High-Fidelity Magazine* is permitted to include the *SME Baton* only in issues distributed to members of the Society and at no extra cost to the members or to the Society.

#### Article X: ELECTIONS

Election of national Society officials shall take place biennially and shall be administered by the Office of the Managing Director.

#### Article XI: QUORUM

At all meetings of the National Council or its committees, the presence of a majority of their entire number shall be necessary to constitute a quorum sufficient for the transaction of business and a quorum may be constituted by proxies.

#### Article XII: VOTING

*Section 1:* All full members, members-at-large, family members 16 years of age or over, and life members shall have equal voting rights on all matters put before the general membership by the Society.

*Section 2:* An Honorary member or a family member under 16 years of age may not vote on any Society matters but may vote on Chapter matters if such privilege is extended by the Chapter in which he is a member.

*Section 3:* A Delegate to the National Council will carry a vote in Council matters equal to one per twenty members in his Chapter of good standing with the Society and Chapter, and of record with the Society three months prior to the end of the Society's fiscal year.

*Section 4:* Voting on Society matters may be accomplished through the U. S. Mails or at meetings called by the Managing Director, at his discretion.

*Section 5:* Voting on National Council matters may be accomplished through the U. S. Mails or at meetings called by the National Chairman, at his discretion.

#### Article XIII: BY-LAWS

*Section 1:* Resolutions of the National Council concerning amendments to the By-

Laws of the Society shall require an affirmative vote of two-thirds of the members present at a meeting at which there is a quorum.

*Section 2:* As a division of the corporate structure of its sponsor, Audiocom, Inc., amendments to the By-Laws of the Society and resolutions involving appropriation of funds shall require approval as provided by the Directors of Audiocom, Inc.

#### Article XIV: VACANCIES

In the absence of eligible persons to perform the duties and functions necessary for the proper and efficient operation of the Society and any of its activities, the Managing Director shall appoint a suitable person or persons to carry on such work in such capacity and for as long as may be necessary until such position can be filled by a qualified successor.

#### Article XV: RESIGNATIONS

*Section 1:* Any member of the Society may resign from the Society or from such office as he may hold by written notice, effective 30 days from date, to the Managing Director. No refund of membership fee shall be made.

*Section 2:* Renewal of membership in the Society may be refused to any person whose activity is contrary to the letter and spirit of the Society.

#### Article XVI: LIMITATIONS

*Section 1:* The Society may not commit or perform any act or pass any legislation which may be considered by Audiocom, Inc. as detrimental or embarrassing to it or its publications.

*Section 2:* The National Council may not impose any restriction, actual or implied, which may serve to stifle free local activity, expansion and autonomous control of Society Chapters, so long as the terms of the Chapter Charter Agreement are met and not exceeded.

*Section 3:* A Chapter may not engage in any activity foreign to or competitive to the Society or of such nature as to invoke any hardship whatever upon its members of the Society.

#### Article XVII: CHECKS

*Section 1:* All checks, money orders, bank drafts and such other means of making payments to the Society shall be made payable to: Society of Music Enthusiasts, and submitted to the Office of the Managing Director for endorsement and deposit in such place as may be determined.

*Section 2:* Checks drawn against the account of The Society of Music Enthusiasts shall be signed by the Managing Director, and countersigned by an officer of Audiocom, Inc.

*Section 3:* Checks over \$2,500.00 drawn to cover accounts payable and such other indebtedness as may be incurred by the Society shall require, in addition, the signature of the Comptroller.

#### Article XVIII: ADDRESS

The mailing and business address of the Society is:

Society of Music Enthusiasts  
Great Barrington, Mass.

This address shall be the official headquarters of the Society.

*Continued on page 121*

# How to Plan for

# LIVING MUSIC

## in Your Own Home

*There is in souls a sympathy with sounds,  
And as the mind is pitched the ear is pleased  
With melting airs or martial, brisk or grave.  
Some chord in unison with what we hear  
Is touched within us, and the heart replies.*

By MILTON B. SLEEPER

THE kind of music that is worth having in our homes does not come from little boxes we can buy at the nearest electrical shop or hardware store, carry home along with our purchases of meat and groceries, and put in operation merely by plugging the cord into a convenient light socket.

We've been told that it's that simple, but it is not. We have been promised music of studio quality from portable phonographs, and cathedral tones from inexpensive radios. The promises are false. These devices cannot meet such claims, just as \$8,500 houses, fully equipped with leaking roofs and defective plumbing, fail to sustain the agents' assurance that they will make us feel like kings in our own castles. Just as a home must provide more than shelter, so equipment for music reproduction must do more than emit sound.

Many people have learned to their sorrow that a house worth buying must, first of all, be planned to suit the intellectual and artistic demands, as well as the daily living habits, of the particular family that is to occupy it. Moreover, the house must meet certain specifications as to the quality of materials and methods of construction. Otherwise, it will give the occupants neither joy nor even satisfaction, and the money spent to buy it will only represent a poor investment.

The problems of planning a music installation closely parallel those of planning a house. In each case, the factors of arrangement, quality, facilities, and price require the most careful consideration, so that the owner's needs and tastes will be served to best advantage within whatever limitation is set up on the cost. There is one difference:

When you decide to buy a house, your first step will probably be to engage an architect. In his professional capacity, he will first discuss with you, at great length, your way of living. He must know just what you will expect your house to do for you, and how you will make use of it. And he will ask how much you can afford to spend. In all probability, what you want will cost more than you intend to pay. But architects are trained in the task of helping their clients decide what features are essential and which are not, to make compromises that put first things first, and then to add as many luxuries as can be included within the budget limitations.

On the other hand, the architect may suggest features that had not occurred to you, which will add to the comfort and attractiveness of your new home. It is a part of his job to know all the latest conveniences and the most advanced construction techniques, and to suggest their use to those who might appreciate them, even though they raise the total construction cost above the limit set initially.

Such professional advice and counsel is not, unfortunately, very widely available — as yet — to people who want to install high-fidelity music systems in their homes. In most cases, it is necessary to choose between two courses of action. You can send for mail order catalogues, and study the information presented on different types and combinations of equipment, or you can go to a dealer's store and listen to various systems. Either way, you run the danger of becoming confused by the endless combinations of equipment available to you, and you may find, after you have had your installation for a few months, that you have bought what someone else thought you should have, rather than a system carefully tailored to your requirements and your budget.

It is the purpose of this article to present a new approach to the problems of planning a home music installation, not as a substitute for purchasing equipment



by mail or at a dealer's store, but rather as a means of making certain that, wherever the equipment is bought, it will give you the most entertainment per dollar of its cost.

This outline for planning a home music installation actually parallels the study an architect would make of

your requirements for a house. Thus, just as the architect has a general idea of what you want before he even starts to make drawings, so you can decide on the basic elements you want to combine in your music system before you look at a catalogue or visit a dealer who sells high-fidelity equipment.

## PLAN FOR A HI-FI SYSTEM

In this PLAN FOR A HI-FI SYSTEM,<sup>1</sup> all the different elements that are ordinarily combined in a music system have been listed. Each is discussed in detail, so that you can decide for or against its inclusion in your system. Having made up your mind about each item, you can then pick out the various pieces of equipment from a catalogue, if you are going to order by mail, and tally the cost. If there is a balance to spare in your budget figure, you can then add one or two items, or substitute more expensive models. Or if you exceed your budget (which, alas, is more likely), you can revise your plan or increase your appropriation accordingly.

<sup>1</sup>This PLAN FOR A HI-FI SYSTEM is copyrighted, and must not be reproduced in whole or in part without permission.

On the other hand, if you intend to buy your equipment from a local dealer, take your plan to him. It will help him to advise you, by giving him an overall picture of the equipment you want in your system. You will then be saved the experience of listening to one combination of instruments after another, and being asked over and over again, "How do you like the way this sounds?" until finally you are so mixed up that you say: "I can't tell which I like best. What do *you* suggest?" Whereupon the dealer, who certainly doesn't know what you like if you don't yourself, will undertake to advise you anyway. And if you follow his advice blindly, the result will depend largely upon the experience of the salesman who waits on you.

## THE COST OF A HI-FI SYSTEM

Your first step is to decide how much you want to spend. It's reasonably certain that you will spend more than you plan at first. Consequently, at the end of this section, provision is made for putting down an initial figure, a first revision, and a final estimate. This will be for equipment and installation. Provisions for phonograph records and pre-recorded tapes have not been included, since you will not buy more than a few records or tapes at the start.

You can spend as much or as little as you please for your equipment and its installation. Perhaps you have a friend who has a hi-fi system, and you want something similar to his. That may indicate the amount you want to spend. You may have a specific sum available for your installation. Or, if you have exact ideas as to what must be included, you might as well set up your plan, and then find out what it will cost.

One word of warning at this point: Don't plan on buying hi-fi equipment at a discount. You probably won't have much luck anyway, because the trade prices don't allow the dealers enough profit to give away very much

of it. If you find a way to get a substantial reduction on some item, the chances are that it is an obsolete model that is being closed out because it has been superseded by something much better.

The only safe procedure is to buy from a dealer or mail order house of top reputation. Sometimes even the best equipment develops a fault of one kind or another. If that happens, you want the protection of the manufacturer's guarantee, and not the answer: "Sorry, we can't allow you a discount and give you service besides!"

The purpose of starting with an estimate of cost is to help you plan a system that will give you the most satisfaction from the money you spend. Or, to put it the other way, to give you what you want at the lowest price. So the first step is to put down, in the space below, your initial figure. Subsequently, you will arrive at the first estimate, and eventually you will be able to put down a figure for the final estimate.

INITIAL FIGURE \$ \_\_\_\_\_ FIRST ESTIMATE \$ \_\_\_\_\_  
FINAL ESTIMATE \$ \_\_\_\_\_

## THE BASIC HI-FI FACILITIES

Exactly what do you want your hi-fidelity system to do for you? That is something no mail-order house nor dealer can tell you, since you are the only one who knows. Therefore, you must decide which of the basic facilities — FM radio, records and tape — you want to include in your installation.

This point is stressed because so many people allow

themselves to be persuaded into buying complete FM, record, and tape equipment only to find, after they have had it in use a few months, that they were actually interested in just one or two of these sources of music. Then they wish that they had put all their investment into what they wanted most. If you are in doubt on this point, take time to acquaint yourself with the various pieces of

equipment, so that you will understand what each one can do, and how much entertainment it will contribute to you.

On the other hand, if you plan for only one source at the beginning, it is wise to provide for adding the others at some future time.

While television is not primarily a source of musical entertainment, it is included here for consideration. An

increasing number of people feel that TV is properly part of a custom installation, and they want to use the hi-fi system for reproducing the sound channel.

In sections 1 to 5, FM, record, tape, and TV equipment are taken up separately and their uses discussed so that you can decide which you want. Also, you may want to rate them in order of their importance in allocating the amount you will spend for each one.

## 1. FM BROADCAST RECEPTION

There are about 700 FM broadcast stations on the air now. Service varies considerably in different parts of the United States. If you live within 75 or 100 miles of a large city, you can probably get all the network programs on FM, and some that aren't on AM at all. Many areas outside the primary coverage of AM stations have a wide choice of FM programs. More and more, FM stations are specializing in fine recorded and live-talent music.

You may be under the impression that you do not have FM service where you live because you or one of your neighbors once bought a set with FM tuning, only to find that the reception was not good. That may have been because the set was not sensitive, or because it did not have a proper antenna.

The more sensitive the FM tuner, the more effectively it will cut out static and interfering noises. Also, FM is like TV in that it requires some kind of an antenna, and the weaker the signals at a given location, the higher and more efficient the antenna must be. You may even find it advisable to have a control to rotate the antenna, so as to point it in the direction of the station you want to receive.

While you may get FM reception with only a line-cord connection, the performance will be improved even if only a simple dipole made of wires is run along the picture molding, or stretched between rafters in the attic.

FM is the high-fidelity method of audio broadcasting. On FM, recorded and network programs are heard against a background of utter silence. Live talent programs, originating at the local transmitter can have full 15,000-cycle quality, and provide the presence effect which seems to bring the artists right into your living room. Once you get into the habit of listening to FM, you won't be able to tolerate the background noise and interference on AM.

Thus, if you are interested in radio programs you should 1) check carefully on the FM stations within 75 to 100 miles of your home, 2) choose a high-sensitivity tuner, and 3) find out what type of antenna will be necessary to pick up adequate signal strength. If you are going to have television also, you may be able to use the same antenna for both FM and TV, or at least you can mount two separate antennas on the same mast.

FM TUNER \$ \_\_\_\_\_ ANTENNA \$ \_\_\_\_\_

## 2. MUSIC FROM PHONOGRAPH RECORDS

The principal advantage of phonograph records is that you can have the particular music you want whenever you want it. In addition, there is life-long enjoyment to be derived from building a collection. Aside from the entertainment and relaxation records afford, they are useful as a means of encouraging children to appreciate good music. Recently, a considerable list of children's records has become available, ranging from dramatized nursery rhymes and folk songs to those which call for the child's participation in acting or dancing. Records are also the most convenient source of dance music for young folks or grownups. And now, with better records and more perfect reproduction available, group listening has developed as a popular social activity among high school and college students, as well as among adults.

The elements of a hi-fi system specifically related to records are the turntable or record-changer, tone arm, pickup, and stylus.

A turntable plays only one record at a time. Practically all turntables are adjustable as to speed for 33, 45, and 78 rpm. If you are going to use long-playing records only, at 33 rpm., you may want a turntable rather than a

changer, because it is hardly necessary to have a changer when each record side lasts 20 minutes or so. Furthermore, if you plan to have a very fine system, you may be sure that its bass response will show up the slightest mechanical rumble. Hence, it is advisable to get a turntable.

The convenience of a record-changer becomes most important when 45's or 78's are to be played, though many a music lover revels in being able to stack four hours of LP's on a changer and just letting it run. A feature on many changers is a switch to cut off the changer after the last record. The older designs repeat the last record until the motor is switched off manually. That is disastrous if you turn down the volume to answer the telephone, for example, and then forget the changer is running. Finally, the better your system and the more critical you are of reproduction quality, the more important it is to choose your changer for true tracking and freedom from rumble, rather than for the number of tricks it will perform.

The best way to decide between a turntable and a changer is to have both. An increasing number of installations



are being equipped in that way, and it is an excellent plan.

A tone arm is necessary to carry the pickup if you have a turntable. You can buy a separate arm, or one that comes already fitted with a pickup. There are tone arms with pressure adjustments. Others have a viscous damping arrangement, so that when you drop the arm on the record it settles down so gently that neither the stylus nor the record is injured.

Pickups vary widely in performance and price. Least expensive are the crystal types. Magnetic or reluctance pickups are very widely used for high-fidelity reproduction. The FM capacitance type employs the lightest pressure and causes the least record wear. You have your choice between separate plug-in pickups for microgroove and 78-rpm records, or turnover types that can be adjusted for both speeds.

The best advice is to choose a pickup consistent in performance and price with the overall quality of your system. If you are going to use it principally for popular 78 records, a crystal pickup will probably be quite

adequate. But if you are hoping for superlative reproduction from the best recordings, you must select your pickup accordingly. The foregoing applies to the choice of a pickup for use with either a turntable or changer.

As for the stylus, you have a choice between a semi-permanent metal or sapphire type, and a diamond point. The former must be replaced at rather short intervals. A diamond will last much longer. Again, your decision should be dictated by the kind of records you are going to play. With a diamond, you don't have to worry that your best records will be injured by a worn needle. On the other hand, if you are going to play popular 78's, you will probably discard them before they will suffer from a metal or sapphire needle that wasn't changed soon enough.

TURNTABLE \$ \_\_\_\_\_ RECORD CHANGER \$ \_\_\_\_\_  
TONE ARM \$ \_\_\_\_\_  
PICKUP, SEMI-PERMANENT STYLUS \$ \_\_\_\_\_  
PICKUP, DIAMOND STYLUS \$ \_\_\_\_\_

### 3. A SECOND PHONOGRAPH

The enjoyment of fine phonograph music should certainly be shared with the younger members of the family in a home where there is a high-fidelity installation. However, good equipment calls for a very careful handling. It takes only one scratch to ruin a long-playing record, and expensive pickups are not designed to withstand rough treatment.

Accordingly, you may want to include in your list of items a portable phonograph which the young people

can use for their own 78's and 45's. They can carry it around, and use it as they please. It's the best way to eliminate what might be called unauthorized use of the hi-fi installation, and those embarrassing situations that arise when scratches appear on pet long-playing records, or the pickup, for some unaccountable reason, doesn't produce music any more!

SECOND PHONOGRAPH \$ \_\_\_\_\_

### 4. TAPE RECORDER AND PLAYBACK

Of all audio equipment, tape machines vary most widely in design, performance, and price. You can get a little battery operated unit, light enough to carry on a strap over your shoulder, that gives moderately good reproduction, or a professional model that is flat above 15,000 cycles and is portable to the extent that it has handles so that two men can carry it a short distance. There are excellent models intended for permanent installation priced from \$100 to \$3,500. A few are playback machines only, but most perform the dual functions of recording and playing back.

From the foregoing, it is clear that you must know just what you want to do with a tape machine before you buy it. Both audio quality and price depend to a considerable extent upon the tape speed. Most machines have two-speed drives. A machine operating at 1 7/8 and 3 3/4 inches per second will record speech at moderately good quality, but music is only fair. At 3 3/4 and 7 1/2 ips., speech is excellent, and music is equal in quality to the reproduction capabilities of moderately-priced audio systems. If you want the very best recordings — and they can be practically equivalent to the original speech, music, or sound effects — then you will require a machine that

operates at a tape speed of 15 ips. With such a machine you will need a microphone of top quality, and a real high-fidelity system to reproduce everything that is recorded on the tape.

This brings up again the importance of consistent quality in all associated components. For example, inexpensive microphones are supplied with machines operating at 1 7/8 and 3 3/4 inches. Nothing would be gained by using a \$150 microphone with such a tape recorder, nor is there any advantage in playing the tapes on a three-way loudspeaker system.

Unless you are experienced in making tapes, or have an expert to instruct you, it might be well to start with a moderately-priced machine, and then trade it in on more expensive equipment later. Or you may prefer to buy a professional-type recorder right away, and to work with it until you have mastered its use, if you are seriously interested in making tapes.

Tape machines are used widely for building private libraries of church organ and choir music, radio programs, and such other sources of music as are available. Many collectors transcribe each new record on tape at once, making it unnecessary to subject the record to wear there-



*Emory Cook cuts a binaural disk on a Special Scully lathe.*

arate independent arms, or on a single arm. In the latter case, they must be individually suspended from the arm, allowing each free vertical motion, so that they may follow individually the warp of the record. No record is without *some* warp, and the degree of warp is never the same at the two points of contact. Such an arm is being produced commercially, by Livingston Electronics, and there is no need for home-made experiments along that line if binaural is to be set up.

### The Amplifier(s)

Many an audio enthusiast has a second unused amplifier around the premises, which can be rescued and put back into service. Or, a "push-pull throughout" amplifier can be easily converted to serve the binaural purpose by itself alone by splitting the two sides of the push-pull channel into the two cartridge outputs, bypassing all cathodes to ground if they are "common" cathodes, and treating the output stage as if it were two single-ended outputs instead of a push-pull. The existing output transformer may be used for one side, a similar one added for the other side. However, if such a "conversion" amplifier has an interstage transformer along the line somewhere, the scheme will *not* work.

### Power Capacity

In passing, it may be well to mention a strange characteristic of binaural systems. They sound louder for the same power level in the room than regular single-channel equipment. Two 10-watt binaural channels seem to

sound much louder than a 50-watt single channel. Correspondingly, hiss noise level is also reduced.

### The Speakers

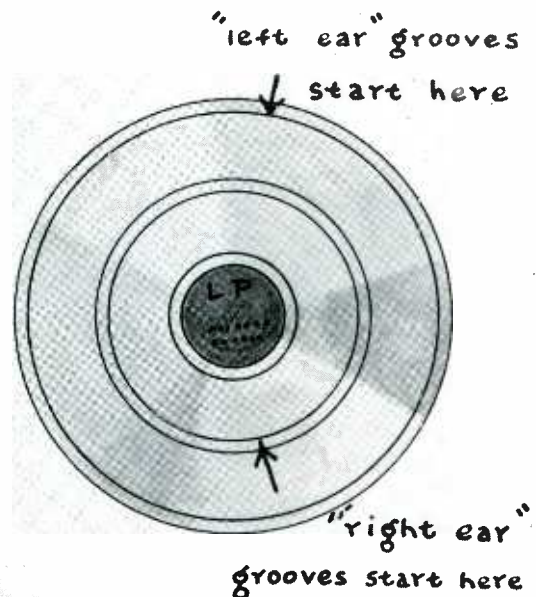
The next step is that of reproduction in the living room. Since (fortunately) the "average" living room (14 by 16 ft.) is an abstraction rarely met in practice, it is impossible to reduce speaker placement to an exactitude, and we must all resort to the pleasant procedure of experiment. The two speakers should be as alike as possible, and if the distaff side objects to the second speaker in the room (in addition to the TV set and six record cabinets), then it may be disguised behind some piece of furniture. Generally speaking, if speakers are against a wall, 10 feet or more apart, and perhaps equidistant at least 6 to 10 ft. from the listening area, we have a basis for binaural effect.

### Room Acoustics

An intelligent decision as to where to place the speakers must be influenced, if not entirely determined, by room acoustics. Since few of us are in the bachelor's position of feeling free to adjust the room's furnishings to suit the sound, then the tail must instead wag the dog, and the speaker locations sandwiched in by ingenuity, tact, skill, and luck.

Reference to Fig. 2 will give a basic idea of what is required if the speakers and the room acoustics are to get along together harmoniously. By "hard" acoustic material is meant plaster, tile, brick, varnished or painted wood panelling, etc. "Soft" means rugs, heavy curtains, Celotex or other soft wallboard, monks' cloth, and the like. In principle it is always best if two opposing surfaces (walls, or floor — and — ceiling) are not both hard.

*Fig. 1. Sketch of a stereophonic disk: twin groove bands both track inward toward center, can be played singly.*





A large percentage of the wall opposite the speakers must be soft for the best effect, and preferably also a substantial portion of the side wall area, otherwise reflection from the hard area may be so pronounced that the three-dimensional effect is reduced. Ordinarily, since most floors carry rugs over much of their area, the hard ceiling is not a problem.

### Compatibility

There are several ways in which to produce binaural records. The one chosen here is especially planned to yield complete compatibility with existing records and record players. The BN series is recorded outside-in at 33 1/2 rpm. It may be played back successfully on an ordinary phonograph with a single cartridge, the same as any LP, one band or "ear" at a time, until such time as a binaural phonograph conversion is made. After conversion, the binaural arm still can be made to play ordinary records simply by raising one of the two cartridges off the record.

### The Invisible Clock

The whole idea of three-dimensional sound was originally predicated primarily on the use of earphones for listening. This practice being both uncomfortable and anti-social, it was also short-lived, but it lasted long enough to cause a confusion of recording technique. Obviously, while earphones were considered as the listening medium, everything was beautifully simple. A recording would be made using two microphones spaced six inches apart, located at a point in the studio where the balance of sound was satisfactory to a pair of human ears. (Six inches is the approximate effective spacing of human ears.) Then we could record each microphone separately, play them back synchronously, each into one of the earphones, and the system was complete. No trouble.

Using loudspeakers instead of earphones changes binaural sound at once from a tinkerer's hobby into a potentially popular medium. But it also complicates the technical approach: we must abandon any idea of microphone spacing at six inches, and build a new technique which correlates the spacing and positioning of the recording microphones with those of the reproducing loudspeakers. This means that the makers of a recording must keep their spacing of microphones down as nearly as possible to measurements which can be duplicated in a

living room. The eventual fine adjustments, however, must be made by the owner of the living room and the loudspeakers. To help him place the latter just right, we have made a test disk — a binaural recording of a grandfather clock. When the listener has his speakers placed and spaced exactly right against one wall of his room, a phantom clock will seem to be ticking precisely halfway between them. All our BN records will be made to reproduce properly through speakers placed according to the test record.

It seems to us by no means impossible that the advent of binaural disk recording may have important, even revolutionary effects. Binaural sound is so good that it is bound to bring other record companies into its manufacture through pressure of demand. Two, besides ourselves, are in action already. Polymusic is preparing a binaural disk of a piano recital by Jesus San Roma; Atlantic is making one of a jazz band. Our own output thus far, aside from the clock-tick, consists of a double pipe-organ offering. There is no way, of course, in which a taped monaural recording can be doctored to come out binaurally on disks. Each binaural recording requires a new performance. Not all such need be expensive, however. Recorded binaurally, we have found, many a commonplace abstract sound can be an attention getter. And recorded drama benefits notably from binaural recording.

Binaurally as monaurally, disks have certain advantages over tape for home listeners, in convenience, in economy, in plain availability. The future of binaural is up to the record companies. They have had opportunity to discover, through microgroove, that if they but furnished the records, the customers would contrive or acquire equipment to play them on. Once the equipment exists in quantity, the FM-AM broadcasters and tape-machine makers will also begin to benefit.

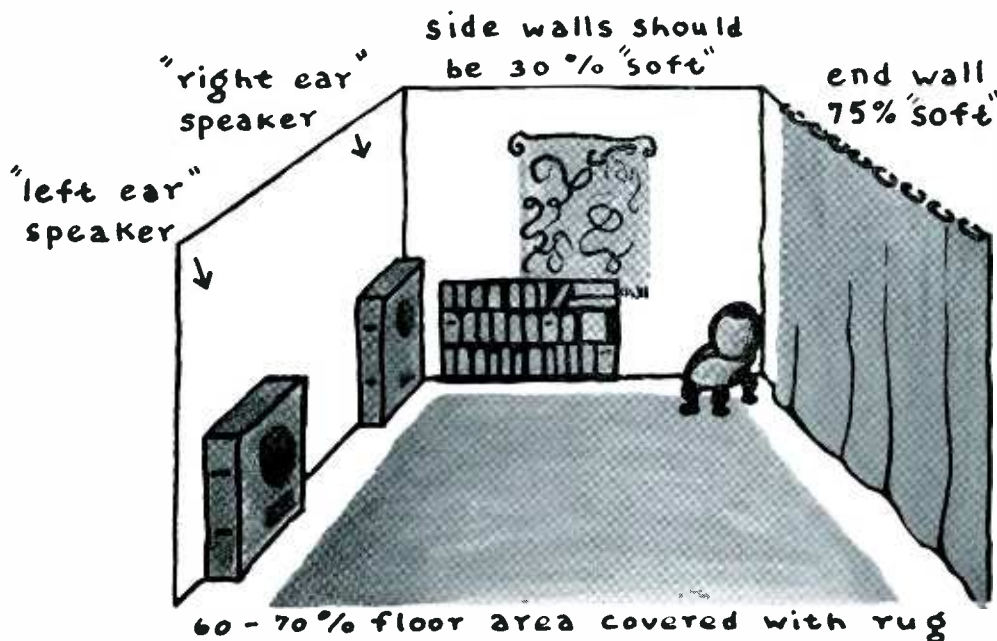


Fig. 2. Most rooms will adapt readily to binaural reproduction. Note that both speakers face directly forward; putting them in corners would interfere with binaural perspective.

# Boxed in Beauty

**A** TRADITION has grown up that, to express the absolutely last word in true swank, a home-music installation must be built into the walls of its owner's dwelling. This is unfortunate. Plenty of people with adequate wealth and taste to want and acquire the best in equipment do not happen to own the houses they live in. Hence their equipment must be detached, movable. Some dwellers in apartments and rental houses do not even have — shudder if you will — corners wherein to put separate speakers. Below are two views of a one-box installation designed and owned by Chicagoan Ken Schmid and

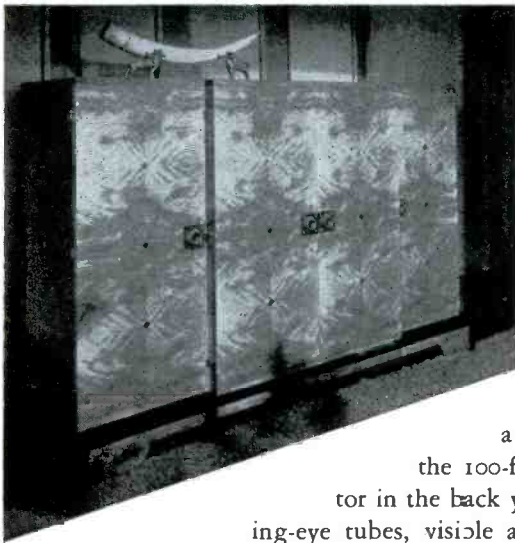
good-looking enough to suit anyone. It contains a Meissner tuner amplifier, a 15-in. Altec speaker, a Webster changer with Pickering cartridges, all housed in a modified Drexel buffet. The speaker chamber encloses 9½ cu. ft., yielding good bass. On the opposite page is something much vaster, contrived by Gerald Shirley, of Televox. An idea of its size may be obtained by scaling it against the record albums visible in the lower picture. At that, it is not a self-contained music system. It houses equipment which feeds a Brociner-Klipsch corner-horn speaker not shown in the photographs, although mounted in the equipment-



*This tastefully adapted Drexel buffet could turn any man's rig into something his wife would welcome into the living room — an asset which needs neither explanation nor elaboration.*







cabinet are two 8-in. Permoflux speakers, for monitoring or use with non-musical TV material. The cabinet itself is fabulous. Of English hawewood veneer, it was designed by Tommi Parzinger, made by Hofstatter's Sons, Inc., New York, and cost \$3,000. It is 8 ft. long. Perhaps it is unfair to describe it as a mere cabinet; it could almost be called a containment policy. The components it houses are: a Browning RJ-20-A FM-AM tuner; a Brook amplifier; a Rek-O-Kut turntable with Pickering arm and Pickering diamond cartridges; Webster changer with triple-play GE cartridge, diamond styli; a Radio Craftsmen TV chassis with 24-in. tube; a Masco tape recorder, and an RCA 16 mm. sound-

movie projector. To

get the full picture, a reader should also visualize the 100-ft. TV-FM mast with rota-

tor in the back yard. One of the two tun-

ing-eye tubes, visible at the right, indicates sta-

tion-signal strength! Concealed in a slot above the TV

tube face is a 36-in. movie screen which can be pulled down

like a window-shade. Below the screen are AC outlets to power the

projector and an input for its own audio amplifier. The whole giant

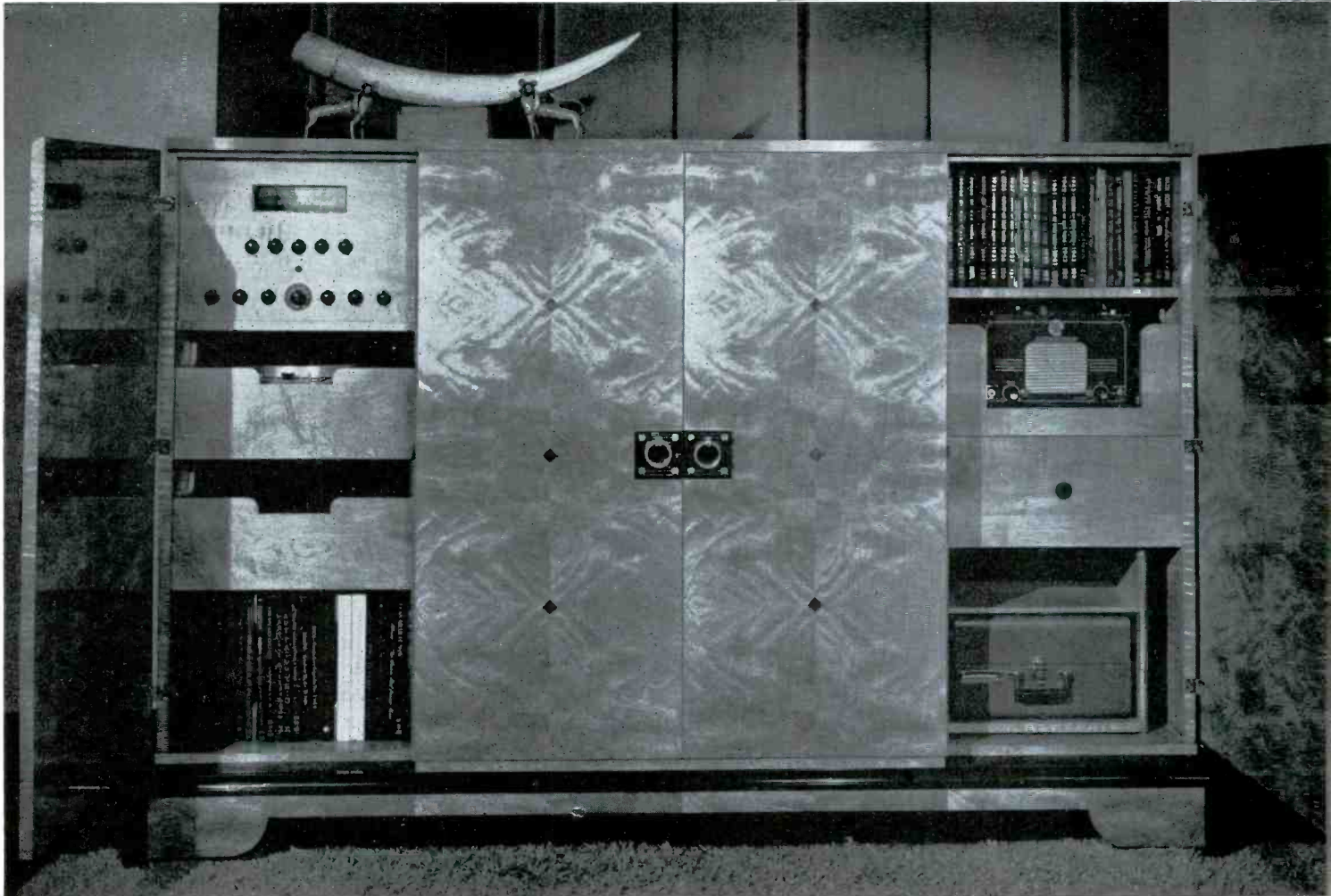
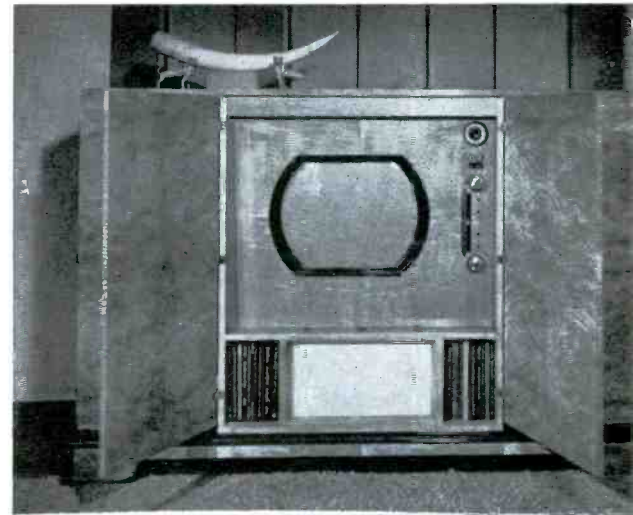
box moves on rubber rollers. A novel accessory: the remote-control

"Com-muter" made and sold commercially by Televex at \$2. It is sim-

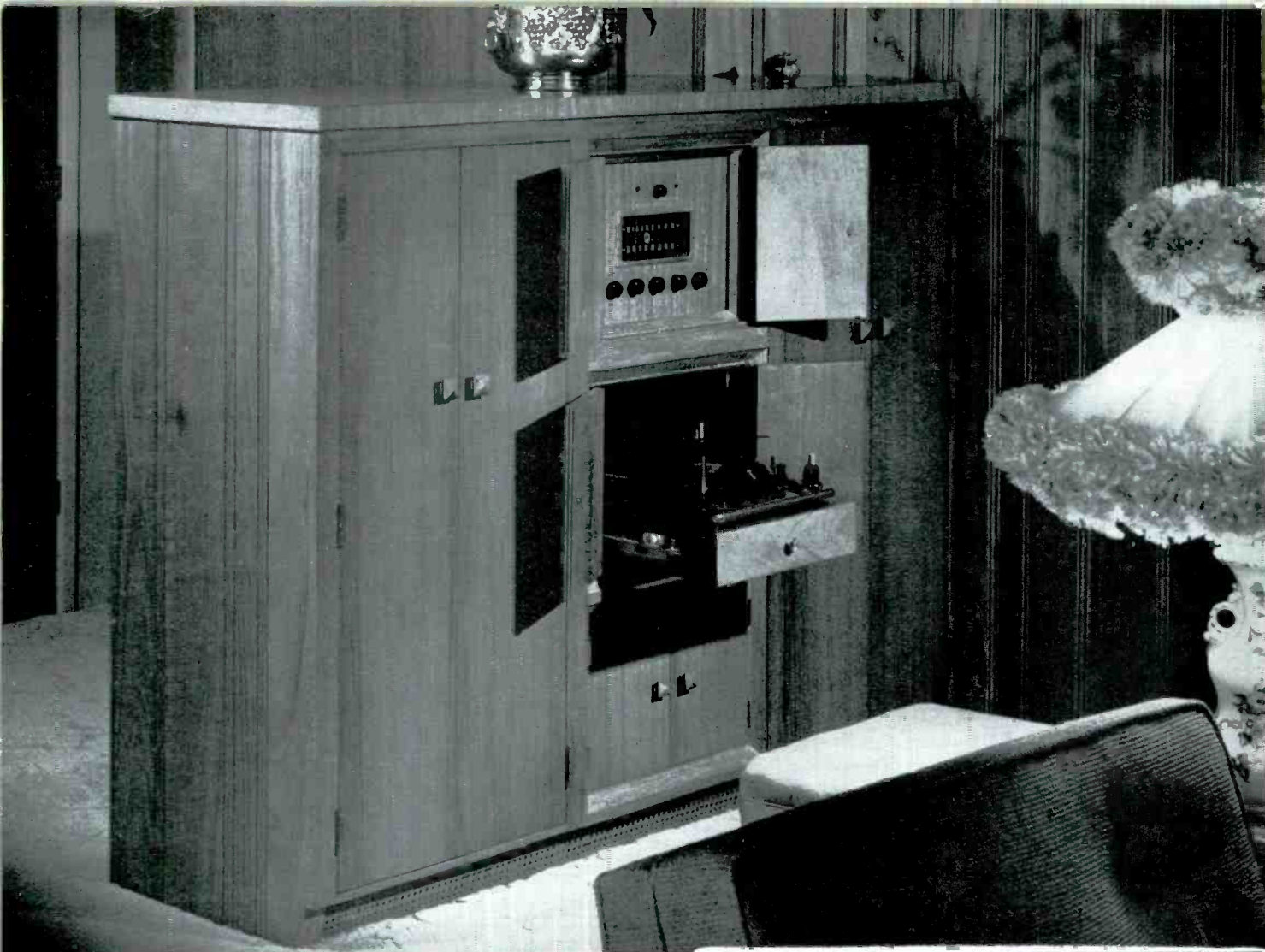
ply a remote switch by which a TV commercial can be rendered instantly

soundless, hence the name: commercial muter. More modest ventures

into the rectilinear are shown on the following page, the top item being a product of Audio Arts, Chicago, the lower of Los Angeles'

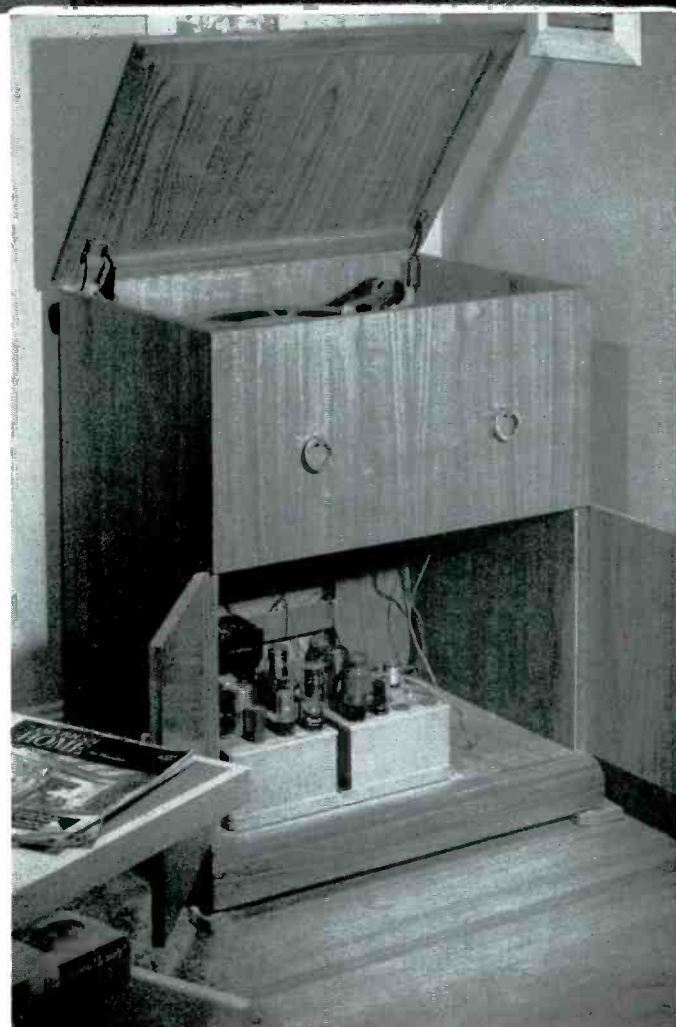






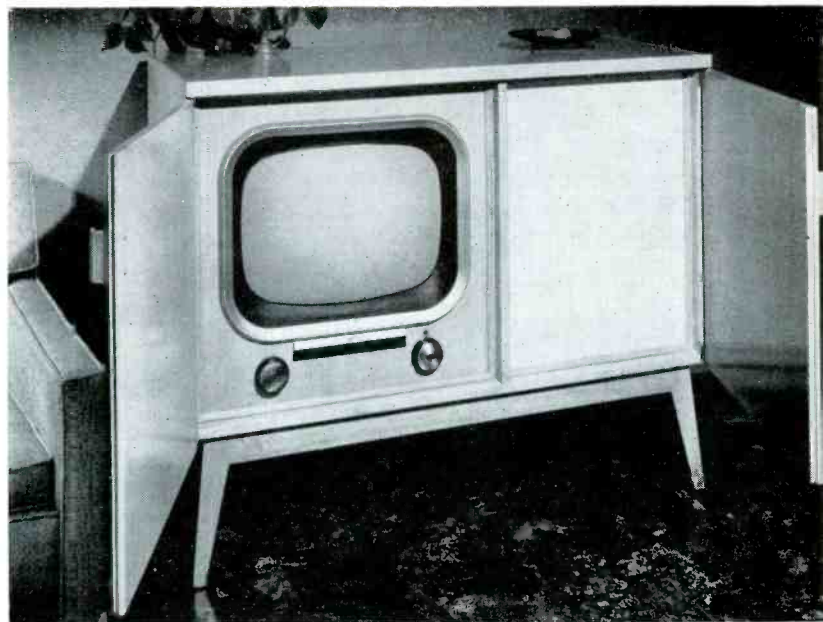
KIERULFF, LOS ANGELES

*Boxing practiced as a fine art by Kierulff of Los Angeles: Above, a rather modest sound-system in a quasi-Colonial-Modern cabinet in wood to match wall panels. Below, imposing equipment — note Fairchild turret-arm, 50-watt MacIntosh amplifier—in superbly simple, slightly housings.*





Kierulff. One gives positional unity to loudspeaker, TV screen and tuner and would have to be fed broadcast or recorded music by tuner and record player elsewhere. The lower picture suggests the elsewhere — where else but at the chairside? Actually, this particular arrangement would not be ideal. If the radio tuner's amplifier were housed with speaker and TV tube, it would be too far from the tuner. If it were

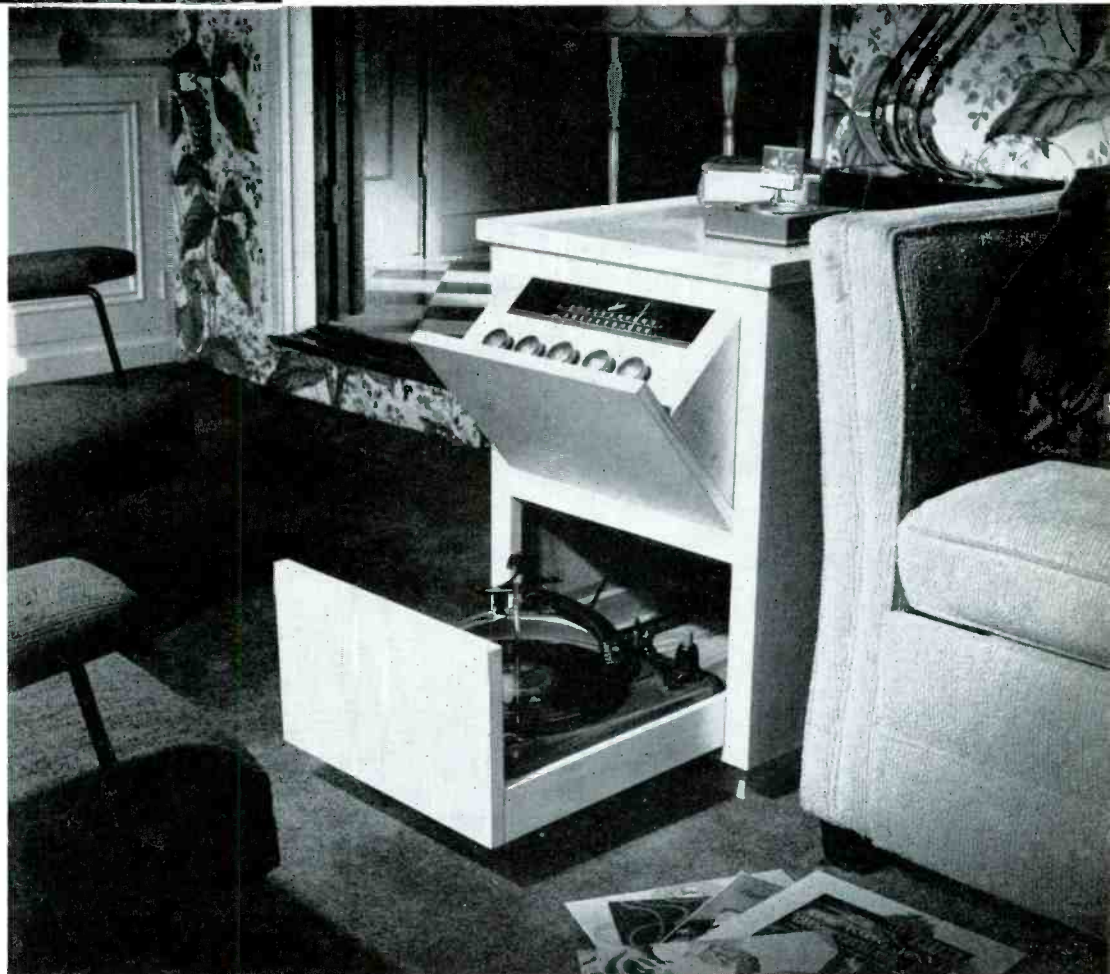


ALERO ARTS. CHICAGO

*Many a home music listener is, when it comes to audio equipment, a modicum-hunter. Especially if he lives in a small apartment, he doesn't particularly crave big sound. What he wants, in his TV-radio-phonograph combination, is self-contained compactness and the absence of the aural horrors perpetrated by the average commercial set featured in department store salesrooms. Albeit his name is probably Legion, the trade has almost ignored him, up to now. On this page are some ideas for him and his worthy ilk.*

KIERULFF. LOS ANGELES

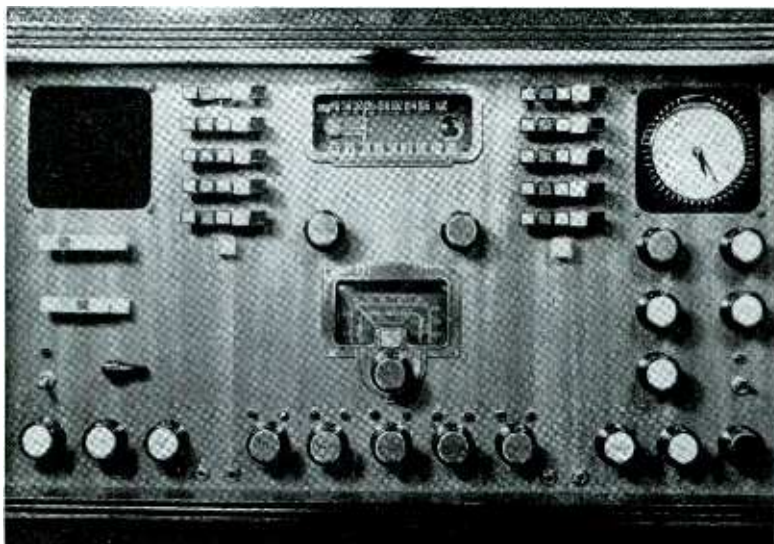
housed with the radio tuner, the TV tuner's audio output would have to be led across the room to the amplifier and back again to the loudspeaker. In the chairside cabinet, Kierulff has made one of a number of compromises (there is no real solution to the problem he faced). He chooses to let the radio station hunter stand up, makes the record-lover squat for his music. Perhaps Kierulff theorizes that the lady of the house is usually the greater radio-user, hence should be spared having to grovel for her music. Another possible arrangement, which sometimes traps the unwary, is to give the record player top position — and a hinged lift-lid. This has interesting party possibilities, since a guest always puts a highball down on the lid just as the host lifts it.



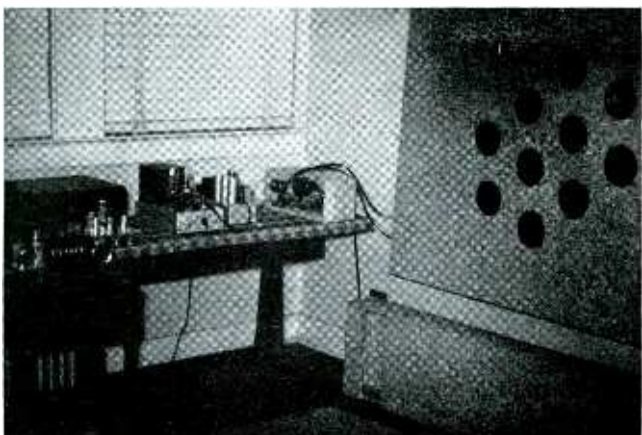


## Complications have set in . . .

Below is a view of what has been referred to (in awed whispers) around the office for a fortnight as The Thing. The Thing is the creation of A. J. Leftwich, Jr., a Florida resident. As a result of life in the bracing air of the



Gulf Stream breezes, he has developed the magnificent effrontery which enables him to claim that he contrived The Thing for the benefit of the little woman, probably the least likely story heard on these premises since the associate editor got the word that the Dodgers would take the Series in straight games. On the gold-blond mahogany face it presents to a flinching world, The Thing bears 19 control knobs, 62 push-buttons, 2 dials, 3 miscellaneous switches, 4 plug-in sockets, 12 pilot lights, colored red, green and amber, and a clock, wired to turn programs on and off. The little woman, it may be deduced, is not actually very little, since the cabinet housing The Thing is a full 4 ft. tall and topped with a lift-lid which exposes two record changers, a Webster and a Seeburg. Other sound sources contained in its innards include a Bogen R602 AM-FM tuner, an RCA 6T short-



wave radio (audio out) and an RCA 9T77 TV receiver (the picture tube being housed elsewhere, together with a GE 1201D master speaker. Every room in the Leftwich menage has a built-in loudspeaker, all fed by The Thing). Seated at the controls of The Thing, Mr. Leftwich can operate two audio amplifiers, through the six knobs paired in the lower corners. The five knobs in between enable him to select and channel his sound sources. Above the left set of amplifier controls are those which adjust TV volume, contrast and brightness. When desired, the TV audio-detector output can be switched to one of the high fidelity amplifiers. One switch permits him to cut TV sound, silencing objectionable commercials (a



growing practice, apparently). Four banks of push buttons arrange for the conveyance of sound to the various rooms in the house. The monitor-speaker, top left, allows him to temper said sound for the room's occupant. In case nobody but him wants to listen, a contingency which might just possibly arise, there is a jack-socket for ear-phones. Finding suitably varied knobs for all these functions, Mr. Leftwich reports, proved to be quite a chore, but he got them. Next he plans to acquire a tape recorder, which, through some unaccountable oversight, The Thing still lacks.

We are obliged to admit that we have moments of weakness during which we would enjoy forsaking the simple life and sitting down in front of The Thing . . . what a sense of power it would give!

Some audio enthusiasts really don't want to hide the working parts of their rigs. Others can't. One of the two is LCDR Palmer McCurdy, a Navy engineer officer, who has set up in his quarters the attractive and functional rig shown at the left. It comprises a Heathkit tuner, a pre-amp and equalizer, a Partridge-Williamson amplifier, a three-way network (375 and 2,000 cps.) feeding a University tweeter, ten 6-in. cones and a Jensen P-12P in an air-coupler.

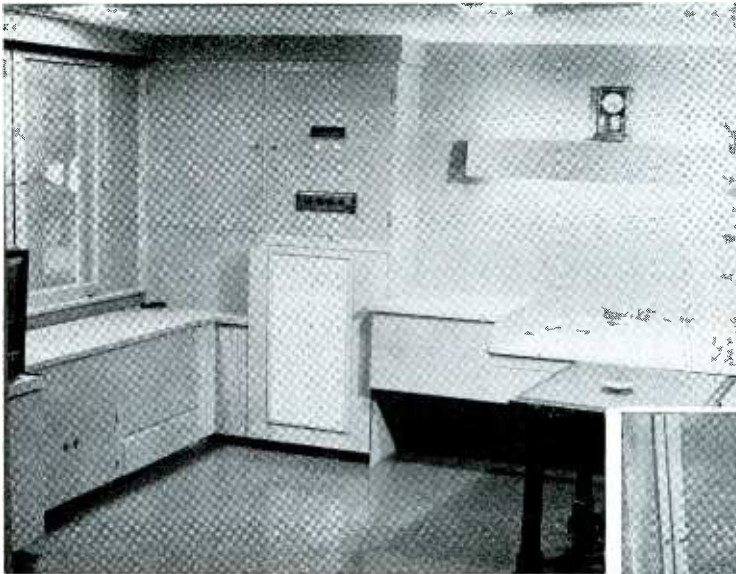


## . . . a porch is remodeled

"Take a TV set, two Concertones, a Jim Lansing speaker plus a Brook amplifier and a Brooks FM tuner, plus a 16-in. Rek-O-Kut turntable, plus a fairly large tape and record collection and you can imagine how crowded our 12 by 25-ft. living room was, and why the law was laid down from headquarters to 'do something about it'."

*That is the teaser which reader Roger ter Kuile of Bridgeport, Conn., sent us recently. Knowing that there are a lot of readers in similar straits, we quickly "bit" and asked for more information. Other readers may not be able to follow Dr. ter Kuile's exact plan of action, but his solution may start them on a tour of the house with a new gleam in their eyes. Here's the rest of the story:*

"I had tried corner cabinets for all but the tape recorders and the turntable, but that didn't help much. Obviously, I had to expand in another direction. Your various articles on ways and means of expanding couldn't apply here unless I got rid of Mama's piano, so I was more or less on my own. Then my eyes lighted on our screened-in side porch. This was one of those dinky affairs, really too narrow (10 ft.) to use much and,



besides, the porch was cut into by the living room fireplace chimney. Why not close in the porch, cut a large archway through the side wall of the living room from the fireplace to the rear of the house and use all that porch space? Solid walls could be installed where the screens were, the floor could be raised to the level of the living room floor, and windows arranged at each end of the room.

Our architect was a man of vision and progressive ideas. He drew up plans to work in with my needs and modified the living room so that the two rooms blended in very well.

The pictures give an idea of the setup and are taken from the living room looking through the 9-ft. archway.

The picture at the left shows, from left to right, the TV set (showing in part) which is on a cabinet on casters to be rolled out for viewing; the two tape recorders, located in cabinets with storage space under them; the corner-wall arrangement to accommodate amplifier, FM tuner and amplifier controls; loudspeaker (the latter is on casters to facilitate moving it for service or closer listening); a long shelf with the turntable at one end, tape and record storage at the other.

The right hand picture is a semi-closeup and shows the cabinets opened and the loudspeaker pulled out from normal position.

All of the cabinet work from the corner cabinet down is arranged along the outside wall of the porch, using up 15 ft. of porch space. The rest of the space beyond the record storage area is given over to bookshelves and cabinets.

All wiring is concealed but readily available. I take the center drawer out from under the counter and then can sit on a chair and get my knees under the counter. The bottom of the turntable receptacle is open so that this can be serviced from above or below. Suspending the FM tuner and amplifier controls on the large door makes them readily available and the 13-ins. of space (in depth) behind them gives plenty of breathing space. The shelves that hold the tape recorders in their receptacles do not go clear back to the wall under the windows, which allows air to circulate from the storage space below, even with the covers shut. I mounted the tape recorders on 9-in. shelf brackets as legs and braced by wood strips on the ends. This keeps the mechanism open for ventilation and very easy servicing.

The sound is broken up by the many angles and by keeping the original porch ceiling, which is tongue and groove slats. The loudspeaker can be moved to shoot from any angle or distance for living room listening.

The equipment chosen represents *many* months of search and trial. I wish you could hear it."





## all this is *NOT* but a dream

*Dreams can come true, Romeo. Even for high fidelity enthusiasts — as this article proves.*

By V. H. POMPER  
and H. H. SCOTT

**T**HIS IS the story of a high fidelity system. True enough, few of us can be so fortunate as to have such a system. But the details should be told — for two reasons: first, the system represents the ultimate in our knowledge of just what actually can be accomplished in the way of home music reproduction as of mid-1952. Perhaps, even five years from now, we shall wonder how anyone could be satisfied with such "poor" reproduction . . . just as we look back from 1952 upon the screeches and booms of a 1947 *ne plus ultra*.

Second, though the system be beyond the means of most, so too are the sleek cars designed for Indianapolis. Yet the Ford owner would do well to examine the engi-

neering of these super-cars. And, though the installation to be described here employed two \$700 speaker systems, the same principles can be applied to two lowly 12-in. units, with a marked improvement in sound.

Behind this story, there are months of equipment testing by experts to determine the very finest equipment obtainable among all the many units on the market. Weeks of planning by engineers and architects preceded the manufacture of new and special equipment and the actual installation. Every refinement of detail required the best efforts of critics, manufacturers, technicians, electricians, carpenters, painters, owners and onlookers, and the just plain incredulous.



## Wanted: the Best

This music system began innocently enough when its future owner first came upon high fidelity music reproduction in the pages of the *Saturday Review of Literature*, and promptly appealed for help in assembling a system. The problem soon found its way to C. G. Burke, who for months had been making careful, impartial comparisons of leading high fidelity equipment for a book which, at that time, was soon to be published.<sup>1</sup> As readers of HIGH-FIDELITY know, the results of Mr. Burke's tests were recommendation of five complete high fidelity systems in separate price categories. Each system was composed of those units which Mr. Burke and a jury of critical listeners had judged to be the best obtainable within the given price range.

Since Hermon Hosmer Scott, Inc. is the manufacturer nearest (300 tortuous miles, as the narrow road twists) to the summer home in Maine where the installation was to be made, the authors were approached regarding the possibility of their planning and supervising the installation of this ultimate in home music systems. Suffice it to say that the challenge proved too strong to resist, and thus our work began.

## Selection of Equipment

For this installation, the choice of equipment was developed from that high fidelity music system which Mr. Burke considered "the best, price irrelevant". The basic units were an H. H. Scott 214-A amplifier, Electro-Voice Patrician speaker system, Fairchild cartridges and arm, Rek-O-Kut turntable, and Garrard changer.

Quoting the words of Mr. Burke, such a system represents: "the nonpareil, de luxe, supreme, *ne plus ultra* category—the only considerations are musicophonic. Curiously, this integrity of concept is almost indecent in its aloofness from practicing practicality: most of us are forced to compromise with principle by permitting the trespass of alien consideration. We are ignoring cost and bulk in this category: we are composing a chart for the fortunate and erecting a standard of realizable merit which the subsequent categories will approach as closely as their economic restrictions permit.

"The eclectic apparatus in the first category recreates a rounder and truer music than any of its auditors had ever heard in anyone's home. It seems impossible to ordain a more rational basis for selection of a musical instrument."

## Two Complete Speaker Systems Used

As a result of his tests, Mr. Burke recommended more than one speaker system if possible, since "Elaborate music is most eloquently sounded when emitted simultaneously from several points". With a multi-speaker system, the listener can be bathed in a sea of musical sound, particularly effective for orchestral music, even

when reproduced at low levels. So to the basic system we add a second Patrician four-way loudspeaker system.

When two speaker systems are used, however, it becomes imperative to control the balance of power fed to the various systems, since the desirable relative volume of the speakers will vary with the type of music and the location of the listeners. Faders or mixers in amplifier outputs are generally undesirable since they dissipate amplifier output power and, in effect, reduce the power handling capacity of the system. Therefore it was decided to drive each patrician with a separate amplifier: the Scott 220-A, which is the power section of the 214-A. A single front end or tone control section would feed both power sections.

Installed on the estate already was an outdoor weather-proof loudspeaker. (What of the poor fisherman several miles at sea who might also like good music?) A third power amplifier section was required to drive this outdoor speaker.

For radio broadcast reception, a Browning RJ12B FM-AM tuner was chosen because of its extreme selectivity, sensitivity, and stability.

With the extended bass response of the speakers, the overall frequency response of the system was truly remarkable. Such very low response, however, increases susceptibility to turntable rumble, and the extended high frequency response can reproduce record scratch and hiss, LP "steam", and so on, as well as the musical highs. To minimize the undesirable concomitants of extended range a Scott 111-B dynamic noise suppressor was installed.<sup>2</sup>

The finest equipment is of no use without correct and convenient control of all units. Because of the complexity of this system, suitable control units were not available commercially.

## Speaker Balance Controls

The two Patrician speakers, operating from independent amplifiers, were located in a long serpentine living-dining-room, one in a corner at the living room end, the other set into the back wall at the dining room end. It was necessary, therefore, to provide complete control of balance between these speakers, so that either could be used independently or both adjusted to any desired relative level.

The outdoor speaker presented a still more complex problem, since this had to be controlled independently by a water- and weather-proof control on a long, flexible cable so that the listener could sit on the surf-side terrace, or walk out on the rocks, and adjust the level to his liking.

To meet these requirements, the 214-X3 speaker balance control was developed. By adjustment of a single knob, this control allows the acoustical balance to be varied from full volume on the main speaker system and no volume on the secondary system, smoothly through equal volume on both, to full volume on the secondary

<sup>1</sup>The *Saturday Review Home Book of Recorded Music and Sound Reproduction*, reviewed in HIGH-FIDELITY No. 6.

<sup>2</sup>See "Controls and the Amplifier" V. H. Pomper, HIGH-FIDELITY No. 4.

system and complete quiet on the main unit. Thus any desired balance of sound output can be obtained readily and quickly.

But what of the outdoor loudspeaker? Naturally, control from outdoors was desirable, though still delivering maximum power without distortion to the unit. For this an impedance adaptor unit (the 214-XS1) and a remote volume control (the 214-XS2) were created. Since this control would frequently be exposed to the rigors of Maine climate and seashore, it was made as nearly water and moisture proof as possible. Placed at the end of a 70-ft. cable, it allowed convenient control of the outdoor speaker from almost any point on the surf-front terrace. (The cable, however, was made just too short for the remote control to be taken into the surf!)

Special equalizing networks were provided for the phonograph pickups and, together with complete switching, were combined with the noise suppressor, into what we designated as a 214-X6 phonograph control panel. This panel also included an adjustable high-frequency cutoff filter for use on noisy AM reception or for old records which are badly distorted.

Because of the location of the equipment, entirely built in to the living room wall, special ventilating and power control systems were also required.

## Architectural Considerations

As an architectural masterpiece and leading example of good contemporary design, the home in which this installation was made is hardly conventional. Obviously, a music system, for all its bulk and complexity, should interfere as little as possible with the decor and functional interior design. The long combined living and dining room was mildly S-shaped, paneled in driftwood-colored cypress with two huge curved-glass windows fronting on the ocean. The ceiling and that part of the front wall not occupied by the windows was a smooth whitish surface of cedar formed in a single continuous sweeping curve reminiscent of the hull lines of a ship. The furniture was simple and in keeping with the general style of the room. A garden of evergreens separated the raised dining end from the remainder of the room.

Facing the cold Atlantic and the rugged rocky coast of Maine, such a room has to be seen to realize its true beauty and appropriateness. Obviously, nothing should be overlooked to avoid marring this perfection. All storage closets, a bar, an earlier type radio-phonograph, etc., were concealed by flush panels, completely undetectable when closed. Even the outer doors of the room were set flush and finished in such a manner as to be unnoticeable when closed.

Unfortunately, such a room, with its hard, concave surfaces, presented acoustical problems. Hard surfaces reflect sound; concave surfaces focus it. The result can be extremely unmusical, with "dead" and "hot" spots in which bands of frequencies are, respectively, attenuated or exaggerated to distort the overall sound pattern.

Therefore, careful acoustical surveys were made of the room, covering reverberation and sound meter meas-

urements for best coverage with different loudspeaker positions. The first speaker was placed in a corner at the living room end. The second was set into the back wall of the room at the junction of the living-dining room sections—a position favored by the owner for aesthetic reasons, and which acoustical studies proved to be entirely satisfactory musically, in spite of the fact that the speaker then directly faced the front wall which consisted of concave glass and wooden surfaces.

## Matching the Decorative Scheme

So that all speaker cabinets, grilles and other additions would harmonize with the general plan of the room, a firm of architects was engaged to design them. The grilles of the speakers are of a simple, horizontal design, carrying out the lines of the bookcases in the back wall of the room, and finished to match the panel.

The exposed corner speaker was mounted in a completely custom built cabinet, again to match the style and finish of the room exactly. When completed, it actually appeared far smaller than its considerable size because it blended so perfectly with the surroundings. Even for the grille cloth, great care was taken, the stores of Boston being searched for exactly the right shade to match the wall finish, and the right texture to transmit even the highest frequencies. The speaker grilles were carefully designed so as to provide no alteration in the sound pattern. This was done by spacing the bars of the grilles so that none was in front of any of the high frequency speakers.

To accommodate the second speaker system, shelves and drawers of a concealed cabinet closet were torn out and reinstalled in a convenient butler's pantry. In the space thus made available, there was constructed a right-angle corner for the four-way corner horn system. In constructing this artificial corner of heavy plywood, reinforced with 2 by 4's, particular care was taken to insure extreme rigidity of the plane surfaces so that they would not resonate even when reproducing the most powerful bass tones. Because of the height of the space, a third horn path, in addition to the two side paths (typical of Klipsch-type horns) was constructed over the top of the speaker, effectively improving the matching of the driving system to the room at very low frequencies.

A specially designed pecky cypress grille concealed the mechanism of the system. Horizontal bars were used in the grille, and were so placed as to avoid obstructing the radiation paths from directional high-frequency horn units. A former door was cut so it would fold when open and thus avoid interfering with the doors of a concealed bar. When closed, this door hid the secondary speaker system entirely.

## Installation and Ventilation

The three power amplifiers were mounted side-by-side below the turntable and record changer in the end wall of the living room beside a convenient lounge. Since the heat generated by three heavy duty power ampli-



*This luxurious modern living room was the decor into which the finest of home music systems was to be installed. The illustration below shows the room before the installation*

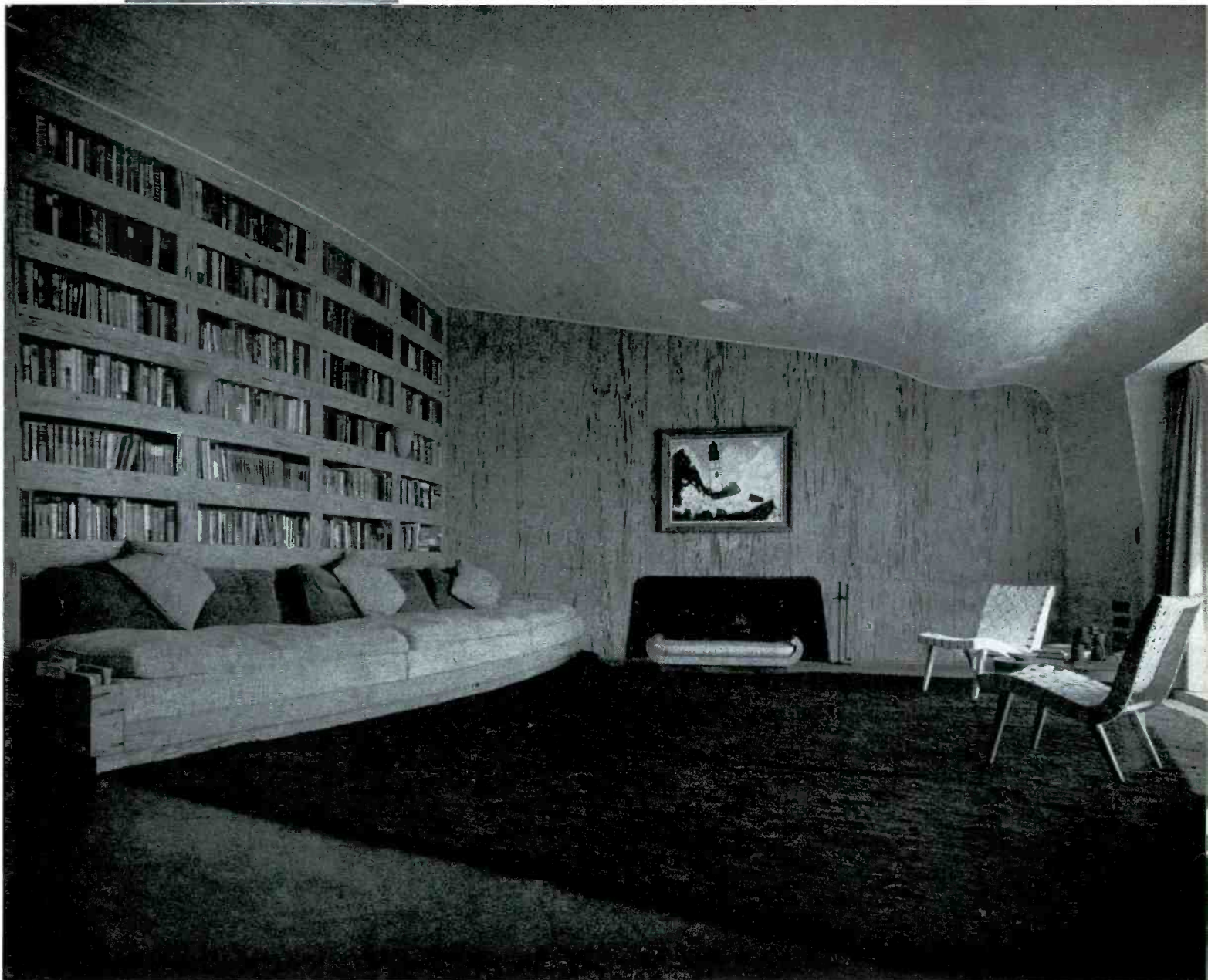


*was started. Even when complete — with two four-way speaker systems, three amplifiers, and a complete control panel, the only visible change was the addition of a single speaker cabinet in one corner, skillfully blended with the interior finish:*

*note the small picture at upper right. The control panel, turntables, and FM-AM tuner (left) are normally completely hidden behind flush panels.*



Photos by Tom Leonard; courtesy of House and Garden and Progressive Architects.



fiers exceeds that of many electric hot plates, ventilation was imperative. The previous music system installed in this space (a very high quality console) had had a long record of periodic tube and fuse failures, primarily because of the high temperatures developed in the small enclosed and unventilated space. With three amplifiers, the only solution was forced ventilation. Through a series of ducts, a small, quiet blower drew air from the room, through the amplifier enclosure, and thence exhausted the heated air outdoors.

Surprisingly enough, the area in which the equipment was to be placed represented a stern and rigorous test of all the equipment. Since the installation is in a summer home, it undergoes periods of sustained use alternating with long periods of disuse. The Maine climate is invigorating but hardly balmy. With the summer home directly on the seashore, humidity and the corrosive action of salt air were major hazards.

In addition to the normal (?) humidity of Maine, we ran into a special problem: directly behind the installation was a stone wall with wonderfully moisture-retentive properties. In fact, condensation from this wall frequently formed pools of water on the sub-floor in a single night. Under such extreme conditions, humidity is a major hazard to sensitive and delicate electronic equipment. To overcome this problem, a 25-watt electric light bulb was installed in the enclosed amplifier area. This bulb, operating continually, provided just sufficient warmth and air convection in the enclosed space to keep moisture condensation below danger limits.

### Minimizing Hum

An important consideration in designing and installing high fidelity equipment in areas of limited space is the problem of power transformer placement in relation to the pickup cartridges. Phonograph cartridges are extraordinarily sensitive devices, and they readily pick up AC hum generated by the electrostatic and electromagnetic fields from any power transformers which are in too close proximity. For this reason, considerable care was taken that maximum possible distances separate the pickup cartridges from amplifier and tuner power-transformers.

### Accessibility of Equipment

Nothing which man has yet wrought is forevermore without flaw, and this applies even to the very highest grade high fidelity equipment. Under extended operation, vacuum tubes may fail, adjustments may get out of order, and so on. It is important, therefore, that all components, connections, tubes, and controls be readily accessible. This is particularly imperative as the system becomes more complex. Therefore, all concealing panels and shelves, including those upon which equipment was mounted, were designed to be readily removed.

In every possible way, panels and shelves were designed and constructed to harmonize with the functional theme of the design. In fact, the entire system can be

completely concealed, with the single exception of one corner speaker. In view of this concealment, a small neon glow lamp was mounted in an inconspicuous external spot to give a prominent, albeit discreet, indication that the equipment was turned on.

Last, but not least architecturally, all wiring connections, as from the distant speakers to the amplifiers, antenna lead-ins, and so on, were made through the walls themselves to avoid marring smooth wall surfaces with unsightly wires. Even the antenna for the tuner had to be concealed so as not to mar the exterior architecture of the house. A folded FM doublet, doubling as an AM antenna, was mounted in the top of a nearby high pine tree and proved very effective, although almost invisible.

### Conclusion

These are, then, the details of the design and installation of what, to the best of our knowledge, can be rightly termed the last word in high fidelity home music systems. The final list of components is formidable: Two Electro-Voice Patrician speaker systems, plus an outdoor speaker controlled through a 70-ft. extension wire. Each speaker was driven by a separate H. H. Scott power amplifier; volume levels at each of the two Patricians could be adjusted and balanced through a one-knob control. All three power amplifiers were fed by a single Scott 120-A preamplifier-equalizer to which was added the Dynaural noise suppressor. A Rek-O-Kut CVS-12 turntable was used in conjunction with a Fairchild arm equipped with three diamond-styli cartridges, feeding to a matching transformer. Additional turntable facilities were provided by a Garrard changer employing Pickering diamond-styli plug-in cartridges. With the exception of one speaker, all equipment was installed for complete concealment.

To design and supervise such an installation was a challenge which we are glad we accepted, not only because of the satisfaction of working on an "ultimate" but because of the experience gained in the solution to myriad acoustic and electronic problems. We certainly do not intend to convey the idea that every audiophile will have to face as many problems as were presented by this installation, nor will such elaborate planning and testing be required. Home music systems such as the one described in this article are relatively few and far between. Yet we do want to impress on readers that care in planning and at least some experimentation in placement of the all-important speaker enclosure will more than pay off in the end, even in the simplest system. There are many cases on record to show that changing of the speaker enclosure location from one corner to another in the living room has effected a marked improvement in sound reproduction. Ordinary listening tests were enough to prove that there was a difference; to determine why would have required extensive study.

Now we can only wonder what the "ultimate" will be like which we may be privileged to install in — 1957? That is the challenge of the future: to see how outmoded we can make a 1952 installation, judged by 1957 standards.



# London Newsletter

D. W. ALDOUS

**W**HENEVER one talks about unusual applications of recorded sound in this country, the name of H. Lynton Fletcher immediately springs to mind. Mr. Fletcher has been a BBC engineer, announcer, producer and, during the war years, was Recorded Programmes Director for the Corporation. He is Chairman of the Association of Professional Recording Studios and a director of a London company specializing in sound recording.

He is credited with the development of a remarkably successful simultaneous translation technique for international conferences and, in conjunction with a brilliant electro-mechanical engineer named Charles F. Garner, he has produced a number of novel contrivances using recorded sound in some form. Talking maps, diagrams and publicity boards and the armchair in the furniture shop that, when you approach it, appears to speak in a welcoming voice: "Do sit down. That's what I'm here for", are just a few of the exhibition devices created by Lynton Fletcher. Perhaps the most ingenious and complex device of them all was a giant animated sugar lump, known as Mr. Cube, developed for publicity purposes for the huge Tate and Lyle sugar company. Mr. Cube had a human face with rubber lips that moved in synchronism with the words being uttered. Mr. Fletcher's latest invention, "talking tape", hints at his lively sense of humour. Already marketed in America, I believe, this novelty is entirely new to Great Britain and, in fact, full-scale production has not yet commenced here.

A "talking tape" consists of a length of plastic tape (up to a maximum length of 24 inches) embossed on one side with a recorded message, and a stiff card, small box or commodity package, to which the tape is attached by knotting one end and threading through a small hole in the card or container. When the tape is fitted to the card or container the message can be played by simply running the fingernail down the embossed side of the tape. Apart from advertising matter, the immediate application is for Christmas and greeting cards. Tapes are

normally supplied to the trade in hanks containing approximately 250 tapes, each tape being embossed with the required recorded message and marked for cutting and knotting. The manufacturing process is covered by patents, and details are not released at present.

**T**HE HISTORY of magnetic recording has been written innumerable times in recent years but one might justifiably ponder what the Danish engineer Valdemar Poulsen, who exhibited his magnetic wire recording machine at the Paris Exposition in 1900, would think of today's developments in the field. The full impact of magnetic recording, particularly tape systems, is now striking the British market and in the current issue of a popular radio periodical here at least fifteen advertisements of magnetic recorders appear. It need hardly be added that the price and technical quality of these units vary over a wide range. A good quality domestic tape recorder costs around \$200 to \$225 and the professional type recorders, with 15 and 30 ips. tape speeds, are priced from \$1,680 upwards.

The applications of tape recording and the queer uses to which all forms of recording are put nowadays are legion, but the following item in a national Sunday newspaper may be of interest: ". . . After listening to a tape recording of a sermon given by the Rev. Alex S. Renton, of Dunoon, Argyllshire, members of a Presbyterian Church in Quebec, Canada, unanimously resolved to invite him to become their minister."

**P**PETER J. Walker, of the Acoustical Manufacturing Company, Huntingdon, whose everyday job is to design and produce high-grade sound reproducing equipment, combines professional knowledge of this work with the enthusiasm of the keen amateur.

It has been my privilege to attend many technical meetings with him and at one week-end conference I

recall long discussions, lasting until the early hours of the morning and restarting even before breakfast! The fruits of such willingness to talk about the problems of sound reproduction and how best to solve them are seen in his remarkable QUAD amplifier and Corner Ribbon type loudspeaker, which in combination produce a sound-quality that has to be heard to be believed.

Another of Mr. Walker's long-standing interests is



*Britain's newest electronic organ is the "Gregorian". Its 96-tube innards are shown at right. Speakers are separate.*

pipe organs. A by-product of this interest was demonstrated recently in London. It was a new electronic organ, known as "The Gregorian", on which Mr. Walker worked in conjunction with Alfred E. Davies & Son, organ builders, of Northampton. The method employed for tone generation is L/C-controlled oscillators from which the fundamental and harmonics are extracted separately from different parts of the circuit. Buildup and decay periods are controlled by a third winding on the iron-cored coupled circuits. A tremulant range is provided by varying the high tension supply to all generators; this is operative from F sharp below middle C to the organ's top note. Another innovation is the simulation of wind noises by the introduction of random circuit hiss during the build-up period.

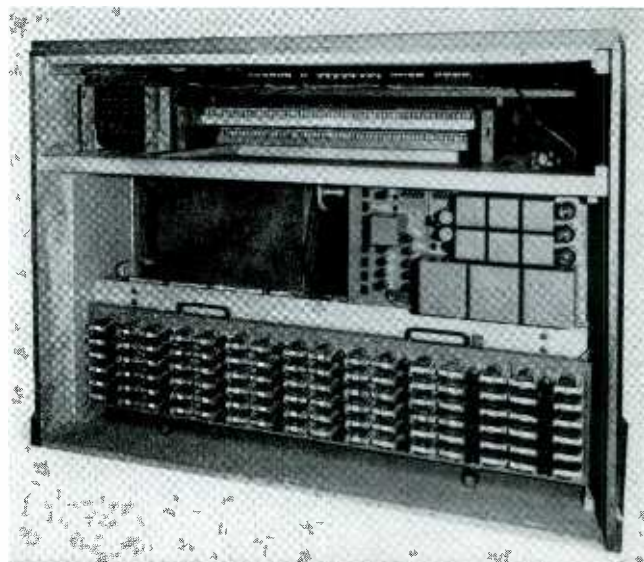
Each basic note in the 96-valve generating unit can be individually "voiced". The system used makes available an unlimited range of tone colours (stops) of typical pipe organ character. These stop units are of plug-in construction and the specification of the instrument can, therefore, be varied with individual requirements and the acoustic properties of the building in which the organ is to be installed. With this plug-in method, changes in specification can be made even after installation.

The problem of the radiation of the sounds produced has been carefully investigated, as loudspeakers primarily designed for sound reproduction are not suitable for sound *creation*. The loudspeaker-arrays finally settled on utilize acoustic systems having several spread modes of stored energy. These "speaker-resonators" have pipe-like baffles constructed of woods specially selected for their resonant qualities.

The whole unit is built into a standard console case. The "Gregorian" Style "V", with two manuals (compass CC-C 61 notes) and pedal (compass CCC-G 32 notes) and a choice of eight stops from a wide range of types and tone colours, costs about \$4,100. Opinions on organ quality, particularly diapason tone, are highly personal, it appears, but traditional organists seem highly pleased with the "Gregorian", as the tone quality does not reveal its electrical origins.

**M**Y ATTENTION was directed the other day by a BBC friend, Mr. Wheatley, to the wording that accompanies an old print in St. Sepulchre's Church, Holborn, London:

"At the back of the pulpit in the centre of the Church at the east end, there is a singular sounding board, in the shape of a large parabolic reflector about twelve inches in diameter, which extends over the preacher, and by collecting those pulses of sounds which would other-



wise be dissipated above and behind the speaker, and reflecting them into the body of the Church, assists the voice. It is constructed of ribs of mahogany, so arranged that the grain of the wood radiates in all ways from the centre and the face of it is varnished. This was put up on the appointment of the present Vicar, the Rev. J. Nott by Mr. Elliott Godwin-Churches of London."

Not very remarkable, you say? But the date was 1830! This gentleman must have been very far-sighted and informed on acoustics.



c g burke

david randolph

alfred frankenstein

james hinton jr

j f indcox

# RECORDS

in

# REVIEW

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## CLASSICAL MUSIC ON L.P.

**BACH** *Brandenburg Concertos No. 2 in F and No. 4 in G*

London Baroque Ensemble; Karl Haas, cond.  
WESTMINSTER WL 5113. 12-in. 13, 17 mins. \$5.95.

The use of fipples for transverse flutes in both cases here transforms the character of the music in an entertaining way. The cursed word "baroque" has plagued us with a learned, empty din ever since it was dusted off for incessant use a few years ago, but seems really applicable to the stimulating barbarous sound of the obsolete instruments here. Boldly bright playing and recording, the whole effect exhilarating and unusual and, at the same time, very exasperating in *No. 2*, where the sensational trumpet parts have been played an octave down. *No. 4* has been issued previously on the reverse of *Cantata No. 152*, WL 5067. — C. G. B.

**BACH** *Cantata No. 4; Christ lag in Todesbanden Cantata No. 140; Wachet Auf*

Anny Felbermeyer (s); Alfred Uhl (t); Hans Braun (bne). Choir and Orch. of the Bach Guild; Felix Prohaska, cond.  
BACH GUILD BG 511. 12-in. 23, 30 mins. \$5.95.

*Cantata No. 201; Phoebus and Pan*

Anny Schlem (s); Diana Eustrati (a); Herbert Reinhold (t); Gert Lutze (t); Karl Wolfram (bne); Gerhard Niese (bne). Choir and Orch. of the Bach Guild; Helmut Koch, cond.  
BACH GUILD BG 514. 12-in. 42 mins. \$5.95.

*Cantata No. 205; Aeolus Appeased*

Anny Schlem (s); Diana Eustrati (a); Gert Lutze (t); Karl Wolfram (bne). Choir and Orch. of the Bach Guild; Helmut Koch, cond.  
BACH GUILD BG 515. 12-in. 42 mins. \$5.95.

*Canta No. 210; O holder Tag*

Magda Laszlo (s). Vienna National Opera Orch.; Hermann Scherchen, cond.  
WESTMINSTER WL 5138. 12-in. 40 mins. \$5.95.

Our best Bach has come from these two companies. The five cantatas here will enliven music-lovers' sentiency while deflating music-lovers' pocketbooks. The two church cantatas, *Nos. 4* and *140*, have been recorded elsewhere, but not in this coupling. *140*

ought to be compared to a very different, more stately concept of Scherchen on Westminster WL 5122, the vocal honors of the two in conflict and the sound — very good in both cases — representing two methods of adjustment. *Nos. 210* and *205*, exhilarating fluff, receive a properly informal presentation and tingling sound, plus a touch of anticipatory echo. The opening chorus of *Phoebus and Pan*, with its snarling, clamorous winds establishing the impudent atmosphere, ought to be played to everyone who equates Bach to the gigantism of the Mass and the *St. Matthew Passion*; and such a Bachite will find in *Aeolus Appeased* six innings of unflagging sport. The other secular cantata, *No. 210*, a wedding cantata not to be confused with the better-known *No. 202*, is a series of very high solos for soprano and orchestra, sung with beautiful distinction — in spite of difficulties with its calisthenics — by Magda Laszlo, accompanied by a superbly delineated small orchestra, and recorded with glittering exactitude. *Phoebus* and *Aeolus* are also on Renaissance X 42 and 43, unluckily not received for comparison with the Bach Guild records. — C. G. B.

**BACH** *Cantata No. 161: Come Sweet Death Cantata No. 202: The Wedding*

Hilde Rosell-Majdan (c); Waldemar Kmentt (t) in *No. 161*. Anny Felbermeyer (s) in *No. 202*. Choir and Orch. of The Bach Guild; Felix Prohaska, cond.  
BACH GUILD BG 513. 12-in. 20, 22 mins. \$5.95.

Music-making of a rather high order characterizes the recording of Bach's Cantata *Come Sweet Death*. The contralto, Hilda Rosell-Majdan discloses a voice of even and pleasing quality which she uses most intelligently. Very close to hers is the level of the performance by the tenor Waldemar Kmentt. The only slight fault one might find with this recording is the fact that the tenor soloist seems to have been placed farther from the microphone than was his colleague. Otherwise, in its justly paced direction, in its round but not rotund acoustics and fine recording, in the appealing sound of the recorders (despite one consistently flat note) and the well-balanced, poised singing of the chorus in the closing sections, this is a very ingratiating performance indeed.

The other side of the disk contains a very understanding reading of Bach's secular *Wedding Cantata*, in which the soprano Anny Felbermeyer displays a lovely intensity of feeling, as well as an ability to negotiate Bach's more florid passages with seeming ease

and gratifyingly pure tone. In view of the foregoing, it would hardly be in place for me to mention that at times, the "focus" upon her seems to change, as if she had for brief moments changed her position relative to the microphone. No matter though: this remains a most satisfying disk. D. R.

**BACH** *Concerto for Harpsichord No. 3 in D Major*  
*Concerto for Harpsichord No. 6 in F Major*

Maria van der Lyck, harpsichord. Tonstudio Orch., Stuttgart; Hans Michael, cond.

PERIOD SPLP 547. 12-in. 18½, 18½ mins. \$5.95.

Two very familiar items show up here in new packages. The *Concerto No. 3* is in reality the well-known E Major Violin Concerto transposed to the key of D. The *Concerto No. 6* is actually the equally familiar Fourth Brandenburg Concerto, originally for Violin and Two Recorders, in G Major, and here transposed to F Major, with the recorders retained but with the violin part allotted to the harpsichord.

Both concertos are part of a group of seven that Bach wrote while he was conductor of the Telemann Music Society in Leipzig. He probably made these transcriptions in order to supply performance material for the society. For those who would like to see what happens when Bach himself transcribes a work from one medium to another, the record is invaluable.

The harpsichord used in these performances communicates a quality I have not met in any other recordings to date. Instead of featuring the hard, metallic plucked sound so characteristic of most, this one allows the softer twang of the strings to come through. That softness is neutralized, however, in the *Concerto No. 3*, in which the solo instrument is recorded so close to the microphone that the ear welcomes the few moments of relief that come when the harpsichord is silent. On the reverse side the harpsichord is placed in more proper perspective and shares the spotlight equally with the two recorders. The performances are well-paced throughout. The recording is realistic, but of the unspectacular studio variety, with no "air" around the players. D. R.

**BACH** *Missa Brevis No. 1 in F Major*  
*Sanctus No. 1 in C Major*

Swabian Choral Singers, Stuttgart; Tonstudio Orch., Stuttgart; Hans Grischkat, cond.

RENAISSANCE X 44. 12-in. 28 and 2 mins. \$5.95.

*Missa Brevis No. 2 in A Major*  
*Sanctus No. 2 in D Major*

Swabian Choral Singers, Stuttgart; Same orch. and cond. as above. RENAISSANCE X 45. 12-in. 36 and 4 mins. \$5.95.

Bach composed four so-called "short Masses" (Missae Breves) consisting of the Kyrie and Gloria only, thus lacking the Credo, Sanctus, Benedictus and Agnus Dei portions of the full Mass. While the identity of the person for whom he wrote them has never been determined with certainty, it is believed that he composed them about 1737 for Count Franz Anton von Sporck. Since the Count was a Catholic, it is unlikely that he knew any of Bach's Protestant church

music. For that reason, Bach unhesitatingly drew upon his tremendous store of cantatas, drawing from them various ones of the more worthwhile movements and transforming them into these Masses. Thus, very little, if any original music was composed for these works. That in no way lessens their value, since Bach exercised excellent judgment in choosing the movements. The A Major Mass especially is outstanding for its depth of feeling. The "Qui Tollis" section of that work reveals its origin in a cantata through the "personal" nature of the writing. The music given to the soprano soloist has a warmer and more intimate feeling than one ordinarily finds in a "Qui Tollis".

While the performances are all sympathetic, one could wish for a better balance between the orchestra and chorus. In many places, particularly in passages in which the choral sopranos and the violins share the same running sixteenth-note figurations, the voices are lost. Too prominent also are the violin obbligatos accompanying the vocal solos.

The D Major Sanctus is somewhat routine; the one in C Major is quite exhilarating, with its brilliant orchestration. D. R.

**BEETHOVEN** *Concerto for Piano No. 4 in G, Op. 58*

Paul Badura-Skoda, piano. Vienna National Opera Orch.; Hermann Scherchen, cond.

WESTMINSTER WL 5143. 12-in. 34 mins. \$5.95.

There are now eight editions of the work, six of them imposing in various ways and different degrees. The product of the factors of interpretation and sonic reproduction gives particular prominence to three: Gieseking-Karajan on Columbia ML 4535, Backhaus-Krauss on London LL 417, and this one. Young Mr. Badura-Skoda's temerity in entering this competition is justified by the results, although to those familiar with Dr. Scherchen's orchestral style this will appear as the conductor's interpretation — introspective, a little deliberate, carefully defined and dynamically exuberant. The spotless formations of Gieseking are not in Badura-Skoda's province, neither are the affectionate warmth of Backhaus and Krauss. Badura-Skoda and Scherchen are blessed with superior over-all sound. The ratio of piano to orchestra seems perfect. Orchestral detail is finely etched, the string pattern always distinct, and the woodwinds are voluptuously shaped and never obscured although permitted no untoward eminence. Piano-tone, top and bottom, loud and soft, is very close to reality. C. G. B.

**BEETHOVEN** *Coriolan and Egmont (Overtures)*

Philadelphia Orch.; Eugene Ormandy, cond.

COLUMBIA AAL 15. 10-in. 7, 8 mins. \$2.85.

The glitter of spearpoints and helms is not lost when the phalanxes are ranged in Philadelphia. The great tragic poems have their finest recording and Mr. Ormandy's *Egmont* is capital. *Coriolan* is hurried and nervous, with the contrast between its subjects slighted, to the disadvantage of its measured, ominous biography. C. G. B.

**BEETHOVEN** *Quartet No. 5 in A, Op. 18, No. 5*  
*Quartet No. 11 in F Minor, Op. 95*

Barylli Quartet.

WESTMINSTER WL 5140. 12-in. 28, 21 mins. \$5.95.

Unctuous sound from players and engineers, although the violins are not easy to correct, but *No. 5* is more elegantly tailored by the Paganinis for Victor, and the excellent performance of *No. 11* is less compelling than an old Budapest with inferior sound and a new Pascal for Concert Hall which sounds fine. C. G. B.

**BEETHOVEN** *Quartet No. 13 in B Flat, Op. 130*

Barylli Quartet.

WESTMINSTER WL 5129. 12-in. 34 mins. \$5.95.

Extravagant and coarse, tonally ugly in a percussive recording metallic at *fortes*, this interpretation offers no challenge to the Pascal edition on Concert Hall CHS 1210. C. G. B.

**BEETHOVEN** *Quartet No. 14 in C sharp Minor, Op. 131*

Barylli Quartet.

WESTMINSTER WL 5144. 12-in. 39 mins. \$5.95.

In the Fifth and Eleventh Quartets, noted above, the Barylli are found less convincing than other versions, but in the immeasurably greater Fourteenth their record is the one to have. Not that their



Probaska and Felbermayer: the "Wedding" had a lovely intensity.





Zino Francescatti and the Kreutzer: "The quieter drama . . . lasts."

excellent interpretation is the best — Budapest on Columbia and Pascal on Concert Hall having in different ways a more affecting eloquence — but the synthetic mean of playing plus recording divided by two is strongly in the Barylli favor because of the exceptional sound granted to them by their engineers. The achievement of this sound is to be at once spacious and analytic — to grace the hearer with an opulent, rounded tone and simultaneously bare the speech of each instrument in clarity. The sound's richness stimulates the aesthetic responses; and the revealed linear interplay, as if a separate spotlight were on each subject against a velvet background, is an intellectual and emotional excitant found rarely in the concert hall and present in only a few painstakingly supervised recordings. The vitality of reproduction has a musical value, a physical impact, of its own: the listening experience is personally felt as if the listening nerves were uncovered and vulnerable to the penetration of music in echelon, and from unprecedented directions.

C. G. B.

**BEETHOVEN** *Romance No. 1 in G Major, Op. 40*  
*Romance No. 2 in F Major, Op. 50*

Joseph Fuchs, violin. Little Orchestra Society; Thomas Scherman, cond.

DECCA DL 4004. 10-in. 8, 10 mins. \$2.50.

A curious LP oversight until now, and a commendably rational choice for a pair of the new short long sides. Mr. Fuchs plays the gently contemplative pieces with the classic refinement we expect of him. The orchestra provides an agreeable background. The recorded sound is virtuously discreet.

C. G. B.

**BEETHOVEN** *Sonata for Piano No. 29 in B Flat, Op. 106*  
(*"Hammerklavier"*)

Egon Petri, piano.

COLUMBIA ML 4479. 12-in. 40 mins. \$5.45.

One of Columbia's best reproductions of the piano, near identity with its prototype, particularly rich in the fugue, and playable without much fussing with controls. Mr. Petri too is flushed with health, which may be the quality which keeps this performance from being memorable. Pianistically commendable in its elements, it fails to communicate an emotional infection of importance. London has Gulda in the best edition.

C. G. B.

**BEETHOVEN** *Sonata for Violin and Piano No. 3 in E flat Major, Op. 12*  
*Sonata for Violin and Piano No. 4 in A Minor, Op. 23*

Zino Francescatti, violin; Robert Casadesus, piano.

COLUMBIA ML 4478. 12-in. 18, 16 mins. \$5.45.

*Sonata for Violin and Piano No. 4 in A Minor, Op. 23*

*Sonata for Violin and Piano No. 8 in G Major, Op. 30, No. 3*

Max Rostal, violin; Franz Osborn, piano.

LONDON LL 471. 12-in. 16, 18 mins. \$5.95.

No. 3 is new to records. No. 8 enjoys a masterly performance by

Cornman-Spivakovsky on Columbia ML 2089, not displaced by the new Osborn-Rostal. It is interesting to compare O-R with C-F in No. 4: (1) The former are not the mechanics of their instruments that the latter are; (2) The former play with an intensity of sentiment that makes the precise teamwork of the latter seem courtly; (3) The quieter drama of the nicer playing lasts after the intensity of the more dramatic playing has frayed; (4) The London piano recording is patently better than the Columbia except in quiet passages, where the Columbia is extremely good; and the violin in London's engineering is less cutting than the much superior Francescatti — Columbia tone. Having propounded the irreconcilable values, the critic retires, without advice and without grace.

C. G. B.

**BEETHOVEN** *Trio No. 2 for Strings in G Major, Op. 9, No. 1*  
*Trio No. 3 for Strings in D Major, Op. 9, No. 2*

Ruth Posselt, violin; Joseph de Pasquale, viola; Samuel Mayes, cello.

DECCA DL 9635. 12-in. 21, 24 mins. \$5.85.

Serious opposition is provided by the brothers Pasquier on Allegro ALG 3031 (No. 2) and ALG 3015 (No. 3), which are paired with the *Serenade, Op. 8*, and *Trio No. 4*, respectively. Miss Posselt and her allies have a happier flight and a freer song than the Pasquiers, who in turn have an easy superiority of address and style produced by two decades of collaboration. The Decca sound is solid without noticeable reverberation; the Allegro sound is uncertain in No. 2 and excellent in No. 3. The Decca proffers a greater average pleasure.

C. G. B.

**BERG** *Lulu*

Ilona Steingruber, Waldemar Kmentt, Otto Wiener, Hans Libert, Karl Loida, Emil Siegert, Maria Cerny, and others. Vienna Symphony Orch.; Herbert Häfner, cond.

COLUMBIA SL 121. Three 12-in. 2 hrs. 10 mins. \$17.35.

*Lulu* was Alban Berg's second opera, begun in 1928 and left unfinished at his death seven years later. Its libretto was adapted by the composer from the *Erdegeist* and the *Buchse der Pandora* of Frank Wedekind, whose plays no doubt seemed the last word in realist-expressionist revelation when Berg saw them on the stage in 1905; today, however, they seem flimsy, old-fashioned and unbelievable.

Berg's *Lulu* is the fatalest femme to be presented in all seriousness since D. W. Griffith laid down his megaphone. Her effect upon the men (perhaps males would be the better word) with whom she comes in contact — notably Dr. Ludwig Schön, his son Alwa, a painter named Schwarz, a physician named Goll, an African prince and a schoolboy — is indistinguishable from that of Miss Theda Bara in her prime, and like Miss Bara, *Lulu* gets her come-uppance in fairly rough style: she is murdered by Jack the Ripper in a London bagnio.

Perhaps *Lulu* can be enacted with a certain degree of credibility, and Berg's music certainly gives it depth, fire and dignity. But the book lacks the pathos and the immense tragic resonance of the same composer's *Wozzeck*, and for this reason it is likely that *Lulu* will not take its place alongside that earlier work as one of the masterpieces of modern opera.

As is the case with *Wozzeck* itself, the musical structure of *Lulu* is indescribably intricate, employing the 12-tone system, free atonality, and tonality freely handled. It demands every kind of vocal resource — singing, speaking, and the combination of speaking and singing known as *Sprechstimme*. Sonata, rondo and variation forms are employed as devices of dramatic characterization; the formidably involved orchestration is also a means of describing character, and there are numerous character motifs of other kinds, like the pentatonic scale associated with *Lulu's* devoted friend, the Countess Geschwitz. (The five-tone scale, apparently, was much admired on the Island of Lesbos.)

There can be no question of the high seriousness of the music, of its dramatic power, or of its effectiveness in painting the sinister, the morbid and the obsessed, but its vocal line — unlike that of *Wozzeck* — seems rather monotonous, and one misses the shattering climactic impact which *Wozzeck* so devastatingly provides. Reservations regarding the play have already been suggested; the play, furthermore, seems to waver uncertainly between symbolism and drawing room drama.

The performance, so far as one can tell without a score, is magnificent, and so is the recording. Columbia, having been severely criticized for omitting the text from its recording of *Wozzeck*, provides the libretto of *Lulu*, in the original and in a parallel English translation, but it has been rather carelessly edited; a big chunk of the English is left out on the first page and there are other omissions here and there. The editor has also committed a serious oversight in failing to indicate that the orchestral interlude on Side 5 is intended to accompany a movie about the whole of Lulu's life for which Berg provided a detailed scenario. A. F.

**BERNSTEIN**      *Three Dances from Fancy Free* — See Walton

**BLOCH**            *Israel Symphony*

Soloists of the Akademie Choir; Vienna State Opera Orch.; Franz Litschauer, cond.  
VANGUARD VRS 423. 12-in. 35 mins. \$5.95.

Though the title of this symphony implies preoccupation with the problems, past and present, of the people of the composer's faith, it would seem to be just as applicable to those of the human race in general. In this respect, it may be considered more international than racial or national.

It is a towering composition, of adamant construction, yet full



*Thomas Scherman: spirit and polish for Hindemith and Stravinsky.*

of compassion and yearning, as well as faith in the ultimate triumph of the human spirit over adversity. The scoring is bold, the writing uninvolved but varied in mood, being in turn barbaric, plaintive, joyous and repentant.

This is a massive recording, which does not reproduce well at low volume. Forceful brass blasts come off very effectively, clean and definite. Drums are fully resonant, but seem slightly too distant. Violins and woodwinds are both faithfully reproduced. The closing section, a prayer of faith for four women's voices and solo bass, is most affectingly sung by unnamed vocalists, who seem to be too close to the mike. The composer's instructions were that they be placed "among the instruments, or at the rear of the platform". J. F. I.

**BRAHMS**            *Quartet No. 2 in A Minor, Op. 51, No. 2*  
*Quartet No. 3 in B Flat, Op. 67*

Curtis Quartet.  
WESTMINSTER WL 5152. 12-in. 31, 32 mins. \$5.95.

This is apparently the first commercial musical record whose two sides total more than an hour's duration. One hears frequently the objection that very long records distort as the stylus approaches

the spindle; that is, as the linear speed diminishes; and there is some truth in the objection. Fortunately such distortion is so gently graduated that it is not noticed if a record is played in the normal progressive manner. It can sometimes be made obvious if one jumps the stylus from the circumference to a place near the center. It is also true that such a distortion is much less obvious than a kind seldom mentioned, and present in 90 percent of records: that caused by the erratic speed compelled by eccentricity. Until our records are perfectly centered we need hardly dread the lesser fault of reduced efficiency near the center.

What we have here is a pair of quartets for the cost of one, and by far the best sound of the few editions in contest. Westminster has used here the technique of reinforcing the sound of small ensembles by astute placement in the room or hall; and as sound these two sides are as rich as any of any string quartet recorded in America. (They sound better near the center than most of their competitors near the periphery.) The reentry of the Curtis Quartet into phonographic circles promises well. The existing opposition is simply not in their class, particularly for Op. 67, whose tender (if perhaps shallow) charm is played by the Curtises with affectionate and polished euphony. C. G. B.

**BRAHMS**            *Trio for Piano, Clarinet and Cello in A Minor, Op. 114*

Mieczyslaw Horszowski, piano; Reginald Kell, clarinet; Frank Miller, cello.  
DECCA DL 7524. 10-in. 23 mins. \$3.85.

*Trio for Piano, Clarinet and Cello in A Minor, Op. 114*

*Trio for Piano, Violin and Horn, in E Flat, Op. 40*

Franz Holletschek, piano; Leopold Wlach, clarinet; Franz Kwarda, cello; Walter Barylli, violin; Franz Koch, horn.  
WESTMINSTER WL 5146. 12-in. 23, 28 mins. \$5.95.

Styles more divergent would be hard to imagine. Perhaps the silky melancholy of the tender Horn Trio will attract the preference of music-lovers to the Holletschek *et al* Clarinet Trio. This is at once dark, moody and rhapsodic, less emotionally stable than the Decca, which has more rhythmic sharpness and brightness, plus Kell's cooler tone and spry enunciation. The Miller cello is very persuasive, too, and the Decca interpretation is the one preferred *per se* here. Recording values are good in both cases, Westminster more cushioned, to match the playing. A version on Lyricord LL 9, less subtly stylized than these, is supported by a strong and lifelike sound, and is paired with the Mozart Clarinet Trio. C. G. B.

**BRAHMS**            *Variations and Fugue on a Theme by Handel, Op. 24*

Julius Katchen, piano.  
LONDON LS 552. 10-in. 26 mins. \$4.95.

An impressive demonstration of resourceful pianism, assured and balanced, responsive without ambiguity to the severe plastic requirements of a work which flashes a new mood every minute. Good similitude of the piano, small-scaled. C. G. B.

**BUXTEHUDE**        *Three Choral Cantatas*

Margot Guillaume (s); Ernst Max Luehr (bs). Musikrunde Chorus, Hamburg (Ruth Mueller, dir.); Instrumental Ensemble of the Bach Anniversary, Hamburg. Marie-Luise Bechert, Director and Organist.  
VOX PL 7430. 12-in. 24, 13, 5½ mins. \$5.95.

History records the fact that both Bach and Handel once applied for the position of organist that had been vacated by Dietrich Buxtehude. Although presumably both of these musicians possessed the necessary qualifications, neither of them took the job. The reason: it was stipulated that the new organist marry Buxtehude's daughter! From the evidence, it might reasonably be assumed that Miss B. was something short of ravishing.

However unsuccessful he may have been in his human progeny, though, Buxtehude holds his own in his musical creations. The cantata, *Erbarm Dich Mein, O Herre Gott* is an example of that body of German sacred music from which Bach himself derived his style. But even if it were not for its historic importance, the work stands on its own as a moving piece of music. One need hear nothing more than the melancholy opening sonata, with its halting rhythms, to



realize that this is no mere scholarly exercise, but rather a touching emotional experience. The performance is pervaded by an over-all feeling of poise which seems exactly right for the music. Margot Guillaume imparts to all her solos, which are actually chorale melodies, a very satisfying warmth of tone. Especially noteworthy is her handling of the final chorale, with its fiendishly high tessitura. One inconsistency must be noted, however, in the repetition of this melody by the chorus. Motivated perhaps by the desire to sound "authentic", the sopranos in the chorus sing with a certain "whiteness" of tone, the justification for which is lessened by the fact that the melody has just been sung in the fuller, "modern" manner by the soprano soloist.

In the shorter cantata, *Fuerwahr, Er trug unsere Krankheit*, this same inconsistency is present, but to a somewhat lesser degree. Nevertheless, one cannot help but admire the feeling and texture of all the choral portions; the individual lines emerge most clearly, thanks to the fine acoustics and balance, and to the excellent diction. The bass, Ernst Max Luehr handles his big voice well in both cantatas, although a slightly warmer tonal quality would have been welcome.

It is in *Befehl Dem Engel, Dass Er Komm*, the third and shortest of the three works, however, that the chorus really comes into its own. This cantata, with its gentle echo effects, is a joy to hear from beginning to end. An exceptionally good balance is preserved among the instruments and voices throughout the record, whose only mechanical fault is the presence of a slight tape hiss. D.R.

#### DEBUSSY

#### *Pelléas et Mélisande*

Suzanne Danco (s), Flora Wend (s), Hélène Bouvier (ms), Pierre Mollet (t), Heinz Rehfuss (bnc), Derrik Olsen (bnc), André Vessières (bs). L'Orchestre de la Suisse Romande and chorus; Ernest Ansermet, cond.

LONDON LLA 11. Four 12-in. 2 hrs. 25 mins. 13 secs. \$23.80.

Irène Joachim (s), Emile Rousseau (s), Leila Ben Sedira (s), Germaine Cernay (ms), Jacques Jansen (t), H. B. Etcheverry (bnc), Narcon (bnc), Paul Cabanel (bs). Orchestra with Yvonne Gouverne Chorus; Roger Désormière, cond.

RCA VICTOR LCT 6103. Three 12-in. 2 hr. 53 mins. 13 secs. \$17.16.

*Pelléas et Mélisande* is a very special work and, at least outside of France, it has a very special group of supporters. It has never won a large enough segment of the regular American opera public to support it as a repertoire piece. No one ever raises a voice against its right to a place among the great operas, but tickets still stay in the box office racks.

When he had finished setting Maurice Maeterlinck's play, Debussy did not call *Pelléas et Mélisande* an opera. He called it a *drame lyrique*, after the fashion set by Wagner when he called *Tristan and Isolde* a *musik drama*. At the same time, he subtly perverted the Wagnerian aesthetic. Surely the answer is here. *Pelléas et Mélisande* seldom blossoms into real melody. It is much too far from the conventionally operatic to suit palates that make *La Traviata* a staple; yet it is much too delicate for those accustomed to the huge, solid proportions of Wagner.

The art of Verdi (before *Falstaff*, at any rate) is that of terse, exciting exposition, leading up to the crystallization and communication of an emotional reaction. The art of Wagner is that of explaining and reiterating, convincing, and finally overwhelming. That of Debussy is expression — a lyric flow that keeps the vocal line free from symphonic, formal, or thematic bonds and makes possible the subtlest, most sensitive mirroring of the text. Whatever the general arguments for opera in English may be, an English *Pelléas et Mélisande* is unthinkable. Is there any other work in which the musical structure is so intimately bound up with the language? Not even Montemezzi's *L'Amore dei Tre Re*, another superb work that awaits the reconciliation of Wagnerian and non-Wagnerian tastes to gain its audience, surpasses it in this respect.

Now, for the first time, devotees of *Pelléas et Mélisande* have a chance to choose between two full-length recorded performances. The decision will not be an easy one, for each version has surpassing merits that are denied the other. Some devoted and affluent admirers will probably buy both — the London so that they can hear every note in the score reproduced as clearly as anything on records; the Victor so that, by dint of love and imagination, they can overcome the barrier set by an outmoded reproduction and so experience a supremely fine performance.

The Victor issue is a Collector's Label pressing of the performance that was available before the war on 78's. Then it had little competition — an older set of excerpts on Columbia (with Hector Dufranne, who sang the first Golaud, back in 1902, lending his

distinguished presence) and a handful of excisions on Polydor. Even in the light of present recording standards it is far from impossible technically, and the performance is magnificent.

The brightest jewel in the cast is the *Mélisande*, Irène Joachim. From her desolate, frightened "Ne me touchez pas! ne me touchez pas!" to the end, she sustains — or rather, realizes — one of the most delicate, charming, touching performances to be heard. The innocence of *Mélisande* is infused with the exact expressive command of the artist, and the two merge into one.

Jacques Jansen, the *Pelléas*, is also very fine, much more youthful in delivery and much fresher of voice than when he sang at the Metropolitan four seasons ago. Etcheverry's Golaud and Paul Cabanel's Arkël are both even more magnificent in style and in projection of vocal character, and Germaine Cernay, the *Geneviève*, is not far behind them. The minor singers are all better than competent, and Roger Désormière's conducting is a model of relaxed, easy evocation of the work's peculiarly medieval, vaguely northern quality, of its poetry, and of its tragedy.

The London performance is also a good one, and Ernest Ansermet's luminous reading of the score is reproduced with almost life-like fidelity — very clear, very close-to. It remains a question in my mind whether such crisp nearness is really proper for this opera. In the opera house *Pelléas* never seems very immediate, even in the ninth row. It is a thing of impressionist lights and shadows, of tales long ago, of symbolism half revealed; *Pelléas* must always exist at a certain distance from the listener, and London's attempt to close this gap seems to me to miss the point of the work.

The cast is best described as competent. Suzanne Danco does not operate very easily in the narrow borderland between song and speech that is *Mélisande*'s. She ends by singing operatically much of the time, and the fact that she sings very well does not make up for the lost poetry. Pierre Mollet is a very efficient *Pelléas*, and André Vessières a soundly artistic Arkël; but Heinz Rehfuss' command of French, while adequate for most purposes, is not nearly easy enough to save him numerous lost expressive opportunities. Only Hélène Bouvier, as *Geneviève*, seems really first-class in this context.

But, for all of these shortcomings, London has made the score sound as it never has before on records. Take your choice. J.H., Jr.

#### HINDEMITH

*Kammermusik No. 1* — See Stravinsky

#### KABALEVSKY

*Concerto for Violin, Op. 48*

†Khrennikov: *Much Ado About Nothing Suite*

David Oistrakh. State Orch. of U.S.S.R.; Dmitri Kabalevsky, cond., in the *Concerto*. Same orch. with Alexander Stassevich, cond., in the *Khrennikov*.

VANGUARD VRS 6002. 12-in. 17 mins. \$5.95.

The title of the Khrennikov suite might well be applied to the Kabalevsky *Concerto*, an extremely meretricious piece of music, in which the composer runs out of ideas after the first half of the first movement. The faltering continues through the second movement — which sounds almost like improvisation on the solists' part — then picks up speed in a third movement cast in the mold of *The Comedians*. Oistrakh's performance is a dazzling display of violin virtuosity. In sharp contrast is the slovenly orchestral playing under the composer's direction, the last movement being particularly out of hand. The recorded sound is considerably below the standard of modern American recordings, instrumental definition being clouded and fuzzy. Perhaps the one unmitigatedly good point about this side is that it only takes 15 minutes.

The Suite, on the obverse side, is innocuous, saying in 17 minutes what it could have said as well in seven. J. F. I.

#### KHRENNIKOV

*Much Ado About Nothing Suite* — See Kabalevsky

#### LISZT

*Sonata in B Minor*

Andor Foldes, piano.

DECCA DL 7528. 10-in. 29 mins. \$3.85.

It is difficult to assess the value of this recording, due to the extremely low level at which it was cut. Originally recorded for Deutsche Grammophon, the transfer to LP has not been very satisfactorily made, and the defects that made many of the Kempff Beethoven Sonatas on this label unacceptable, from the point of view of sound, are inherent here.

The performance is rather lyrical in conception and none too

vigorous in execution, though technically secure. The work itself is sententious, with a tendency to become boring unless performed with more bravura than is present here. Other handicaps include dull piano sound and occasional tape flutter. A good recording by Magaloff is available on London LS 392, a better one, stylistically, by that unique pianist, Simon Barere, on Remington 199-85. J.F.I.

LOEWE

*Ballads*

†*Ancient Music of the Church: Schütz, Hammerschmidt, Perotin, Monteverdi*

William Warfield (bne); Otto Herz, piano, in the *Ballads*. William Warfield (bne), Andrew Tietjen, organ, in *Music of the Church*. COLUMBIA ML 4545. 12-in. 20, 21½ mins. \$5.45.

By this time William Warfield's reputation should be sufficiently well established to need no bolstering from this corner. Suffice it to say that the present record can only add to his reputation, both in the choice of music and in the quality of the performances. Just as Chopin's name is associated with the "Nocturne" for piano, so is the name of the 19th Century composer Karl Loewe forever linked to the "ballad", a form which he fostered and developed. It is good to hear these attractive songs, performed with such impeccable diction and fine tone. Mr. Warfield brings the same attributes to the four ancient songs on the other side of the disc. The recording leaves nothing to be desired. D. R.

MAHLER

*Songs of Youth (Lieder aus der Jugendzeit)*

Anny Felbermayer (s); Alfred Poell (bne); Viktor Graef, piano. VANGUARD VRS 424. 12-in. 42 mins. \$5.95.

Some of the songs in this cycle have already appeared, with orchestral accompaniments, on Vanguard's previous issues, VRS 412/413 and VRS 421. This release uses the original piano accompaniment Mahler provided and they seem to be, generally, more effective in this form.

Felbermayer and Poell are again the soloists, and the performances are notable for the high standard of artistry and vocalism of both singers and for sympathetic and knowing support from Graef at the piano.

Vanguard's sound is clear and resonant, the balance reasonable, though the piano might be a trifle closer. J. F. I.

MOZART

*Concerto for Violin No. 1 in B flat Major (K 207)*

*Concerto for Violin No. 2 in D Major (K 211)*

Aida Stucki, violin. Tonstudio Orch., Stuttgart; Gustav Lund, cond. PERIOD SPLP 549. 12-in. 20, 19 mins. \$5.95.

*Concerto for Violin No. 7 in D Major (K 271a)*

*Rondo in C (K 373)*

*Adagio in E (K 261)*

*Rondo in B Flat (K 269)*

Aida Stucki, violin, in the *Concerto*. Gustav Swärdström, violin, in *Rondos* and *Adagio*. Tonstudio Orch., Stuttgart; Gustav Lund, cond.

PERIOD SPLP 548. 12-in. 26, 7, 7, 5 mins. \$5.95.

These records are indispensable to Mozarteans in spite of Mr. Lund's unpointed direction and a recording that masks its virtues behind an exasperating overprominence of the solo violin, which falsifies the nature of the music and distorts the instrument as well. They are indispensable because the first two Concertos can only be heard here. The two Rondos and the Adagio are better played and recorded elsewhere. C. G. B.

MOZART

*Concerto for Violin No. 4 — See Prokofiev*

MOZART

*Quintet for Clarinet and Strings in A Major (K 581)*

Antoine de Bavier, clarinet. The New Italian Quartet. LONDON LL 573. 12-in. 35 mins. \$5.95.

The sixth LP of a work irresistible to clarinetists and listeners is as much tapestry as narrative. As such it has no peer for its seductiveness of tone, propriety of contrast, lofty serenity of line, homogeneity of style and lambent glow of subdued color. It is chamber-music playing of detached perfection, gorgeous, unique

and of questionable application to the tough core of this Quintet. Acknowledging perforce that the larghetto in this playing has an ethereal flotation invulnerable to cavil, the hearer may find the persistent restraint of the quicker movements too placid, or languid even delicately fatigued. It is not inconceivable that this may be regarded as a discreet and tender emasculation, operated with boundless good taste. It would be wise to compare it with the warm romanticism of the Westminster edition, or the crisp manliness of the Decca. Sound in itself is satisfactory here, but the accompanying hum is a hindrance to the pure absorption of all this purity. C. G. B.

MOZART

*Sonatas for Piano and Violin No. 24 in C (K 296)*

*No. 25 in G (K 301)*

*No. 28 in E Minor (K 304)*

Paul Badura-Skoda, piano; Walter Barylli, violin. WESTMINSTER WL 5130. 12-in. 16, 12, 13 mins. \$5.95.

*Sonatas for Piano and Violin No. 20 in E Flat (K 58)*

*No. 29 in A (K 305)*

*No. 35 in F (K 377)*

Paul Badura-Skoda, piano; Walter Barylli, violin. WESTMINSTER WL 5145. 12-in. 8, 15, 22 mins. \$5.95.

These are in succession to Nos. 37 and 39 on WL 5109, and the three disks perhaps signal the unassuming inception of what unquestionably will be a notable series if continued. For years the touchstone for the Mozart Piano-Violin Sonatas has been the Kraus-Goldberg performance for Parlophone, six of which are in Decca DX 103, very fine, but with considerably less vital sound than these newer recordings wherein — especially in 5109 and 5145 — the two instruments present a consummate tonal integrity. Not much sonic display is possible for the pair in concert if they are balanced: we can never expect the intoxicating reward which follows the unloosing of an orchestra in our premises, we always have an apprehension that the engineers will try to escape the limitations imposed by the essential nature of the duo. Here we have no more than a real violin and a real piano, interpreting unique music with unfeigned and serene simplicity, in linear ease and dramatic reticence, and so securely adjusted to each other that the proportions seem instinctive. C. G. B.

PEIKO

*Moldavian Suite — See Prokofiev*

PROKOFIEV

*Concerto for Violin No. 1 in D, Op. 19*

†*Mozart: Concerto for Violin No. 4 in D (K 218)*

Joseph Sziegeti, violin. London Philharmonic Orch.; Sir Thomas Beecham, cond. COLUMBIA ML 4533. 12-in. 20, 25 mins. \$5.45.

Salvage of the Prokofiev from 78's was truly imperative; no more phenomenal exhibition of imperturbable musicianship by a fiddler existed on records. The original sound was satisfactory and the LP sound is an improvement. This side is recommended as a definitive performance. The Mozart, in spite of its considerable beauties of execution, emerges aurally vitiated in a muddy recording. C. G. B.

PROKOFIEV

*Winter Holiday*

†*Peiko: Moldavian Suite*

Soviet National Radio Orch.; Samuel Samosud, cond. Same orch. with N. Rachlin, cond. in the Peiko. WESTMINSTER WL 5132. 12-in. 20, 17 mins. \$5.95.

Routine and rather fatigued fun-by-decree in competent orchestral playing and easy, neat and well-groomed sound, with nothing spectacular, nothing out of place, no projections from a linear rank; a little two-dimensional but not uninteresting. C. G. B.

ROSSINI

*Semiramide and Italian Woman in Algiers (Overtures)*

Berlin Philharmonic Orch.; Ferenc Fricsay, cond. DECCA DL 4010. 10-in. 8, 11 mins. \$2.50.

Impressively supple and cohesive orchestral playing of an interpretation untroubled by any search for inner values is supported by



Decca's ripest orchestral recording, quite first-class after the edge has been removed from the violins. This is a juicy plum in the valuable "4000" series — corresponding to Columbia's "AAL" — of works averaging about ten minutes per side. C. G. B.

**ROSSINI** *Six Quartets*

The New Art Wind Quintet.  
CLASSIC CE 1010. Two 12-in. 1 hr. 19 mins. \$11.90.

These relatively unimportant Rossini quartets are interesting mainly as examples of the composer's independence of style, his flair for melody, and the youthful *joie de vivre* he invests them with. They are freer from the influences of Haydn and Mozart than one would expect from an impressionable youth of 17, and resemble those masters' works only in the elegance and grace of the writing.

Originally written for strings, with little interweaving of parts, they were simply a series of violin solos with stringed accompaniment, and would, one suspects, have been monotonous in sound. Re-written for wind instruments, they take on depth, tonal coloration and expressivity, and become altogether delightful.

The New Art Wind Quartet plays them with enthusiasm and musicianly address. The sound, reasonably full and well balanced, is quite good, save for an occasional fuzziness in high tones towards the inner grooves. J. F. I.

**ROSSINI** *William Tell*

Graziella Sciutti (s), Rosanna Carteri (s), Miti Truccato Pace (ms), Mario Filippeschi (t), Tommaso Soley (t), Antonio Pirino (t), Giuseppe Taddei (bne), Giorgio Tozzi (bs), Plinio Clabassi (bs), Fernando Corena (bs), Mario Zogniotti (bs). Chorus and Orch. of Radio Italiana, Turin; Mario Rossi, cond.  
CETRA-SORIA XTV 1232. Four 12-in. 2 hrs. 45 mins. \$23.80.

Originally one of the longest of operas, *Guillermo Tell* (written in French as *Guillaume Tell*, recorded here in Italian) has undergone successive cuts to reduce it nearly by half, a happy thing in view of its miserable libretto, which Rossini garnished with a light and lively music, heavily scored. It is surprising how beguiling this music is, when heard as a *divertimento in cantata*, with the words nearly ignored and the stage action merely imagined.

The Cetra performance and recording are most of the time so very good that we feel a personal concern and exasperation at certain spasmodic defects that seem obviably. Rossi's direction is vivid and dramatic, except for some sections of curious inflexibility. The chorus is energetic and brawny. The soloists are competent — some a good deal more than competent. Miss Carteri has passages of very beautiful singing, and Mr. Taddei's professional skill covers the deficiencies of his voice. Mr. Filippeschi has a good tenor despite himself: he wounds it severely by overblowing it and by ignorance of microphone manners, producing the flutter which is the only marked flaw in the sound. No other Cetra has such an incisive differentiation of choirs, so easy and agreeable a balance between high and low. For 160 out of 165 minutes, all is right and imposing. An aggregate of about five minutes is marred by clumsy punctuations of intense ugliness. A splendid canvas, fly-specked. C. G. B.

**RUBINSTEIN** *Concerto for Piano No. 4 in D Minor, Op. 70*

Oscar Levant, piano. Philharmonic-Symphony Orch. of New York; Dimitri Mitropoulos, cond.  
COLUMBIA ML 4599. 12-in. 39 mins. \$5.45.

Once highly esteemed, this example of mid-Victorian musical fustian has declined steadily, almost inevitably, in popularity, and has now almost disappeared from the modern repertoire. This Columbia recording of it is the first to appear in twenty odd years.

The concerto is effectively written for the keyboard, but is less happy in its orchestral accompaniment, and since the basic ideas are rather commonplace, only an exceptionally brilliant performance could make it acceptable. What we have here is best described as routine — a briskly propulsive reading by Mitropoulos; unimaginative, stolid playing by Levant. There is little variety in his tone throughout, and often a disregard for the composer's indications of dynamics. The balance is reasonable but the over-all sound is not up to the standard of Columbia's recent releases. J. F. I.

**SCARLATTI** *Sonatas, Vol. II*

Kathleen Long, piano.  
LONDON LS 524. 10-in. 24 mins. \$4.95.

*Sonatas, Vol. III*

Fernando Valenti, harpsichord.  
WESTMINSTER WL 5139. 12-in. 54 mins. \$5.95.

These are continuations of series which we may assume will go on until public interest tires. No use comparing harpsichord (for which Scarlatti wrote) with piano, especially since only one little Sonata, L 10, is common to both instruments on disks. Miss Long has a fetching, charming and expert primness, and it is doubtful that Valenti's peer exists as an expositor of the flash of these worklets. Recording is good in both records, brilliant on the Westminster, whose volume must be reduced for verisimilitude. C. G. B.

**SCHUBERT** *Impromptus, Op. 90 and 142*  
*Sonata for Piano No. 10 in A, Op. 120*

Paul Badura-Skoda, piano.  
WESTMINSTER WAL 205. Two 12-in. 10, 4, 6, 8; 12, 6, 9, 6; 23 mins. \$11.90.

The only other edition of the *Sonata* is also new, and has not been heard. The *Impromptus*, all or some, are in various editions. Westminster has a way with Schubert, the elementary way of delivering this most Viennese music to Viennese performers. At least six times this elementary procedure has resulted in disks superior to their competition, and in many cases there has been no competition for these Schubert records of surpassing appeal. The Viennese manner is slow, with a softened accent and lingering stroke. It is Badura-Skoda's manner here; it gives full scope to Schubert's lyrical romanticism, and provides a most effective contrast to the agitated outbursts which punctuate it. Piano-sound is just a little short of the truest recorded. C. G. B.



Gérard Souzay: a Frenchman showed Teutonic romantic intensity.

**SCHUMANN** *Dichterliebe, Op. 48*

Pierre Bernac (bne); Robert Casadesus, piano.  
COLUMBIA ML 2210. 10-in. 29 mins. \$4.00.

*Dichterliebe, Op. 48*  
†Wolf: *Four Songs*

Gérard Souzay (bne); Jacqueline Bonneau, piano.  
LONDON LL 535. 12-in. 9 mins. \$5.95.

Three other versions are unaccountably not in these archives. The two French baritones unroll the romantic cycle with a Teutonic romantic intensity startling until one remembers the favor this work enjoys in France. Mr. Bernac is intelligent and dramatic, but his voice simply has not the music of the Souzay baritone. In counterbalance, the Casadesus accompaniment is a gift in itself and the Columbia sound is exceptionally distinct — formidably, where the Bernac sibilants seem to call attention to their own shape — and most laudably in its revelation of the piano's ukases and innuendoes. C. G. B.

SCHUMANN *Kreisleriana, Op. 16*  
*Romance, Op. 28, No. 2*  
*Toccata, Op. 7*

Joerg Demus, piano.  
 WESTMINSTER WL 5142. 12-in. 33, 5, 6 mins. \$5.95.

Schumann's most rewarding long piano work in a devoted, poetic and varied performance, with a piano-sound as faithful as any recorded. Retention of the unbroken roll of the bass is extraordinary, and the treble reproduces cleanly without special compensation. A distinguished achievement by all participants. C. G. B.

SMETANA *Richard III, Op. 11 and Misc. other works*

Various soloists (unnamed) and Czech Philharmonic and Broadcasting Orchs.  
 SYMPHONIC SR 1, 2, and 5. 12-in. \$5.95.

The performances are attributed to the Czech Philharmonic Orchestra, the Chorus and Orchestra of the Czech National Theatre, the Czech Broadcasting Choir and Orchestra, and some unnamed soloists.

In this critic's experience the records contain the nadir of LP sound. The following faults occur and some never abate: distortion, opacity, insufficient volume, inconstant pitch, variable characteristics, lack of *fortes*, falsification of timbre, microphonic flutter, absence of differentiation and even occasional resemblance to the agitation of broken glassware. C. G. B.

SPOHR *Grand Nonette*  
*Six Songs for Mezzo-Soprano, Clarinet and Piano*

Stradivari Records Chamber Music Ensemble in *Grand Nonette*; Alice Howland (s); David Weber, clarinet; Leopold Mittman, piano, in *Six Songs*.  
 STRADIVARI STR 609. 12-in. 28, 21 mins. \$5.95.

A captivating little period piece by Spohr, a composer once considered the equal of Beethoven and Mozart. Time has rather exploded that myth since, apart from an occasional performance of one of his many violin concertos, practically nothing remains of his music.

This is a most cunningly constructed composition, with sweet appealing tunes, and written most gratefully for the instruments involved. The instrumentation is a little unusual — the scoring is for violin, viola, cello, bass, flute, oboe, clarinet, bassoon and horn — yet the meshing of these voices is wonderfully contrived. It cannot be easy to play, yet, from this delicate, relaxed and beautifully balanced performance, it sounds that way.

The six songs for mezzo-soprano, have a rather period air about them, with their uncomplicated vocal line and the use of the clarinet to simulate the sound of birds, brooks and winds. They are sung (in German) by Alice Howland, with just the right amount of, for want of a better word, charm. The Stradivari engineers have capably transcribed the sound on both sides — especially successfully with the *Nonette*. J. F. I.

STRAVINSKY *Suite Pour Petit Orchestre No. 1*  
*Suite Pour Petit Orchestre No. 2*  
 †Hindemith: *Kammermusik No. 1, Op. 24, No. 1*

The Little Orchestra Society; Thomas Scherman, cond.  
 DECCA DL 7529. 10-in. 12, 13 mins. \$3.85.

A most enjoyable and rewarding disk, which is remarkable for the vivacity and lucidity of Scherman's exposition of both suites — very spirited, polished orchestral work — and, even more so, for the wonderfully clean, live and shining sound Decca's engineers have captured and etched on this record, one of the finest feats from any American studio in the past year.

The coupling is ideal, the wryly humorous and satiric Stravinsky suites make a perfect companion for the early, rather jazzy, Stravinsky-influenced music of Hindemith.

The performance is marked by the startling interior definition of instrumental voices, the result of Scherman's ability to maintain a perfect orchestral balance. The curious, almost laughing timbre of the brass, is vividly and cleanly delineated. The kettle drums seethe and hiss furiously, but also precisely, and little bells tinkle with amazing fidelity. To all these sound virtues, Decca has added unusually quiet surfaces. This is an exciting release. J. F. I.

TCHAIKOVSKY *Swan Lake (Complete Ballet)*

London Symphony Orch.; Anatole Fistoulari, cond.  
 LONDON LL 565-6. Two 12-in. 1 hr. 29 mins. \$11.90.

The first recording of the entire *Swan Lake* ballet has several decisive advantages over a number of abbreviated versions. It has almost twice the duration of the longest of those, and the restoration of the less familiar episodes, with the presentation of everything in proper sequence, gives dramatic form to music usually heard as a synthetic orchestral suite. The sound, strong and alive, following a rational curve and notable for ringing brass timbre, is by far the best the work has had. The performance is a ballet performance, one that neglects finesse in favor of a clear, broad statement; one that could inflame the stage as well as stimulate an auditorium. C. G. B.



Anatole Fistoulari: *there were new depths in the old Swan Lake.*

WALTON *Four Dances from Facade*  
 †Bernstein: *Three Dances from Fancy Free*

Philadelphia Pops Orch.; Alexander Hilsberg, cond.  
 COLUMBIA AAL 17. 10-in. 7, 7 mins. \$2.85.

An expert orchestra and outstanding sound revivify the Walton, which is clever but not *too*, and emphasize the comic in the other's musical journalism. The choirs are purposely unbalanced to favor brass and percussion, startlingly effective here, and harmless. C. G. B.

WEBER *Der Freischütz and Oberon (Overtures)*

New York Philharmonic-Symphony Orch.; George Szell, cond.  
 COLUMBIA AAL 19. 10-in. 9, 9 mins. \$2.85.

There are many of these in miscellanies, but as a whole none better. The string tone is to be commended, and the honest interpretations. The depth of sound is unusual. C. G. B.

WOLF *Four Songs — See Schumann*

## MISCELLANY

### ENCORES BY ZINO FRANCESCATTI

Friedman Bach-Kreisler: *Grave*; Kreisler: *Allegretto* (in the style of Niccolò Porpora); *Praeludium and Allegro* (in the style of Pugani); *Minuet* (in the style of Porpora); *Londonderry Air*; Poulenc-Heifetz: *Presto in B-flat Major*; Valle-Heifetz: *Ao pé*



aa *Foqueira* (Preludio XV); Massenet: *Meditation from Thaïs*; Villa-Lobos: *O Canto Do Cysno Negro* (Black Swan); Emmanuel Chabrier-Samuel Dushkin: *Marche Joyeuse*; Vitali: *Chaconne in G Minor*.

Zino Francescatti, violin; Artur Balsam, piano.  
COLUMBIA ML 4534. 12-in. 42 mins. \$5.45.

A program that is mercifully free of most of the usual claptrap that clutters up recordings labeled "Encores". If we exclude the *London-derry Air*, and the almost inevitable *Meditation* of Massenet, the remainder make a choice collection. The Villa-Lobos work, a little gem, was new to me — but probably not to Cole Porter, for it bears a striking resemblance to one of his most popular songs. The Francescatti performances are distinguished, refined, impeccable in taste. His beautiful clear tone has been well captured by the recording engineers. The Balsam accompaniments are excellent. The balance between instruments is more equitable than has often been the case. J. F. I.

#### RICHARD TAUBER FAVORITES

Mattinata; La Paloma; Santa Lucia; Farewell, Corsica; Serenata; Gypsy Love; Liebesleid und Liebesfreud; Rokoko Love Song; Speak To Me of Love; Plaisir d'Amour; Tränen Weint Jede Frau So Gern; Es Muss ein Wunderbares Sein.

DECCA DL 9597. 12-in. 37 mins. \$5.85.

A curious conglomeration of folk songs and pop ballads, with a Lehar fragment and a Liszt song thrown in, no doubt to authenticate the title "Tauber Favorites". All are sung in German, a language not particularly kind to the Italian *Mattinata* or the French *Plaisir d'Amour*.

Typical Tauber performances . . . stylish, artful, with masterly phrasing and a considerable dash of the well-known Tauber vocal "charm".

Originally issued in the early 1930's, the recordings show their age quite badly. Balance is poor, the singer being on top of the mike, the orchestra very much in the background. Orchestral sound tubby and very enclosed; inferior surfaces. J. F. I.

#### HIGHLIGHTS

*Prélude à l'Après-midi d'un faune* (Debussy); *Circus Polka* (Stravinsky); *Alborado del Gracioso* (Ravel); *March from The Love of Three Oranges* (Prokofiev)

L'Orchestre de la Suisse Romande; Ernest Ansermet, cond.  
LONDON LS 503. 10-in. 24 mins. \$4.95.

The virtuosity of this orchestra, under the masterly direction of Ansermet, has become something of a byword, especially when it addresses itself to the music of Debussy and Ravel. It is no surprise to find the handsomely shaded, luminous realization of the Debussy *Prélude* the highpoint of these Highlights, though given close competition by the beautiful performance of Ravel's riot of orchestral color, *Alborado del Gracioso*. The jaunty, raucous Stravinsky *Polka* strikes a somewhat discordant note, shattering the romantic mood created by Debussy's matchless score. Surely a more appropriate filler for this side could have been found. Ravishing sound features all four pieces, very live and exciting, with excellent flute and brass. The Ravel seems to have been recorded in a rather empty hall, to judge by the echo which it evokes. J. F. I.

#### SACRED ARIAS BY THE GREAT MASTERS

Haydn: *With Verdure Clad* (from *The Creation*); Mendelssohn: *Hear Ye, Israel!* (from *Elijah*); Bach: *My Heart Ever Faithful* (from the *Cantata No. 68*-for Pentecost); Bach: *Sighing, Weeping* (from the *Cantata No. 21*); Handel: *I Know that My Redeemer Liveth* (from *The Messiah*)

Eleanor Steber (s). Columbia Symphony Orch.; Max Rudolf, cond.  
COLUMBIA ML 4521. 12-in. 31 mins. \$5.45.

A generally disappointing record. Not only does the style of these wonderful arias elude Steber, but she has trouble with the tessitura of some and sings the texts of most without regard for their meaning.

The orchestral accompaniments under Max Rudolf's direction seem excessively careful and subdued. The sound is good enough, but the balance is deplorable. The singer is so close to the mike, that in the Bach *Sighing, Weeping*, I expected to see her emerge from my speaker and land in my lap. J. F. I.



Ernest Ansermet: as always, ravishing sound from London's Swiss.

#### ANCIENT MUSIC OF THE CHURCH — See Loewe: *Ballads*

#### MUSIC OF THE LITURGY IN ENGLISH

Plainsong, from the Hymnal of the Episcopal Church; Anglican Chant; Merbecke: *The Holy Communion*.

Students of the General Theological Seminary, Ray F. Brown, cond.; Mixed Choir, Harold W. Gilbert, cond., Andrew Tietjen, organ.

COLUMBIA ML 4528. 12-in. 25 mins. \$5.45.

For him who would venture along untrodden paths where man has but recently ventured with tape and vinylite, there has issued from the realm of Columbia a single disk of Plainchant and Anglican Chant, performed according to the use of the Episcopal Church. The Plainsong is performed by students of the General Theological Seminary of New York, which claimeth unto itself no "professional" singers. This is as it should be. The Holy Communion and the Evening Prayer are sung with complete devotion, betimes by a solo voice, betimes with responses by the entire group. The untrained quality of the solo voices, the unobtrusive nature of the quiet organ accompaniment, the round, open acoustics suggesting the sacred precincts, and the utterly perfect English diction on the part of all participants — all these things are as they should be.

Taking advantage of that dichotomy which characterizeth the device created by mankind for the preservation of his Laudes, the rulers of the realm of Columbia have seen fit to grace the reverse side with equally authoritative renditions of the Anglican Chant and the Merbecke Communion Service. Here, devotion is aided and abetted by skill; the singers who raise their voices (this group, however, characterized by that differentiation in matters of sex which hath been imposed upon the human race by a hand stronger than man's) do so with a degree of tonal beauty bespeaking many an hour of individual practice. The result, to judge by the salutary effects upon the ear, maketh one rejoice in mankind's possession of his vocal mechanism. Though it be granted that the Anglican Chant partaketh not of the austerity of Plainsong, (there being harmony in four parts to further flatter the ear) it must be concomitantly granted that for longer periods of listening, the ear welcometh the blandishments of those harmonies. Here again, the versicles are sung by a voice that bespeaketh more devotion and authority than tonal grandeur. But this, likewise, is as it should be. Praise is due to those of Columbia's realm in whose hands lay the task of preserving for all time the sounds that have issued from the throats of their fellow men. Their efforts have been crowned with the utmost success. All this is as it should be. D. R.

# three times nine



*Toscanini*



*Scherchen*



*Kleiber*

London Records had an excellent idea for a musical surprise to brighten the 1952 Christmas shopping season for lovers of the classics. So did RCA Victor. So did Westminster.

London's project was a very ambitious and expensive one. So was Westminster's. So was RCA Victor's.

In the natural course of time, October arrived, and out came London's surprise. It was a brand new, two-LP recording of Beethoven's great "Choral" Symphony, No. 9 in D Minor.

So was Westminster's.

So was RCA Victor's.

At this point, the season became almost dazzlingly bright for music-loving shoppers, with such a wealth of Ninths to choose among. For the makers of the records, however, the brightness understandably dimmed. There was going to be, alas, a three-way rift in the loot.

London's Ninth featured Erich Kleiber, conducting the Vienna Philharmonic and the chorus of the *Gesellschaft der Musikfreunde* (the same organizations that performed the Ninth originally, in 1824) and four soloists: Hilde Gueden (s), Sieglinde Wagner (c), Anton Dermota (t) and Ludwig Weber (bs).

Westminster's Ninth utilized Dr. Hermann Scherchen, beloved of hi-fi enthusiasts, conducting the Vienna State Opera Orchestra and the *Weiner Singakademie* chorus. His soloists were Magda Laszlo (s), Hildegard Roessel-Majdan (c), Petre Monteanu (t) and Richard Standen (bs).

RCA Victor's offering was favored with a magical name: Arturo Toscanini, conducting the NBC Symphony and the Robert Shaw Chorale, with Eileen Farrell (s), Nan Merriman (c), Jan Peerce (t) and Norman Scott (bs). The Toscanini name gave RCA Victor an initial advantage, and it had another, shared by Westminster. Both their sets offered the Ninth on three record sides and, on the fourth side, the Beethoven First, with Toscanini and Scherchen officiating again. (Actually, Westminster won a substantial edge here, since, while Toscanini's First is faultless, it is also a little serious. Scherchen's is a triumph of 18th century jollity.) London had nothing to throw into this breach except the scorching typewriter of Remy Van Wyck Farkas.

Mr. Farkas, a London executive entrusted with publicity, among other functions, never has refused a battle in his life, and didn't now. "Proclamations," wrote the doughty Mr. Farkas, for the benefit of all reviewers, "will issue forth stating that at long last the great 9th is available by the illustrious Maestro -----." Mr. Farkas

disdained such proclamations. The vocal portions of the London Ninth, he affirmed, with a flick of his shift-key, "NEVER HAVE BEEN BETTER PERFORMED ON RECORDS AND IN ALL LIKELIHOOD NEVER WILL BE." Moreover, he pointed out, the London version was "COMPLETELY FREE FROM TAMPERING WITH CONTROLS IN ORDER TO ESTABLISH FALSE DYNAMIC EXCITEMENT." The latter dig was directed, seemingly, not at the illustrious Maestro A----o T-----i, but at those sinister characters, the sound-engineers of W-----r, gentry famed for an uncanny knack with trumpets and drums.

All Mr. Farkas's valor was needed. The odds against him did not lighten as the three versions of giant symphony were heard, movement by movement. Kleiber's first movement is respectable and accurate. Scherchen's is deeply intellectual, reminiscent of the famous Weingartner reading. Toscanini's is hair-raising: to this listener an adventure for which there is no description. After this, Toscanini takes the second movement strictly as a scherzo. So does Kleiber. Scherchen slows and deepens it, makes it a violent, sardonic masque. In the adagio, Kleiber again is competent and restrained; Toscanini etches starlit solitude and yearning; Scherchen brings forth a heartfelt song of rapture. In the last movement, incorporating the Schiller *Hymn to Joy*, Kleiber is betrayed by his engineers (though his soloists *are* good); the chorus is lost. Scherchen suffers an opposite handicap; his soloists are too close to the microphones, reversing the proper dynamics, though he recaptures them thrillingly in the last bars. Toscanini, more than either of the others, seems at one here with Beethoven: he truly believes in the possible brotherhood of humankind, he thinks it worth fighting for and his baton sings like a sword. Westminster has the richest sound, although it is not always well balanced. London's is, for London, under par. RCA Victor's is better than average for a Toscanini recording, discrete, ultra-clear, with every instrument distinct.

The trio of records add up to a clear case of listener's choice. And, to confuse the choice a little further, Columbia Records (where someone has a sense of humor) prepared an advertisement pointing out with deadpan modesty that there was only one company which had consistently offered the public not one, but *three* definitive recordings of the Beethoven Ninth — by Weingartner, Ormandy and Bruno Walter. You pay your money and you pick your definition.

J. M. C.



# THE MUSIC BETWEEN

By EDWARD L. MERRITT, Jr.

## The Lyric Stage

In the past two years, the only Broadway musical considered worth recording by Decca, originator of the original-cast show-album idea, has been *The King and I*, graced by the late beloved Gertrude Lawrence. Columbia, which shares primacy in the field with Decca, did a perfunctory job on *A Tree Grows in Brooklyn* and devoted itself, apart from this, to show-albums "reconstructed" from past stage performances by vice president Goddard Lieberson, a past-master at this unusual art. Capitol, to make clear that it was in business, put out *Top Banana*. Only RCA Victor, for some reason, seems to have gone scouting

optimistically among the early-1952 offerings. It is a pleasure to report that its effort (more specifically, that of its "pop" artist-and-repertory chief, Hugo Winterhalter) was rewarded. It came up with one tolerably amusing set, *Paint Your Wagon*, one very good one, *Wish You Were Here*, and one absolute top-notch job, *New Faces of 1952*, easily the best show-album since *Guys and Dolls*. Later, we may expect more, disk-wise, of the 1952-53 season. Simon Rady, Decca's sage show-album chief, admits to being excited about the prospects, which is a very good omen indeed. Last time Rady reported excitement was when a pair of gentlemen named Rogers and Hammerstein checked in with a musical set in the wide open spaces. Something about a place named Oklahoma.

### *Wish You Were Here*

RCA VICTOR LOC 1007. 12-in. \$5.72.

Original cast, featuring Sheila Bond, Jack Cassidy, Patricia Marand, Sidney Armus. Orchestra and ensemble directed by Jay Blackton. Book by Arthur Kober and Joshua Logan. Music and lyrics by Harold Rome.

Camp Kare-Free; Goodbye, Love; A Social Director; Shopping Around; Mix and Mingle; Could Be; The Light Fantastic; Where Did The Night Go; Certain Individuals; They Won't Know Me; Summer Afternoon; Don José of Far Rockaway; Wish You Were Here; Relax; Flattery.

Belligerent Chicagoans to the contrary, the economic heart of America still is the towering pile of masonry known as Greater New York, where nearly 10 million people spend 50 weeks a year choring up the nation's business. The other fortnight they spend in the Catskills, pathetically trying to reestablish contact with an idyllic pastoral existence that never was. Arthur Kober's stage play, *Having Wonderful Time*, brought out both the pathos and the humor of this. This musical adaptation of it focuses exclusively on the humor, but it's good nevertheless. Sidney Armus' depiction of the hideous plight of a youth who took a job as a vacation camp's social director is, by itself, probably worth the price of admission. The album should be graded a little below *Gentlemen Prefer Blondes*, a little above *Out of This World*. The recorded sound is first-rate and eminently suitable. First emphasis is on intelligibility, but good perspective is present as well.

### *New Faces of 1952*

RCA VICTOR LOC 1008. 12-in. \$5.72.

Virginia Bosler, June Carroll, Robert Clary, Allen Conroy, Virginia de Luce, Michael Dominico, Alice Ghostley, Ronny Grabam, Patricia Hammerlee, Eartha Kitt, Joseph Lautner, Carol Lawrence, Paul Lynde, Bill Mullikin, Carol Nelson, Rosemary O'Reilly and Jimmy Russell, with orchestra and chorus conducted by Anton Coppola. Words and music mostly by Ronny Grabam, June Carroll, Arthur Siegel, Sheldon Harnick and Michael

Brown. Orchestra arrangements by Ted Royal.

Opening; Lucky Pierre; Love Is A Simple Thing; Boston Beguine; Nanty Puts Her Hair Up; Guess Who I Saw Today?; Bal Petit Bal; Three For The Road; Penny Candy; Don't Fall Asleep; I'm In Love With Miss Logan; Monotonous; Lizzie Borden; He Takes Me Off His Income Tax.

Well, this is it. For years, whenever we ventured into mild raptures over one current musical or another, some vintage playgoer has squelched us by remarking that, after all, Broadway hasn't been Broadway since the great days of the topical review. It is our pleasure to report that 1952 has a review and, furthermore, a review that is easily as good as *The Bandwagon* or *As Thousands Cheer*, which is as far back as we go. It is an additional pleasure to record that it was produced by Leonard Sillman, who began producing *New Faces* in 1934, but ran into ill luck and has been in the Manhattan shadows since. He's back in the lighted theatre now and it's an occasion for cheers. The discoverer of Imogene Coca, Henry Fonda, Van Johnson, Richard Carlson and Eve Arden has dug up an assortment of young talent — acting, singing, writing and composing — that shows he has lost none of the old touch. It's all new, all terrific and all in *New Faces of 1952*. Traffic to New York should pick up as soon as this record gets around.

The record is a near-perfect entertainment item, utilizing the big-hall pickup technique, long popular in Europe, which



Eartha Kitt: a new face, a fantastic voice.

lends an almost visual illusion of being in the theatre. The illusion is heightened by some splendid entr'acte byplay, featuring Virginia de Luce, as the beautiful blonde "friend" of the producer, repeatedly explaining in a never-finished song how he takes her off his income tax. The sketches themselves parody a *Streetcar Named Desire*; *Brigadoon*; the New Yorker Magazine; Johnnie Ray; *Kiss Me Kate* and sundry other aspects of current culture, all hilariously. One skit combines the trial of Lizzie Borden with a hoe-down (*You Can't Chop Your Papa Up In Massachusetts*); another presents Eartha Kitt, owner of a steam-whistle voice that must be heard to be believed, in a fantastic account of amatory conquests which ends with the politically blasphemous phrase: "Ike . . . Likes . . . Me!"

#### *Paint Your Wagon*

RCA VICTOR LOC 1006. 12-in. \$5.72.

James Barton with Olga San Juan and Tony Bavaar. Orchestra and chorus conducted by Franz Allers. Music by Frederick Lowe. Lyrics by Allen Jay Lerner.

I'm On My Way; Rumson; What's Goin' On Here?; I Talk To The Trees; They Call The Wind Maria; I Still See Elisa; How Can I Wait?; In Between; Whoop-Ti-Ay; Carino Mio; There's A Coach Comin' In; Hand Me Down That Can O' Beans; Another Autumn; All For Him; Wandrin' Star.

From the armchair, this is a pretty nice recording. After the same general style as the *New Faces* album, but not quite so full in sound, it is nevertheless a good presentation of a Broadway show. Unfortunately, at this point, the comparison ends. After the success of Lerner and Lowe with *Brigadoon* of happy memory, we expected something much more than is to be found in this record. There are some nice songs, and some good performances, but as a show it simply does not strike fire the way it should.

If you like such tunes as *I Talk To The Trees*, *They Call The Wind Maria*, *I Still See Elisa*, or *Carino Mio*, you'll find the authentic original here for you, and you'll

probably be beguiled with the voice and style of the young tenor, Tony Bavaar, as we were.

#### *Roberta* (Music by Jerome Kern. Lyrics by Otto Harbach)

CAPITOL L334. 10-in. \$3.98.

Gordon MacRae and Lucille Norman with Anne Triola, with orchestra and chorus conducted by George Greeley.

COLUMBIA CL 6220. 10-in. \$3.00.

Joan Roberts, Jack Cassidy, Kaye Ballard, Portia Nelson, Stephen Douglas and Frank Rogier, with orchestra and chorus conducted by Lehman Engel. Produced by Goddard Lieberson.

#### *Lovely To Look At* (Roberta)

MGM E 150. 10-in. \$3.00.

Kathryn Grayson, Red Skelton, Howard Keel, Marge and Gower Champion and Ann Miller with Carmen Dragon and The MGM Studio Orchestra. Additional lyrics by Dorothy Fields.

With the release of the motion picture, *Lovely To Look At*, it was to be expected that more than one new showcase would be provided for the wonderful Jerome Kern score. Herewith our report on three new records:

Each of these disks has something to mention particularly, and the only unfortunate thing about it all is that the best efforts could not have emerged as a part of one single whole. As a matter of personal preference, we pick the Capitol recording for our favorite. This disk has two features which are outstanding. First and foremost is the warm and beautiful voice and style of Gordon MacRae. Secondly, the responsible parties at Capitol decided to make this record as a musical whole. Here, as opposed to the other two records, you will find no collection of eight separate cuts. Instead, we have a unified whole, with the various parts tied together with musical bridges or by dialogue, after the style of a radio capsule presentation.

In picking the Capitol recording as our favorite, we did so in spite of the fact that

Columbia, under the aegis of Goddard Lieberson, has presented another of the magnificent show albums in the line which includes *Babes In Arms*, *Girl Crazy* and *Conversation Piece*, to mention only a few. But, as we mentioned above, this choice was made on the basis of the contents and not the actual recording job itself. Here Columbia is in again, hands down. Tasteful arrangements well played, a beautifully clear sound and a group of talented and well prepared principals serve up this recording. Actually, it would be difficult to pick out any one of them as matching MacRae, but if you choose yours for the overall sound alone, you cannot help but pick this Columbia record.

Motion picture fans will probably make their choice the MGM disk, for it is produced directly from the sound track of the movie. It bears eloquent testimony of the fact, too. There is more than one spot where the tape has been edited to provide a musical whole, and the editing leaves something to be desired. Overall the sound has the overblown, brassy characteristic of so much of Hollywood's music and the end result is a strange grotesque of the really lovely melodies of Jerome Kern.

So far as the individual performances go, there is really little to praise. Perhaps the most interesting is the duo appearance of the dance team of Marge and Gower Champion who do very nicely with *I Won't Dance*. They are, however, no Astaire and Rogers. Red Skelton is completely lost, which unfortunately we cannot say about Kathryn Grayson. As a Hollywood star, she is given headline billing with Mr. Skelton and Howard Keel. As a vocalist she deserves oblivion, provided this example is a true demonstration of her talents. When one realizes the amount of really natural talent and the good voices to be found in this country, it is hard to understand why such a tentative performance, replete with scooping, flattening and vocal simpering needs to be immortalized on wax. When a comparison is made between Miss Grayson and Gordon MacRae's companion, Lucille Norman, one is seriously tempted to paraphrase Hamlet's sad farewell to Ophelia, saying, leave her to Ted Mack. E. L. M.

## Melodious Miscellany

#### *Andre Kostelanetz and his Orchestra*

COLUMBIA ML 4546. 12-in. \$5.45.

Tchaikovsky: *Romeo and Juliet* (Overture-Fantasia); *Waltz* (from *The Sleeping Beauty* Ballet); *Waltz* (from *Suite No. 3* in G Major); *Waltz* (from *Serenade in C* Major for String Orch.); *Valse Finale* (from *The Nutcracker Suite*)

Familiar music has long been the forte of Mr. Kostelanetz and his orchestra. Together with his long list of popular favorites, the conductor has recorded a great deal of the lighter music of Tchaikovsky, of which this disk provides a notable new example. One could hardly call the reading of the *Romeo* profound in any sense of the word, but it is a brilliant delivery of well known

music. The brilliance, of course, comes from a virtuoso orchestra and a knowledgeable balance for recording. When it comes to recorded sound, the conductor knows what he wants and he seems to get it over and over again.

This is no low level recording, but rather a big booming piece of business with rolling climaxes and whispering *pianissimi* after the traditional Kostelanetz fashion. However, there seems to be a change worthy of note. Past recordings by this same orchestra and conductor have been criticized for hardness and a steely sound. Comparing the present disk with some of these earlier ones made it evident that there has been an effort to alleviate this condition. Generally speaking, it has been a successful effort, for both the

*Romeo* and the waltzes on the reverse come through with a great deal more suavety and richness of sound than one might have expected.

The recording itself is, as stated above, big in scale, with a fair amount of room tone. At the same time, there is little echo and a minimum of the cross-modulation which has been too obvious in many previous Kostelanetz records. In other words, the engineering advances of the past few months have been extended by Columbia's engineers to Kostelanetz and Company with pretty happy results.

COLUMBIA ML 4481. 12-in. \$5.45.

Gershwin: *Cuban Overture*; *Mine* (from *Let 'Em Eat Cake*); *Highlights* (from *Porgy & Bess*); *Love Walked In* (from *Goldwyn Follies*)

The steely sound and the hardness mentioned above is present in this disk from the very first notes of the *Cuban Overture*.



In addition to this we find a slight hollow-ness in the recorded sound which seems to give the famous Kostelanetz strings their lift, but which adversely effects the full orchestra. Apart from these considerations, this is an interesting disk, for the *Cuban Overture* is unfamiliar Gershwin, while the reverse carries some of that composer's loveliest memories.

One peculiar error has crept into the liner notes for this record. The author credits Mr. Kostelanetz with a first performance of the *Cuban Overture*. Actually, the fact is that this work was recorded first by Paul Whiteman and his orchestra, with Rosa Linda and Roy Bargy, a good many years back. For those who are detail-minded, check the 1942 edition of *The Gramophone Shop Encyclopedia*, page 179. There you will find that Decca Records released the *Overture* in *An Album of George Gershwin Music*, Decca Album D-31, the individual disks being numbered D-29053/4.

Particular mention is made of this oversight because we feel very strongly that American music owes a tremendous debt of gratitude to Paul Whiteman and his associates. They have made an enviable record for themselves and for popular music in this country. Let's keep the record straight.

#### Romantic Reveries

COLUMBIA AAL 18. 10-in.

Virgil Fox at the organ of The Riverside Church, New York.

Wagner: Bridal Chorus (from Lohengrin); Tchaikovsky: None But The Lonely Heart; Hugh McAmis: Dreams; Grieg: Ich liebe dich (I Love Thee); Godard: Berceuse (from Jocelyn); Mendelssohn: Wedding March (from Midsummer Night's Dream).

#### Music for Meditation

COLUMBIA AAL 20. 10-in.

Virgil Fox at the organ of The Riverside Church, New York.

Handel: Largo (from Xerxes); Vierne: Scherzo (from Symphony No. 2, Op. 20); Bach: Air for the G String (from Suite No. 3 in D Major); Sullivan: The Lost Chord; Dvorak: Largo (from the New World Symphony); Elgar: Pomp and Circumstance March No. 1 in D Major.

Here are two collections of familiar music beautifully presented in arrangement and performance by one of the finest of that unsung group of musicians: the organists. So far as most of the general public is concerned, the organ is a part of 1) Sunday morning, 2) the motion picture of the last generation. To music lovers, the instrument, with its continuity from the earliest days of music, is a fundament of the art.

The history of recorded organ music, unfortunately, has been marred by the very obvious difficulties found in recording. For the organ seems to present practically insurmountable problems in pickup, problems tough beyond those involved in the handling of any other instruments. The tremendous amount of air turbulence present in any loud passages matched against soft, the great presence of the bass register, the acoustics of public halls and churches,

all these factors combine to face recording engineers with a multitude of headaches. The success of Columbia's technicians in solving these riddles is amply set forth in these two disks.

Here we have all the brilliance, depth and scope of a great organ. The actual performance of Virgil Fox, in the vernacular of the jazz fan, lifts one. With the exception of the atmospheric *Dreams* by Hugh McAmis, this is all very familiar music. Music, indeed, known almost by heart by every music lover, and generally presented in a more or less perfunctory fashion by most performers. Not so by Mr. Fox. Listening to these records provides a pleasant reintroduction to old friends. This playing gives us a fine example of the organ as it should sound, and reminds us of the reasons for the music's popularity.



Andre Kostelanetz: *sauvity vs. chill steel.*

For those who enjoy the organ at its best, we should mention another notable recording by the same company. In direct contrast to much of the music on the two Fox disks, Columbia has provided us with a thrilling example of ensemble playing in the organ concerto of Francis Poulenc. This record is played by E. Power Biggs with the slightly disguised Boston Symphony Orchestra directed by Richard Burgin. It is an amazing *tour-de-force*—in fact, a favorite demonstration record with some very astute high fidelity installation men—and its recent appearance on a list of recordings which do not sell leads one to believe that the general reputation of organ music needs a serious reexamination.

If you enjoy the organ, this is a fine time to see how well it can sound in your own home. The three disks we have mentioned here deserve your attention.

#### Curtain Call

DECCA DL 7018-7019. Two 10-in. \$3.85 each. DU 1500-1507. Eight 10-in. 78 rpm.

Ted Lewis, Eddie Cantor, Jimmy Durante, Sophie Tucker, Bing Crosby, The Andrews Sisters, The Ink Spots, The Mills Brothers

When My Baby Smiles At Me; Wear A Hat With A Silver Lining; Now's The Time To Fall In Love; Makin' Whopee; Start Off Each Day With A Song; Inka Dinka Doo; Some Of These Days; Life Begins At Forty; I Surrender Dear; Where The Blue Of The Night Meets The Gold Of The Day; Bei Mir Bist Du

Schön; In Apple Blossom Time; If I Didn't Care; Do I Worry?; Tiger Rag; Paper Doll.

"Let me hear that note again!" Thus the irresistible Jimmy Durante in one of his famous songs. And in the spirit of reviving some of the great memories of the American musical theatre, Decca Records has released the first of a promised sequence which returns to circulation the outstanding songs from the careers of its stars. The first release includes single disks, one per artist.

Here we are not dealing with anything which pretends to be high fidelity recording, because many of these individual songs have come out of the vaults after fifteen or twenty years. What they are is an imperishable record of some of the greatest moments in the history of American popular entertainment. It's only to be regretted that, due to contractual restrictions, Decca is not able to pick up the whole roster of recorded stars and make them a part of this admirable project.

If you are fond of show music, and have a soft spot in your heart for vaudeville as it used to be, you will want to have these records in your collection as a constant reminder of the personalities who made you laugh, cry or swoon in the '20's, '30's and '40's; the personalities whose talents so largely shaped the popular entertainment of our times.

Our review copies came on 78 rpm. disks, so we cannot evaluate the transfer of these old masters to microgroove. You are advised to listen with the idea that these are old masters indeed, and not to be compared with the higher fidelity of later years.

#### Sauter-Finegan Orchestra

RCA VICTOR 45 rpm 47-4866, 47-4867, 47-4927. \$.89 each

Doodletown Fifers; Azuwa-Tè; Rain; Stop! Six Down! Relax! Think!; April in Paris; Moonlight on the Ganges.

Eventually RCA Victor may collect some Sauter-Finegan on long-play records. Then again, being RCA Victor, they may not. So there's no use waiting.

Ed Sauter and Bill Finegan are clever, youngish (38 and 35) men who contributed heavily to the popularity of a much better known pair—Benny Goodman and Glenn Miller, whose arrangers they were (Sauter also wrote the Goodman showpieces *Benny Rides Again*, *Superman* and *Clarinet à la King*). In 1952 a cagy manager named Willard Alexander persuaded Sauter and Finegan to start a dance band of their own, and a most unusual dance band it has turned out to be. It has a percussion section, incorporating a xylophone, orchestra bells, triangle, chimes, celesta and kettledrums. It has also, apparently, a recorder or two, and a fife. In one record, *Moonlight on the Ganges*, there is also what seems to be a kazoo.

This does not add up to monkey business. Both men have sound musical backgrounds: Sauter attended the Juilliard School, Finegan the Paris Conservatory. They have a fine ear for unusual tonal effects, and RCA Victor's engineers are clearly on their side. Prize item so far is *Doodletown Fifers*, a really fascinating arrangement based on the old tune, *Day of Jubilo*. For our money, this is the kind of thing they should do more of.

# From Mother Goose



CABINET BY JACK DORLAND, NIAGARA FALLS, ONTARIO

# To Captain Hook

## *children's records and how to shop for them*

By EMMA DICKSON SHEEHY

**R**EGRETTABLY, we grownups tend to forget how important it is for children to be independent.

Indeed, their constant insistence on independence so frequently gets them into trouble in the adult world that there is a temptation for us to resent it, wish it out of existence. Yet it is vital and desirable, one of the most powerful factors in the process of learning. Youngsters learn most eagerly when they can choose and experiment most freely and actively. This makes phonograph records an excellent medium of learning. They convey, nowadays, a considerable variety of experience. Give children a supply of good disks, plus access to the family record shelves and perhaps to the lending facilities of their local library, and the results can be impressive. Here are experiences that they can "turn on" when they wish and go about the business of extending their musical

and literary horizons at their own pace, in their own way, and without age level ceilings to stop them.

In selecting records for children it is well to keep in mind several things. Children, like you and me, are different and have different tastes and interests (with the possible exception of cowboys!). These interests change from time to time, but can be very intense while they last. Finding new records to hitch on to what is "big" at the moment is important. Not that permanent values should be ignored. We all have some of our own favorites which we believe children should be exposed to. The record that reaches beyond the moment, and gives a child something to grow into, is necessary — but don't turn him against it forever by trying to choke it into him, or by trying to impress its greatness upon him. Be patient. Let him do the discovering. Our job, and



a very important one it is, is to have plenty of good recorded music and stories around to be discovered. A child also needs to make choices for himself. Even a pre-schooler can and will do this, although he may need some help in setting limits. If the child lives in a home that values the importance of giving children choices, he will probably proceed cautiously, even sensibly (!) but we must always be prepared for unpredictable selections. Sometimes they may be a mistake both for him and from our point of view. Again it may seem to be an unwise choice only to us. But that is part of growing. Do take time for an occasional visit to the record store with your child and listen together to an assortment of records before buying.

Parents who are really concerned about the quality of what their child hears will not buy records for him — anymore than they would for themselves — without first listening to them, if this is feasible. Beware of some of the high sounding “educational” patter dished out by some companies and be slow to compromise on what you consider good standards in such things as quality of recording or a direct and nonpatronizing narration in story-records. Be especially suspicious of the practice of employing all sorts of tricks to catch the listener’s attention so that he will swallow the story painlessly. A good story, if it is right for the child, needs no such

shenanigans; it can stand on its own merits. Trapping the child into such experiences shows little respect for his intelligence and belittles the story. Relevant and tastefully modulated sound effects can heighten a story’s dramatic quality, but they should never get in its way. In discussing such standards, we are not talking about children’s interests, but rather about the way in which these interests can be met. For example, any cowboy record may drive us out of the house, but this needn’t keep us from realizing that there are good cowboy records and poor ones. Since Junior is almost certain to have some of the unbearable around, be sure that there are also a few good ones on hand. Here the youngster’s particular cowboy hero must be considered. Capitol gives us Hopalong Cassidy, RCA Victor has Roy Rogers, Columbia is represented by Gene Autry and Decca explores the wide open spaces with The Lone Ranger. For the child with a yen to do some completely independent record-shopping, from time to time, most corner drug stores are conveniently full of 25-cent records. He cannot go far wrong, for instance, buying Little Golden Records (produced by Mitch Miller in conjunction with Simon and Schuster’s Little Golden Books). These feature absolutely straight renditions of standard children’s songs. The surfaces, of course, are terrible, but children seem to like them just the same.



**Records for the Very Young**

For a long time, Young People’s Records and Children’s Record Guild have done a tremendous business in catering to the crowd of youngsters up to about six or seven years of age and they have been willing to reach out and try new ideas with some excellent results. (They have had their duds, too, so again be sure to listen first.) Among the more recent ones which appeal to children are CRG’s *Let’s Help Mommy* and *The Fog Boat Story*. In the latter, sounds and movements of tugs and freighters are dramatized, with music that has a pleasant modern flavor. There is also *Train To The Farm*, with its songs about animals, plus much soundmaking. *Grandfather’s Farm* is one of their earlier ones, still well received because of its singable folk songs. To go back further, if your child has not heard YPR’S *But Muffin Can Hear* and *A Walk In The Forest*, these should be under his Christmas tree. The former is Margaret Wise Brown’s story about a little dog who got a cinder in his eye, and is outstanding for its superb narration. The latter, by

Marie Hall Ets, is a fine example of sensitive musical accompaniment to a simple but literary story. Both are classics. Hot off the griddle is Mercury Childcraft’s *The Night Before Christmas*, backed by *Frosty The Snowman* and who else but *Rudolph, The Rednosed Reindeer*. This is good. *The Eagle And The Thrush* (CRG) is directed to elementary school age children, but the fours and fives who listened to my copy were fascinated by this beautiful old Indian legend that tells how music was brought to earth.

**Mother Goose**

Mother Goose is always a reliable standby. The most recent series done by a large company is MC’s set of six records, which just about takes care of Mother Goose. MC has also just released two of the most delightful records of the year in *Father Gander* and *Modern Mother Goose*, a collection of nonsense lyrics set to fascinating and bewitching music by Curtis Biever. Sensitive orchestration provides a fine musical experience here and the whole

family will probably find it hard to lose the tunes. Jack Russell does an excellent job in catching the spirit of the songs, sometimes tender, again spoofing and high-going.

**Records About Real Experience**

An intelligent approach to tapping children’s interest in the life around them can be credited to Columbia for their new series, *Skyline Flight 35*, in which the listener gets acquainted with the intricacies of the take-off and landing of a real airplane from the inside of the pilot’s cabin; *Hook And Ladder No. 99*, where the drama and excitement of a real fire is caught by on-the-spot recording, and *Tugboat Peter Moran*. This last is a remarkably good job of giving a sound-picture of the busy life of a tugboat. This is authentic stuff and by its directness and unembellishment frees a youngster’s imagination. Columbia also has its baseball disks (6-in.) again depending on the real thing by having famous players give the low-down on the positions they play. I recently sat by while three fathers listened spellbound to the entire series,

which had been given to the son of one of them. That should be recommendation enough.

### Documentary and Folklore

A new line dealing with factual material was presented this year by Enrichment Records in cooperation with Landmark Books: *Christopher Columbus Voyages*, *The Pony Express*, *California Gold Rush*, *Landing of The Pilgrims*. The subject matter appeals to the older child and we may hope for more



of this type of production — with a little more imagination directed to the background support. The idea is sound and the producers are to be commended in their intelligent handling of the material. One of the most important ways to get a feeling for history is through folklore. Record companies have long drawn on this source. Directed to children especially is Tom Glazer's fine work for YPR. His beautiful *Twelve Days of Christmas* is a holiday necessity. Earlier records by Glazer are *Going West* and *Concertina*, both collections of folk songs. On the humorous side (and there are far too few) is Burl Ives' *Animal Fair* (Columbia). This came out over a year ago, but do not miss it. Folkway's catalog of authentic ethnic recordings has a great deal to offer older boys and girls and, of course, our Library of Congress has a great reservoir of American folklore recorded on the field, and is especially valuable for the student. MC has recorded *Folk Songs Of Our Land* and *Folk Songs Of Other Lands*. In the latter, both English and original French or German words of familiar and lively folk songs are sung.

### Music

The pickings are thin in the field of straight music recorded for young folks. Fortunately children lend their ears to the family favorites, and this is good. We should never minimize what they pick up, so doing, for youngsters have a disconcerting way (to us oldsters) of doing half a dozen things at one time and missing out on precious little. There is, thank goodness, no such thing as age level in music. We can never tell what will appeal. It is important, however, not to get too active in "culturing" the child. It has to work the other way around, so — the less talking, the better. YPR has a group of records devoted to music, among the best being *Round And*

*Round*, (an introduction to the fugue, of all things) and *Rondo For Bassoon*. Haydn's *Toy Symphony* (RCA) has its modern counterpart in YPR'S *Concerto For Toys And Instruments*; both are tops. MC's recent *Great Music For Young Folks* is a fine selection of familiar classics. Vox also has its series on great composers — Schumann, Schubert, Mozart etc. Musical operettas on themes of interest to children are important contributions. Here we have YPR'S *The Emperor's New Clothes*, CRG'S *Sleeping Beauty* (with Tchaikovsky's ballet music) and delightful *Robin Hood*. *Let's Listen To Haydn* (LP; Haydn Society) uses narration on the record, as in the Vox group, to introduce and comment on the music, a practise some folks like and others do not care for. A good, lively parade record is Capitol's *Circus Parade* (LP) played by Ringling Brothers Circus Band.

### Story Picture Record Albums

A really fine example of children's stories on records is RCA Victor's two Milne albums, *Winnie The Pooh And Eeyore* and *Winnie The Pooh And Tigger*. James Stewart is the narrator. The twenty pages of text and original pictures follow the story exactly as the child listens to the records — two in each album. These should be in every child's library. RCA has also just released a group of stories on single 45 rpm's. These are inexpensive compared to the larger albums and, while they are good, you also get less in the way of satisfaction. Among those for the younger children are the Little Nipper group — *The Railroad Train*, *The Fire Chief*, *Hansel And Gretel*. For the older child, there are *Aladdin*, *Captain Video*, *Kukla*, *Fran And Ollie*. Capitol's new album of *Robin Hood* is highly recommended. They have done a splendid adaptation of the story and the Disney pictures are excellent. Capitol was the first company to introduce the story-record-picture album and achieved phenomenal success with their *Bozo At The Circus*, the last in their Bozo series being the hilarious *Bozo At The Farm*. *Peter Pan* (Columbia) is not an album, but a 12-in. LP recorded by the original Broadway cast — including Jean Arthur and Boris Karloff — over a year ago. If I could give only one record to a family, this would be it.

### Record Players

There is not space to get into a discussion on players, but do remember that "not just anything" will do for children. Good records deserve respectable reproduction, which cannot be had with a \$10.00 "kiddie" phonograph, no matter how cute it looks! Since most smaller children's records are still produced on 78 rpm, a single speed player which the child can operate himself is perhaps the best buy for the child under six. One can be had for around \$25.00. When it comes to 45 rpm, you will have to decide whether you want to limit the child to 45's — and both these records and their players are good — and discard the use of your 78's, or whether you will get two machines. The older child can manage a three-speed player easily, and should have one. In disk-fare for him, as for us, the trend of the best is toward LP.



### The Yuletide Spirit

Christmas comes but once a year, a fact which has had no cautionary effect whatever on record makers. On long-play alone, there are now enough issues of Christmas carols, hymns, stories and music in general to fill a large barrel. The good ones, however, are far less numerous.

In the masterpiece department, there is, of course, Handel's *Messiah*, available in excellent versions by Beecham (RCA Victor: four 12-in.) and Sargent (Columbia: three 12-in.). A brand-new item of note is a Bach *Christmas Oratorio*, performed by the Vienna Symphony and soloists under Ferdinand Grossman (Vox: 12-in.).

From RCA Victor comes a performance of the 1951 Christmas TV opera, Menotti's *Abmal and the Night Visitors* (12-in.)

As for group carolling, the cream of the crop are these: Westminster's two superbly recorded 12-in. LP's (each with score) of the David Randolph Singers; Columbia's 12-in. of the Mt. Holyoke Glee Club and the Celebrities Quartet; RCA Victor's two encyclopedic 12-in. Robert Shaw Chorale disks; Vanguard's 12-in. combination of the Welch Chorale and the Bornand Music Box collection; Decca's pair of 12-in. disks, *Christmas with the Trapp Family Singers* and (surprise!) *The Weavers' We Wish You A Merry Christmas*; Capitol's 10-in. featuring the Voices of Walter Schumann; Columbia's 10-in. collection by Lehman Engel's group. There is good singing, not too well recorded, on M-G-M's 10-in. carol-festival of the Canterbury Choir. For those who can locate it, London's set of 12-in. 78's featuring Malcolm Sargent and the Royal Choral Society is a treasure.

Solo Christmas singers are equally varied. Among the worthiest are these: Marian Anderson, tenderly artistic on a new RCA Victor (10-in.); Andrew Rowan Summers, with dulcimer, in early American modal carols, on Folkways (12-in.); Burl Ives, in Yuletide folk songs on Decca (10-in.); Caruso and McCormack, well reprinted in hymns on RCA Victor (12-in.).

A refreshing non-vocal novelty is Cook Laboratories' *Christmas Music Box*, a 10-in., ultra-hi-fi reproduction of tunes from the famous Brown music box collection. As for non-musical Yule fare, there are three good versions of Dickens' *Christmas Carol*: Lionel Barrymore on M-G-M (10-in.); Ronald Colman on Decca (12-in.); Basil Rathbone on Columbia (12-in.) and Emlyn Williams on London (10-in.). Merry Christmas!





# IN ONE EAR



By JAMES HINTON, JR.

## Diamond Anniversary

The New York Public Library observed the diamond anniversary of the phonograph on August 12. Seventy-five years ago, Thomas Alva Edison had devised the archetype of all our present recording equipment and elaborate custom-built reproducing installations. An amateur soprano named Lily Moulton noted the event in her diary. She was horrified by the sounds she heard during the first playback in history, but she *could* recognize her voice as the needle tracked faithfully through the grooves its vibrations had cut into a tinfoil cylinder.

All through the warm months — if a sweltering, 95-degree New York summer can be called “warm” — the library presents free lunch-time concerts of recorded music in Bryant Park, that patch of grass, shrubs, and formal concrete just behind the main building at Forty-second Street and Fifth Avenue. In spite of acoustical conditions calculated to send audiophiles screaming for the cool quiet of the library itself, the programs seem to please their audience of stenographers, clerks, loiterers, bums, and purposeless strollers. But not often does it fall their lot to commemorate so really historic an occasion.

Inside the library, Philip Miller, acting head of the music department, put a forty-year-old cylinder on a 1913 model Edison Amberola. Outside in the park, amid a munching of sandwiches and the steady, big-city hum, loudspeaker diaphragms shuddered and the music began. It wasn't exactly high fidelity, but the sound was surprisingly clear, strong, and true, as *Blanche Arral* and *Marie Delna* came through in arias from *Thomas' Mignon* and *Gluck's Orfeo e Eurydice*. *Mme. Delna*, a Paris waitress who became a light of the *Opéra-Comique* around the turn of the century, sang in this country, at the *Metropolitan*, only in 1910, so the 1913 dating of her cylinder seemed suspect. Whatever its date, it was obviously made a long time ago.

The library has machines older than the Amberola that Mr. Miller used, including some very early Edisons and one of the first disk phonographs, made in 1896, but for a tribute to Edison the Amberola gained preference, since it is the highest development of the cylindrical player, in which he believed to his dying day.

Edison reasoned that the sound would necessarily be steadier on a cylinder of unvarying radius than on a disk of diminishing or increasing radius; but disks won out, partly because they were efficiently promoted, even more because they were less bulky. Edison finally gave up on the cylinder in 1914, long after others had been making disks and presumably long after a burgeoning collection of cylinders had crowded all of the furniture out of his house.

The hand-wound Edison machine was used for just the two cylindrical arias. Other old records, marking what Mr. Miller said were significant steps in the advance of recording technique, were played on up-to-date equipment. Of special note was an aria cut in 1900 by *Emilio de Gogorza*, hiding coyly behind the pseudonym *Carlos Francisco*. It wasn't considered quite respectable in those days for a concert artist to sing into a horn. However, since Mr. De Gogorza later became the first director of artists for the *Victor Talking Machine Company*, it is to be presumed that his views changed.

Then there was one of the first recordings by a major symphony orchestra — the prelude to the third act of *Wagner's Lohengrin*, as played by the *Boston Symphony*, under *Karl Muck*, in 1917. It sounded just awful.

If any single point can be made from all this — except, of course, that recording techniques certainly have advanced since 1878 — it is that the old Edison cylinders sounded better (at least with regard to the indefinable “nearness” that means so much in vocal reproduction) than the other old discs sounded with the presumable advantages of modern equipment. I didn't think that the superiority of cylinders caused this, either. To each his own.

I have an old Brunswick machine, with an alternate head for Pathé recordings. Reactionary heretic that I am, I like to play my old vocal records on it. Perhaps it is because I grew up with the old wreck (the machine, not the singer) that Nellie Melba's voice sounds to me rounder and more immediate as it comes out of the old, squarish horn. Perhaps it is because I know my machine has digestive troubles (thumps and groans inside are the clinical symptoms) that I sympathize with it and tolerate its failure to emit recognizable or even decent sounds when faced with the problem of reproducing the violin tone of Margaret Pardee or the healthy noise of Vessela's Italian Band.

In any case, the phonograph's diamond anniversary concert was good, clean fun. At least Mr. Miller had the taste and forbearance to refrain from offering up one repulsive darling of old-record enthusiasts—the libellous disk, cut high in the Metropolitan Opera House flies, on which Jean de Reszke can be heard (from time to time, anyway) barking out a phrase or two of the forging song in Siegfried. That is one disk that should be suppressed, for the good of a great artist's memory, for the good of the record industry, and, last but not least, for my own good.

### Collectors' Items

A recent New York *Times* advertisement of a three-records-for-the-price-of-two sale at the Liberty Music Shops contained a couple of items that every collector should rush to buy. The first is a recording of *Indian Love Call* and *Rose Marie* (presumably all of it) sung by Nelson Eddy and Dorothy. No last name given. The second is a recording of the *Toreador Song* sung by Risé Stevens and Nadine Connor. It's all right, Liberty, to unload your 78's and 45's at \$1.16, three for \$2.32, but don't get panicky.

### For the Birds

Any of you who doubt that Ottorino Respighi is a "modern" composer, whatever that is, should take note of the fact that the *Pines of Rome* cannot be performed without the use of a recording of the song of a nightingale. Or can it?

This past summer, when Fritz Mahler, conductor of the Erie Philharmonic, was filling an engagement as guest with the Danish State Symphony, he scheduled *Pines of Rome* for a performance. Orchestra parts arrived on schedule and were rehearsed, but just before the concert it was discovered that the nightingale recording had not been sent along. The crisis was resolved when the concertmaster, one Charles Senderowitz, undertook to make like a nightingale with his own voice. He succeeded, Mr. Mahler says, "to perfection", and everybody was happy—everybody except the next conductor who got the orchestra parts and found the nightingale record missing.

Maybe it won't turn up at all, and Mr. Senderowitz can make a new career for himself, traveling around with the score of the *Pines of Rome*. Better still, maybe the

publishers will hire him to make a *new* nightingale recording. Then again, maybe they won't. G. Ricordi publishes the score and, having a firm grasp on economic reality, is more than likely to get not only a real nightingale but a nice, meek nightingale who won't ask to be cut in on the royalties.

Otherwise, Ricordi might find itself in a peculiar position of having to buy a recording of a recording of the nightingale's song from a company that has recorded the *Pines of Rome* and pay royalties back to them for letting other orchestras use it in *their* performances of the work.

This is getting much too complicated. Does anybody know a nightingale who wants to sing in concert and on recordings, or on recordings and in concert? It's getting out of hand again. Remember, a *cheap*, non-union nightingale. James C. Petrillo please note.

### Music on Tape

Our little outburst in the previous issue of HIGH-FIDELITY, about how there wasn't any "Music on Tape" report in that issue because no one had sent in any tape for comment, produced two batches of tape, so the column is back in business again.

One batch was from a newcomer called MaVoTape, Inc., a joint venture of Magnecord and Vox. They plan soon to begin a limited test distribution of their recordings, to be sold as "Magnecordings by Vox." Magnecord describes them as follows:

"The Magnecordings will be recorded on half tracks of standard recording tape at 7½ ips. tape speed, presenting a full hour program on a 7-in. reel. Special equalization in recording will give high fidelity reproduction of 15,000 cycles. They will be sold by time segments, the length of the selection determining the price of the tape. A one-hour program on 7-in. reel of 1200 ft. will sell for \$9.95. A half-hour program will sell for \$4.95.

"The Magnecordings will be made by Magnecord, for MaVoTape, Inc., from master tapes of Vox Productions, Inc., library, and will be distributed initially through Magnecord distributors.

"Plans call for six releases per month. Initial releases will include: Shostakovich, *Fifth Symphony*, by the Vienna Symphony Orchestra, Jascha Horenstein, conductor; Mahler, *Symphony No. 2 in C Minor*, by the Vienna Symphony, Otto Klemperer, conductor with Ilona Steinbruger, soprano; and Tchaikovsky, *Piano Concerto in B Flat*, by Monique de la Brouchellerie and the Vienna Symphony."

Magnecord sent us a preview tape, on which were recorded Walter Piston's *Concertina for Piano and Orchestra* and Mussorgsky's *Night on Bald Mountain*. Both were better than the majority pre-recorded tapes which we have heard to date but the overall sound was not as good as can be secured by recording live FM off the air at a tape speed of 15 ips. Compared to records, there was, of course, no background noise, no hiss or needle scratch, but the dynamic range was not up to that of the disk optimum. Equalization was good.

From A-V Tape Libraries we received four 7-inch reels which show an improvement over earlier tapes from this company but which, like the Magnecordings, were not the equal of sound taken at 15 ips. There was a considerable choice of music on A-V: Christmas Carols, semi-pop musical varieties, the *Coq d'Or Suite* and *L'Après-midi d'un Faune*, the last two, at least, being from Remington.

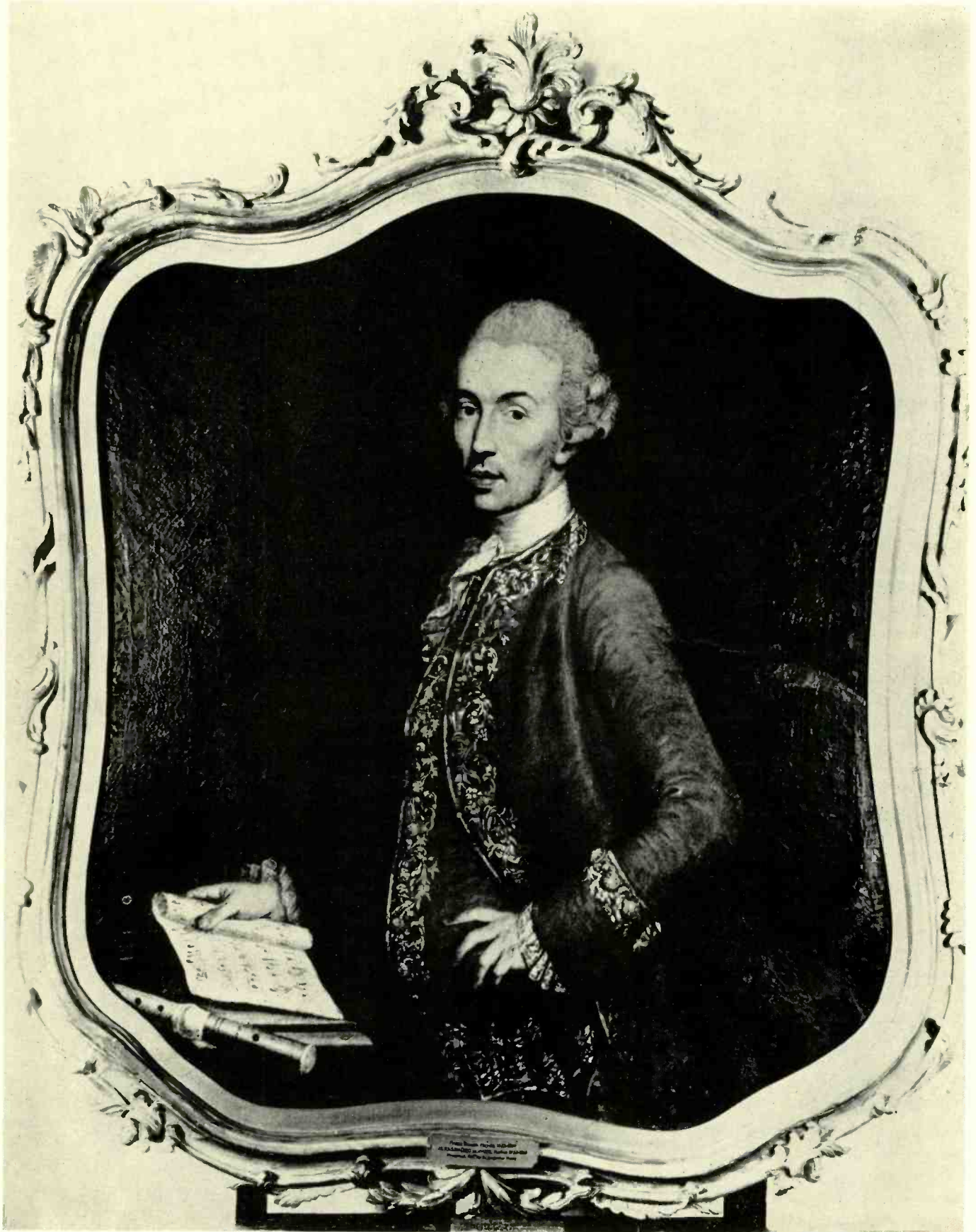
The A-V tapes which we heard were single-track, 7½ ips. reels, which sell for \$8.95 each. Recorded double-track (600 ft.) the price is \$6.95; recorded double-track at 3¾ ips. (300 ft.), the cost is \$5.00.

The situation on pre-recorded tapes can probably be summarized as follows: at 7½ ips., the frequency and dynamic range can be better than the *average* LP. The best 7½ ips. tapes are equal to but possibly no better than the best LP's. Most LP's are definitely superior to tape played at 3¾ ips., even though there is no scratch or hiss on the tapes. If pre-recorded tapes were made at 15 ips., they could be definitely superior to records, but the cost would be higher.

Our suggestion to tape equipment owners: try a couple of pre-recorded tapes. The cost is comparable to a long-playing record; the sound may be better.

C. F.





**FRANZ JOSEF HAYDN**

*the music of*

A handwritten signature in black ink that reads "Jos. Haydn". The signature is written in a cursive, flowing style with a large, sweeping flourish at the end.

*on microgroove records*

C. G. BURKE

### Part 1: Orchestral Works

**F**AVORS conferred by LP have been many and many have been great. We the discophiles have been favored in pleasure exceeding the pain of payment. The teachers of music have been favored incalculably in the opportunity to hear some thousands of works which without the microgrooves they could only talk about. Practising musicians have been able to enlarge a scanty repertory — casual examination of concert-programs verifies this — by repeating publicly what the bold initiative of the new records has revealed to them in private, which does not preclude the favor of an interpretive as well as a repertorial expansion.

The most extraordinary and striking of the favors granted to the musical world in general have been directed simply to listeners as such: technical improvements which make sound resound and banish interruptions. But, also, the technical advance begot the expansion of repertory which lets us have more than a limited sampling of music. Of this expansion, not the least provocative and delightful aspect has been the emergence from a reasonless obscurity of the wonderful music of Franz Josef Haydn.

Justice requires also an acknowledgement of the hospitality offered to Haydn by 78's. The list of Haydn 78's we should not now call extensive, but it was far bolder and more inclusive than the American concert programs of any decade in this century. We had at least twenty-two symphonies on shellac, and twoscore quartets, most of the latter products of the Pro Arte Quartet's unfinished attempt at a complete edition. There were a few of the smaller works, and many excerpts from the oratorios. Now, on microgroove, we have fifty-seven symphonies, thirty-nine quartets — with the remaining forty-odd promised by the Schneider Quartet through the

Haydn Society — twenty-eight piano sonatas, fourteen assorted concertos, ten masses, three oratorios, two operas, the *Stabat Mater*, nine trios and a number of works in less familiar forms. Haydn is third to Mozart and Bach in number of major compositions recorded, and fourth to Mozart, Beethoven and Bach in the aggregate of sides used so far to carry their recorded repertory. His representation is more abundant than that of Tchaikovsky, Brahms or Schubert. This is a rather startling reversal of concert-hall tradition. It is hard to explain either the neglect or the reversal. Perhaps Haydn's position in time, flanked by Bach-Handel and Mozart-Beethoven, has served as pretext to depreciate his music, as if the four giants had squeezed out all the latent tonal juice from two grand epochs, leaving Haydn nothing but an epitaph for the first and an introduction to the second. This has been written and repeated for a century, by men without opportunity of hearing Haydn's music. The evidence poured out by the phonograph has reversed this lazy judgment.

There may be no need to explain the flood of Haydn disks. That it has continued without abatement proves a continuous public acceptance. Indeed the regularity of issuance is remarkable: it is not a spasmodic series of jets, but an even flow, with the output of one month very much like that of the preceding month and the month to follow. Twenty months ago, preparing a Haydn Discography for the *Saturday Review*, the writer was induced to exclaim by the extraordinary number of recorded LP Haydn sides then available: a hundred and twenty-nine. The present study is concerned with a total just below three hundred.

Unquestionably the Haydn Society has been the strongest individual stimulus to the increasing interest in Haydn. This energetic and scholarly organization has issued more than one-third (118 sides) of the Haydn disks, is publishing the first complete edition of the master's scores, and has discovered or reassembled compositions lost for a hundred and fifty years. The preeminence of the Society as a producer of Haydn records — particularly of the works worst slighted — does not require any pleading, but the wide distribution of the composer's new prestige is better illustrated by the existence of Haydn LP's under twenty-eight other labels in the United States alone. Perhaps the only way to find an explanation of the contagion is to hear the best of the records.

The year 1732 presented to a brace of provincial mothers, distant in space and condition, each a son of vast capacity which earned a fame not soon to fail. It was Mary Washington's great fortune to see her son elevated to an unprecedented Presidency and to die without hearing any of the licentious vilification Americans bestow upon their greatest men in manly demonstration of what we choose to call the democratic process. When Anna Maria Haydn died, her oldest son was still in the world's esteem a naught. It would have been kinder to this woman, who had had nothing, to witness her son's ascent, than it was to Mary Washington, who had had a great deal, to have been granted the chance to observe as a matter of course the preeminence of her own obdurate son.



The two men — who did not know each other although each affected the other, Washington dancing to Haydn's music, and Haydn's Empire disintegrating at the infection of ideas which Washington's sword had helped to spread — were by birth, instinct and habit cloistered countrymen. The excursions of Washington were all acts of duty, and his repeated gratitude for the sanctuary of Mount Vernon cannot fail to touch. Haydn, born in the tiny Danubian village of Rohrau in Lower Austria next to the Hungarian frontier, was nearly sixty before he had ventured seventy-five miles away. It was not the splendor of the palaces at Eisenstadt and Esterhaza that comforted him, but their rural settings. If he yearned for Vienna, the impulse was practical and professional.

No other pair of exact contemporaries in that age could have been more indifferent, by inclination, to its searching intellectual excitement. Yet the one wrote its music and the other carried its shield. Haydn was the professional musician par excellence, Washington the utmost in soldierly fortitude. Both disdained accomplishments that did not contribute to their professional mastery. Both were men of simple habits, though both could enjoy luxury. Words were inimical to both these men of grand exploits but sparse opinions. The restless, penetrating intelligence of Bonaparte, the impatient criticisms of Beethoven, the cultivation and philosophical bent of Frederick II, the reflective imagination of the German soldier Goethe — these were foreign to the nature of the twin sons of 1732. Both men became affluent, although Haydn was born miserably poor and Washington's monetary worries were those of a man who always had money. Indeed, Washington eventually became the richest American of his time, baffling history with another instance in which the most deserving received the richest reward of gold.

Here it may be prudent to discontinue analogies, lest an impression be given that Washington and Haydn resembled each other. Their differences were as numerous, and more striking, than their likenesses. The great size, majestic appearance, severe mien and careless Anglicanism of the soldier were in neatest opposition to the composer's ready *bonhomie*, short stockiness and serene south-Catholic devotion. But 1732 deserves some homage, and although the analogies are not arresting they are not far-fetched. After all, Poe and Mendelssohn were born in 1809 and both were human males, but no other likeness is discernible.

The son of a wheelwright who was the son of a wheelwright who was the son of a peasant, Haydn in his impoverished childhood had a taste for music but no chance to show a talent. His boyhood was very drab, but the family's poverty enforced the habit of ceaseless work without which we could not have heard of Haydn, who worked himself into greatness. At eight he began nine years as Imperial choirboy, learning on the side how to play the keyboard and the violin.

Inevitably his voice changed and he was no longer of use to St. Stephen's. Not yet eighteen, he was able to make a precarious living on the shabby outskirts of music: giving keyboard lessons for a few cents, playing (and com-

posing some forgotten occasional trifles) in the streets of Vienna with wandering bands of musicians as poor and as hungry as himself. He wrote a little Mass, which we still have and which has been recorded. He composed a burlesque opera for a cheap impresario. It had some success (for the impresario) although Haydn still knew very little about composition. He has said himself of this period that after miserable days of drudgery in earning a livelihood he worked late into the night at composition.

But he was a musician among musicians, and eventually he met some influential practitioners. It is obvious that people were inclined to like Joseph Haydn. The great librettist Metastasio found work for him. The Neapolitan composer and singing-master Porpora taught him Italian and composition in return for servile offices. Some members of the nobility were attracted to the young man. In 1761, at twenty-nine, with little repute but enormous capacity for work, Haydn entered the household of the Hungarian Prince Paul Anton Esterhazy.

He served four Esterhazys for nearly thirty years, at one or the other of their magnificent country retreats, especially Esterhaza, an imitation Versailles in the Hungarian marshes. As *Kapellmeister*, he was a sort of superior servant, like the steward or the schoolmaster, and wore livery. He played with and directed the musicians — a whole orchestra and a group of singers — maintained by the Esterhazys. He composed music for the family's ceremonials and the family's delectation; he was responsible for the instruments and the conduct of his players. He made quartets, symphonies, masses, divertimentos, operas and dances for his employers. In all, he was such a musical boss as no other composer has been.

This boss-hood — this intimate association with his musicians as technical leader and private adviser — contributed a vexatious falsification to his memory through a nickname, "Papa", applied to him in his early thirties and still fixed. This intimates to us in all its horror a scraping, simpering and sanctimonious image; an aged boy-scout, a characterless fellow without enemies, a dolt of such careful virtues that meaningless and contemptuous approbation is his just due. The epithet has insidiously thwarted all the contrary evidence. No pigeonhole can contain Haydn's abounding variety. He was a rustic turned courtier, incompletely; a hack who conquered the most cultivated elements in the world's most cultured capitals; a prankster who still prefixed every work with a devout "In the name of the Lord" and wrote after every final doublebar "Praise to God"; the man who enriched the symphony to the satisfaction of the savage Beethoven (whose musical moods were so like his own); the creator of the Quartet as we know it and of more great quartets than anyone else; a woman-chaser at sixty; the owner of a strong invective; a humble man but one who did not mistake his own value; the first to assert the peerless genius of Mozart and the first to denounce pretentious, clumsy effort. His work was hard for him, he had to work as few composers have, and he did not reject responsibilities. But those traits, which more papas ought to have than papas have, should no more determine his entire reputation than the fiasco of Long Island Washington's.

"Papa" leveled at Haydn meant what the "Old Man", applied to the Commanding Officer — be he sixty or twenty — means to soldiers. They mean the Boss, the man who, for better or worse, is responsible for the welfare of a group of men. It is true that Papa implies affection and Old Man need not, but the affection for Haydn was not directed at doddering benignancy, but at responsible and practical leadership.

His life, ideal after his thirtieth year for an artist, is a trial for a biographer, for it was concerned almost entirely with his music. Its conflicts and drama were internal, and most of their evidence is confined to ruled paper. He had an extraordinary renown fairly early in his creative life, and this grew as his creations expanded; but in his cloister he did not know how celebrated he was. His friendship for Mozart is a good page in musical history; and his musical influence on Mozart and Beethoven (besides scores of lesser men) made the culmination of classicism music's greatest period.

When, nearing sixty, at last he traveled, the Bastille was down and the Empire's time was up. The proportions of emotion were swelling. For his first long triumph in London he wrote six symphonies bigger and headier than any preceding group; and his second voyage westward over the Channel, while the Revolution went eastward across the Rhine, produced a final set of six which said a final say for a kind of instrumental music about to die with the waning century and the failing Empire. Freed of the kindly Esterhazy bondage, he acquired in London a spectacular glory that accompanied him back to Vienna.

There he was Master, uncontested, until his death in 1809, even after age had subdued his pen. Until 1801 he wrote masterpieces, and he had the happiness of growing even after London. The greatest Masses, the greatest oratorios, belong to his last creative decade. The enormous effort of the *Seasons*, completed just before his seventieth year, exhausted him. He had not the strength to finish his last quartet, although six years remained to him.

His production had been enormous, and even for us who now may hear it in some profusion, everything remains eminently listenable. More than any other composer he practised the direct and healthy clarity which is characteristic of the best art of the second half of the eighteenth century. Behind him loomed the monumental

music-making of the preceding epoch, with its suffocating weight of counterpoint. At hand to tempt him were the literary involvements of early romanticism, which now, 150 years later, seem to us mere tumultuous resuscitations of dead problems. Neither could deflect the fluent but calculated logic of a composer who would tolerate no aberrations in the sturdy and symmetrical architecture he had been fifty years building. He cherished wit and is frequently funny as well; he could be grim and he understood melodrama. However, in his concept, music was variable in mood but invariant in balance, its structure expansive but essentially inviolable. His punctuations of formal clauses — and they are frequent — by startlingly irrelevant matter, serve both to stimulate anticipation and to emphasize the suavity of the very line being broken. He had worked himself into mastery of music, but was bent to a direction which he made prevalent. When others deviated he did not, save to make a temporary point. To reproach him for not having been Beethoven or Mozart is to complain of Saki for being unlike Balzac or St. Luke, or of Washington for neglecting to be like Turenne or like Jackson.

IN assessing the relative values of different interpretations of Haydn's works, the writer has been constantly aware that there can be no finality of judgment in music essentially Eighteenth-Century, which has no overpoweringly vivid core of extra-musical significance such as that in the "*Eroica*" symphony, a wonderful and unalterable bastard begat by the Nineteenth Century on its predecessor. If the interpretations are evaluated with diffidence, the quality of the engineering has been estimated with some confidence and many combinations of acoustical machinery were employed to obviate unfairness either of over- or underestimate. The imaginative diversity of couplings presented by manufacturers hurts this survey's utility as a practical guide to purchases: since it is clearly impossible to compute the comparative worth of a disk containing acceptable but mediocre versions of Symphonies No. 91 and 92, say, and another disk containing a superb 91 and a dismal 100, the couplings have been ignored as a basis for consideration by the writer, although they certainly will not be by the readers.

## SYMPHONIES

(Musicologists have accepted 104 symphonies as veritable Haydn, and the latest numeration follows with fair accuracy the order of their birth. The earliest were composed for two oboes, two horns, as many strings as were available, and harpsichord and bassoon to support the bass. The last utilized the symphony orchestra inherited by Beethoven: flute, oboes, clarinets, bassoons, horns, trumpets and tympani, with a greatly enlarged string body, sometimes surpassing that of our modern orchestras. The

nicknames applied to his symphonies were not his own, and some may not be apt, but all have a real convenience as an aid to memory. However, all likewise, invite a valid objection. Those unnamed don't get concert performances. "Surprise", "London", "Clock", "Military", "Drum-Roll", "Oxford" and "La Reine" tickle anticipation as a mere procession of numbers — 102, 99, 98, 96, 95, 93, 86 and 78 — cannot. The only anonym to compete with those named is No. 88, a pure delight. Perhaps its unrepresentative popularity derives from its former number — 13, a sinister title in our culture. Once we have heard the symphonies, their numbers acquire particular

color from the music and we hesitate to say, after hearing the fifty-seven recorded, that even the frailest color is drab.)

### NO. 1, IN D

The first is a minute fragrant canapé, a foretaste of headier viands concocted during thirty-five of the following thirty-six years. It was, appropriately, the Haydn Society's first LP, and the good sound of the small orchestra in an unpolished but honest performance has worn well — a little rough but direct, with clear definition and effective horns.

—Vienna Symphony Orch., Jonathan Stern-



berg, cond. Haydn Society 12-in. (with *Symphonies No. 13 & 28*). 1001. 7 min. \$5.95.

NO. 6, IN D, "LE MATIN"

Mr. Litschauer unfolds an affectionate if not dainty performance of the first important exercise in courtly music by Prince Esterhazy's new *Kapellmeister*, the beginning



Franz Litschauer: "Fastidious revelation."

of a trilogy evocative of a day without trial, in an agreeable recording commendable for its nice proportions and just representation of timbres. Comforting, refreshing, sometimes suddenly arresting, as in the minuet's trio.

—Vienna Chamber Orch., Franz Litschauer, cond. Haydn Society 12-in. (with *Symphony No. 21*). 1025. 19 min. \$5.95.

—Bamberg Sym. Orch., Hans Weisbach, cond. Mercury 12-in. (with *Symphony No. 13*). MG 10079. \$4.85. (Disk unheard.)

NO. 7, IN C, "LE MIDI"

The five movements of "Noon" follow the four of "Morning" like a flutter of brave feathers. After nearly two hundred years, the elegance summoned by Haydn to ingratiate his prince ingratiate us as much. The adept suavity of the Litschauer realization is not challenged by the rough and clumsy aspiration of the other, although the Remington sound, barring hum, is apparently pretty faithful to the sounds the Randolph orchestra was making. The Haydn Society disk is disturbed occasionally by some coarsening of texture in a recording otherwise solidly successful.

—Vienna Chamber Orch., Franz Litschauer, cond. Haydn Society 12-in. (with *Symphony No. 8*). 1016. 24 min. \$5.95.

—Sym. Orch., Karl Randolph, cond. Remington 12-in. (with Mozart: *Symphony No. 33*). 199-71. 22 min. \$2.49.

NO. 8, IN G, "LE SOIR"

Everything charms in the fastidious revelation of the perfumed "Evening" capping Haydn's trilogy—the restrained and refined pace and phrase solicited by the conductor, the equable acquiescence of a small, well-trained orchestra and the warm but explicit sound contributed by the bewitched

engineers. One of the most appealing items in the Haydn discal catalogue.

—Vienna Chamber Orch., Franz Litschauer, cond. Haydn Society 12-in. (with *Symphony No. 7*). 1016. 18 min. \$5.95.

NO. 13, IN D, "JUPITER"

"Jupiter" because its finale anticipates thematically the finale of Mozart's "Jupiter", Haydn's thirteenth Symphony also deserves the title by virtue of a new assertive strength. The Sternberg disk has the good qualities of interpretation and recording noted for Symphony No. 1.

—Vienna Symphony Orch., Jonathan Sternberg, cond. Haydn Society 12-in. (with *Symphonies No. 1 & 28*). 1001. 17 min. \$5.95.

—Bamberg Sym. Orch., Hans Weisbach, cond. Mercury 12-in. (with *Symphony No. 6*). MG 10079. \$4.84. (Disk unheard.)

NO. 19, IN D

The only extant recording successfully eluded our long search.

—Bamberg Sym. Orch., Hans Weisbach, cond. Mercury 12-in. (with Mozart: *Symphony No. 33*). MG 10077. \$4.85.

NO. 21, IN A

"Straightforward" describes the music, the interpretation and the engineering of the only version. The horns are overbold but some of us prefer that to inaudibility. The judicious relationship of the harpsichord to the rest offers a valuable illustration of its role in these early symphonies, and Mr. Litschauer's free-striding confidence indicates him as the natural exponent of many others.

—Vienna Chamber Orch., Franz Litschauer, cond. Haydn Society 12-in. (with *Symphony No. 6*). 1025. 18 min. \$5.95.

NO. 22, IN E FLAT, "PHILOSOPHER"

The pungent and mysterious melancholy of the long first movement, adagio, raises this Symphony to the highest levels of the Haydn creation. Of the two versions, the Decca sound is sunnier and less flawed, but it is December's sun. The skeletonized Haas club *intime* is numerically incapable of giving the deep throb needed. Mr. Sternberg realizes the solemn apprehension of the first movement by playing it in tempo, while Mr. Haas's quicker speed must disappoint, and this is to the decisive advantage for the Haydn Society, in spite of the customary Sternberg club-footed minuet against a Haas showing of real vitality there. The bigger, deeper Vienna sound is surprisingly good for its age, hurt by some buzzing of the horns against the English horns, but it is a symphonic realization, and the other is not.

—Vienna Symphony Orch., Jonathan Sternberg, cond. Haydn Society 12-in. (with *Symphony No. 35*). 1009. 17 min. \$5.95.

—London Baroque Ensemble, Karl Haas, cond. Decca 12-in. (with *Concerto for Harpsichord and Violin and two Hofball Minuets*). DL 9561. 16 min. \$5.85.

NO. 26, IN D MINOR, "LAMENTATIONE"

Violent and anguished, an extraordinary revelation of the composer's literal Christian belief, the "Christ and Pilate" Symphony has one recorded performance, a little in-

flexible and a little rough, but intelligently devised and well engineered.

—Vienna Chamber Orch., Anton Heiller, cond. Haydn Society 12-in. (with *Symphony No. 36*). 1019. 15 min. \$5.95.

NO. 28, IN A

A Symphony of immediate, albeit fluctuating, appeal, with a luscious adagio and a witty minuet, capably played and recorded with a sound still substantial, although this was the Haydn Society's first microgroove.

—Vienna Symphony Orch., Jonathan Sternberg, cond. Haydn Society 12-in. (with *Symphonies No. 1 & 13*). 1001. 14 min. \$5.95.

NO. 31, IN D, "HORN-SIGNAL"

The only edition abets a dull performance with very poor sound.

—Vienna Symphony Orch., Jonathan Sternberg, cond. Haydn Society 12-in. (with *Symphony No. 34*). 1002. 21 min. \$5.95.

NO. 34, IN D MINOR

Matches its obverse immediately above: uncertain playing; coarse, drab sound.

—Vienna Symphony Orch., Jonathan Sternberg, cond. Haydn Society 12-in. (with *Symphony No. 31*). 1002. 15 min. \$5.95.

NO. 35, IN B FLAT

Cheerful and unimportant, brightly played and recorded with impressive sweep and depth. The harpsichord, in excellent balance, contributes color admirably.

—Vienna Symphony Orch., Jonathan Sternberg, cond. Haydn Society 12-in. (with *Symphony No. 22*). 1009. 15 min. \$5.95.

NO. 36, IN E FLAT

Only a soggy treatment of the minuet it mars a substantial recording that seems to improve with time (or with improved apparatus). Alert and flexible playing of a Symphony which embodies the polite ebullience of a court ball.

—Vienna Chamber Orch., Anton Heiller, cond. Haydn Society 12-in. (with *Symphony No. 26*). 1019. 21 min. \$5.95.

NO. 38, IN C

The invigorating possibilities here are properly exploited for two movements, and then comes the minuet, a rhythmic form for which Mr. Sternberg saves a very individual kind of lugubrious awkwardness. Properly depressed by his experience with that movement, he fails to recover vitality for the finale. Thus half the performance is good. The sound in a comfortable way is all good.

—Vienna Symphony Orch., Jonathan Sternberg, cond. Haydn Society 12-in. (with *Symphony No. 39*). 1010. 14 min. \$5.95.

NO. 39, IN G MINOR, "THE FIRST"

The relentless menace of a darkly superb work clearly stated by Mr. Sternberg, whose intelligence is quite equal to the difficult movements, but who has no resilience at all for the minuet (a great pity that the astounding trio has not been more potently asserted). Nevertheless, an absolutely indispensable record, one of the greatest of symphonies, in a sound even better now than it seemed two years ago.

—Vienna Symphony Orch., Jonathan Stern-

berg, cond. Haydn Society 12-in. (with *Symphony No. 38*). 1010. 15 min. \$5.95.

NO. 42, IN D

The downrightness of the recording matches the virile exuberance of the performance well, even if some roughness in the former disturbs some of the nuance in the latter. The music is concerned more with pattern and structure than with mood; here we have a superior disk of minor Haydn.

—Vienna Chamber Orch., Franz Litschauer, cond. Haydn Society 12-in. (with *Symphony No. 47*). 1026. 25 min. \$5.95.

NO. 43, IN E FLAT, "MERCURY"

This has the evanescent appeal of sunbeams on the surface of a shallow pool. The recording gains from expert playing and sleek sound, particularly in the sweet and natural tone of the strings.

—Chamber Orch. of the Danish National Radio, Mogens Wöldike, cond. Haydn Society 12-in. (with *Symphony No. 50*). 1041. 22 min. \$5.95.

NO. 44, IN E MINOR, "MOURNING"

The Symphony is serious and important, the performance limping and haggard, the sound veiled and scattering.

—Vienna Symphony Orch., Jonathan Sternberg, cond. Haydn Society 12-in. (with *Symphony No. 48*). 1003. 20 min. \$5.95.

NO. 45, IN F SHARP MINOR, "FAREWELL"

With a structure unique in tones, and two beautiful adagios, the "Farewell" really does not require the adventitious support of the charming story of its birth to win the hearts of listeners, but it still does require a good recording. Of the present three, London has an expert and poetic interpretation with obscure and depthless sound; Mercury a big and not improper performance unpleasantly overloaded by the engineers; and Vox a juicy, well-articulated and pleasant reproduction of a performance so matter-of-fact as hardly to be worth the trouble.

—Stuttgart Chamber Orch. and members of the Orch. of la Suisse Romande, Karl Münchinger, cond. London 12-in. (with Wagner: *Siegfried Idyll*). LL 525. 25 min. \$5.95.

—Munich Philharmonic Orch., Alois Melichar, cond. Mercury 10-in. MG 15028. 29 min. \$3.85.

—Pro Musica Orch., Stuttgart, Wilhelm Seegelken, cond. Vox 12-in. (with *Symphony No. 96*). PL 7310. 25 min. \$5.95.

NO. 47, IN G

The first two movements are veal, the concluding pair good red beef, well prepared and seasoned by Litschauer and served with address by the engineers.

—Vienna Chamber Orch., Franz Litschauer, cond. Haydn Society 12-in. (with *Symphony No. 42*). 1026. 21 min. \$5.95.

NO. 48, IN C, "MARIA THERESA"

The Haydn Society must often have wrung its scholarly hands in guilty woe over this affront to Haydn's Empress, whom he wished to salute with a stately, ceremonial symphony. It is good that she cannot be sub-

jected to hearing the undersized band here floundering through twenty minutes of un-ruled and discomfiting sound.

—Vienna Symphony Orch., Jonathan Sternberg, cond. Haydn Society 12-in. (with *Symphony No. 44*). 1003. 20 min. \$5.95.

NO. 49, IN F MINOR, "LA PASSIONE"

A struggle against torment, with an amazing climax of snarling, sinister turbulence, one of the greatest movements in Haydn. Mr. Newstone's knowing direction points to this finale from the first, in an impressive performance of increasing premonition, and the orchestra has a decided dash, to compensate for some roughness. Sound is distinct and strong, a little hardened by hall acoustics, first-class when it comes to the generally troublesome violins.

—Haydn Orch., London, Harry Newstone, cond. Haydn Society 12-in. (with *Symphony No. 73*). 1052. 22 min. \$5.95.



Dr. Hermann Scherchen: *Finesse with gusto.*

NO. 50, IN C

There are some brilliant fanfares in what seems to have been a *pièce d'occasion*, not without bombast. Entertaining if not deep; glossily played and recorded.

—Chamber Orch. of the Danish National Radio, Mogens Wöldike, cond. Haydn Society 12-in. (with *Symphony No. 43*). 1041. 19 min. \$5.95.

NO. 52, IN C MINOR

The adept and sensitive orchestral playing is immediately apparent in a Symphony generally severe, arresting in its alternations of angular and graceful omens. Fine timbre-true sound throughout an extensive spread of dynamics — after careful adjustment of both ends of the amplifier.

—Vienna National Opera Orch., Anton Heiller, cond. Haydn Society 12-in. (with *Symphony No. 56*). 1039. 19 min. \$5.95.

NO. 53, IN D, "IMPERIAL"

The "Imperial" brings out that fetching holiday aspect of Haydn which has been misappropriated to cover his entire imagination. Additional winds have been inserted for the recorded performance, a usually dangerous and reprehensible practice which happens to sound very good here. Interpretation is vivid, the playing very rich and suave, reproduction comfortable.

—Symphony Orch., Leopold Stokowski,

cond. RCA Victor 12-in. (with Liszt: *Les Préludes*). LM 1073. 17 min. \$5.72.

NO. 55, IN E FLAT, "THE SCHOOLMASTER"

The amusing didacticism of its second movement justifies the nickname. Neat, prepossessing, demure, and so played, with continuous finesse and punctuations of gusto. It has been the extraordinary good fortune of this conductor to record fourteen Haydn symphonies without salient sonic faults in any, and this one, while not one of the most effective in its scoring, is one of the best in the crisp cleanliness of its sound

—Vienna Symphony Orch., Hermann Scherchen, cond. Westminster 12-in. (with *Symphony No. 104*). WL 5066. 20 min. \$5.95.

NO. 56, IN C

More than a year ago, in this magazine, this writer labeled the recording, as such, of Symphony No. 56, contrasting its rather coarse sound with that of its obverse, Symphony No. 52. Re-examination on different equipment indicates that the coarseness is orchestral: the band cannot produce as polished a noise as that in No. 52, and the engineers were not at fault in re-creating what was actually played. Not that the sound is not satisfactory according to our standards — we are not free of many deficiencies yet — but No. 56 in most particulars lacks the magnetism of its overside.

—Vienna Symphony Orch., Anton Heiller, cond. Haydn Society 12-in. (with *Symphony No. 52*). 1039. 24 min. \$5.95.

NO. 61, IN D

This is one of a number of symphonies composed by Haydn in his mid-forties, displaying continuous proficiency but some decline in internal interest. It is played with a nicely-estimated symmetry and engineered to a pleasant glow in the string body and with a decisive delineation of the winds.

—Chamber Orch. of the Danish National Radio, Mogens Wöldike, cond. Haydn Society 12-in. (with Mozart: *Clarinet Concerto*). 1047. 25 min. \$5.95.

NO. 64, IN A

The conductor here seems to be trying to attain what his orchestra cannot or will not, and the consequent uncertainties are disadvantageous to a symphony much more attractive than most of its contemporaries. In its original form this was a miserable recording, but it has been reprocessed to a sensible pre-emphasis characteristic and is vastly improved. Music-lovers who wish the improvement must be sure that some lettering other than WL, A and B appears on the label.

—Vienna Symphony Orch., Henry Swoboda, cond. Westminster 12-in. (with *Symphony No. 91*). WL 5023. 20 min. \$5.95.

NO. 73, IN D, "THE HUNT"

This is not large Haydn, wherefore the Indianapolis interpretation seems overblown, the smaller and more vivacious Newstone treatment ringing truer. The RCA sound is warmer and solidier than the Haydn Society's but the latter is clearer. At *fortes* Indianapolis is clamorous, but the London group is a little brittle throughout. It is fair to say





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that both are mediocre, with the 10-inch Victor cheaper, and the Haydn Society enriched by its remarkable overside.

—Haydn Orch., London, Harry Newstone, cond. Haydn Society 12-in. (with *Symphony No. 49*). 1052. 22 min. \$5.95.

—Indianapolis Symphony Orch., Fabien Sevitzky, cond. RCA Victor 10-in. LM 31. 18 min. \$4.67.

#### NO. 77, IN B FLAT, "DON OTTAVIO"

All assured urbanity, resourcefully orchestrated, No. 77 in its only recording has a graciously led performance (albeit fast in the *Il mio tesoro* adagio) which would have sung its assurance better after an additional rehearsal. Age is fading the sound, which was never outstanding, but for all its insistent violins and musty bass it is passable.

—Sym. Orch., Henry Swoboda, cond. Concert Hall 12-in. (with *Symphony No. 78*). CHC 30. 15 min. \$5.45.

#### NO. 78, IN C MINOR

With its impatient dogmatism and vindictive interpellations boldly scored, No. 78 ought to be more widely known. Dr. Swoboda affects a fast adagio, but manages in the rest a convincing and coherent exposition. The recording is better than satisfactory, finer and fuller both than that of No. 77 on the other side. (This is one of three disks of paired Haydn symphonies with completely rational couplings of consecutive numbers, the lower odd. The other two are Haydn Society Nos. 1016 and 1015.)

—Sym. Orch., Henry Swoboda, cond. Concert Hall 12-in. (with *Symphony No. 77*). CHC 30. 16 min. \$5.45.

#### NO. 80, IN D MINOR

Wonderful in its perplexing antitheses, known to America only since the New Friends of Music gave it a première a dozen-plus years ago (which Dr. Stiedry recorded for Victor 78's), this Symphony enjoys in its only LP version a supple presentation of its hope and fright, not casually to be challenged by other conductors, and a limpid presentation of its instrumental phalanx not yet excelled by engineers for the mid-classical orchestra.

—Vienna Symphony Orch., Hermann Scherchen, cond. Westminster 12-in. (with *Symphony No. 103*). WL 5050. 16 min. \$5.95.

#### NO. 82, IN C, "THE BEAR"

About 1785, when he was fifty-three, Haydn became a perfect practitioner of his craft, and he was under no obligation to conceal his knowledge that this was so. His confidence in himself is substantiated by the symphonies from 82 to the end, a parade of masterpieces. Not one is tentative, each is homogeneous and all, as a matter of course, are fresh and stimulating in a new and ever-changing invention. The parts no longer tend to dominate the whole; elegance is supplanted by a lustier grace; humor slips spontaneously into every symphony.

The "Bear" well expresses a number of aspects of the maturing style, and it is too bad that the records do not better express the "Bear". The Rosbaud direction is resolute, more decisive than the Sternberg, but acoustics favor the latter beyond dispute. The trim chatter of the winds is engaging in both, but in both this is a specious advantage

which obscures defects: the badly engineered strings in the Mercury, a shortage of smoothness in the Haydn Society disk.

—Vienna Symphony Orch., Jonathan Sternberg, cond. Haydn Society 12-in. (with *Symphony No. 85*). 1008. 21 min. \$5.95.

—Orch. of the Bavarian Radio, Hans Rosbaud, cond. Mercury 12-in. (with *Symphony No. 104*). MG 10050. 23 min. \$4.85.

#### NO. 83, IN G MINOR, "THE HEN"

The pleasure one undoubtedly must feel in hearing this recording will be gravely compromised if one has opportunity later to hear a really proficient performance. Conductor and orchestra are not at one here, nor is the latter alluring in tone. The projection is flabby and the dryness of the bass contaminates the sound.

—Collegium Musicum Orch., Vienna, Anton Heiller, cond. Haydn Society 12-in. (with *Symphony No. 84*). 1015. 25 min. \$5.95.

#### NO. 84, IN E FLAT

Only the finale has life in a performance without point, energy or unity, not improved by a flat, hard tone.

—Collegium Musicum Orch., Vienna, Anton Heiller, cond. Haydn Society 12-in. (with *Symphony No. 83*). 1015. 28 min. \$5.95.

#### NO. 85, IN B FLAT, "LA REINE"

The queen whose supposed liking for the Symphony gave it its sobriquet was the feckless, hapless consort of Louis XVI, and Maria Theresa's daughter, "*L'Autricienne*," who expiated her birth under the knife in what was not then called the Place de la Concorde. Her taste — otherwise confirmed by her championship of Gluck — was good: Nos. 86 and 85 are the two finest of the six Paris symphonies. Neither has been confided to disks with the care deserved. The two versions of 85 are agreeable in the playing and flawed in engineering, the Haydn Society piercing in the violins and crushed under implacable low-frequency noise, the Mercury pervasively metallic. The latter is easier to endure.

—Vienna National Opera Orch., Erwin Baltzer, cond. Haydn Society 12-in. (with *Symphony No. 82*). 1008. 18 min. \$5.95.

—Munich Philharmonic Orch., Fritz Rieger, cond. Mercury 12-in. (with *Concerto for V, Vo, Ob & Bn*). MG 10116. 26 min. \$4.85.

#### NO. 86, IN D

The sound in both LP's is miserable, obnoxious when played on a sensitive apparatus.

—Mozarteum Orch., Salzburg, Zoltan Fekete, cond. Mercury 12-in. (with *Symphony No. 88*). MG 10071. 24 min. \$4.85.

—Same orch., Paul Walter, cond. Period 12-in. (with *Symphony No. 95*). 516. 24 min. \$5.95.

#### NO. 87, IN A

It is good to hear a fine orchestra respond to a demanding stick as the Viennese do here to Mr. Swarowsky's. The result is a beautifully fluent and dramatic performance of consistent design and luxuriant color. The sound in itself, mellow and perspicuous at *mf* or softer, is spasmodically harsh with a dry reverberation when louder. Some added bass is an improvement but not a

cure. Still, this is a disk whose merits heavily outweigh its deficiencies.

—Vienna National Opera Orch., Hans Swarowsky, cond. Haydn Society 12-in. (with *Symphony No. 89*). 1018. 22 min. \$5.95.

#### NO. 88, IN G

No one should object if this be called the most lovable of symphonies. Of the six recorded versions, none is satisfactory. The tender, full-phrased evocation of the late and still-lamented Fritz Busch instills an immediate and lasting impression as the natural, inevitable concept, followed at a respectable distance by the perceptive, less fluid exposition of Mr. Molinari; but the recorded sound in both cases is repellent and inadmissible. (In terms of pure sound, all six are impure.) Perhaps the dry old Victor so generous with rumble, or the old Columbia with some suggestion of timbre, is the least offensive; but no Haydnist will applaud the virtuoso perversions of Messrs. Toscanini and Ormandy. The swift orchestral perfectionism of the former's three fast movements complements Haydn's nosegay with a necklace of glass diamonds, and the ruthless gigantism of the latter gives us a sedan chair mounted on tank-destroyer treads. The sound of Mr. Fekete's disk is enough to cancel any effectiveness the conductor may display; and the Remington-Paul Walter is undistinguished in direction, ragged in playing and coarse in sound. But in the 88 junkyard it is far from the worst, and until there is a good recording its \$1.89 price makes it not unreasonable for a stopgap.

—Salzburg Festival Orch. (1951?), Paul Walter, cond. Remington 10-in. 149-29. 19 min. \$1.89.

—Danish National Radio Orch., Fritz Busch, cond. RCA Victor 12-in. (with Mozart: *Symphony No. 36*). LHMV 1019. 22 min. \$5.95.

(No preference is implied in the remaining order of mention.)

—Philadelphia Orch., Eugene Ormandy, cond. Columbia 12-in. (with Mozart: *Symphony No. 39*). ML 4109. 21 min. \$5.45.

—Mozarteum Orch., Salzburg, Zoltan Fekete, cond. Mercury 12-in. (with *Symphony No. 86*). MG 10071. 20 min. \$4.85.

—NBC Orch., Arturo Toscanini, cond. RCA Victor 10-in. LCT 7. 21 min. \$4.67.

—Orch. of the St. Cecilia Acad., Rome, Bernardino Molinari, cond. Tempo 12-in. (with works by Mozart and R. Strauss). MTT 2036. 21 min. \$5.07.

#### NO. 89, IN F

The recording has qualities like those of its other side, No. 87.

—Vienna National Opera Orch., Hans Swarowsky, cond. Haydn Society 12-in. (with *Symphony No. 87*). 1018. 20 min. \$5.95.

#### NO. 91, IN E FLAT

Like its companion, No. 64, the recording had originally a characteristic that made it screech, but that has since been amended into decency. The work is congenial to Dr. Swoboda, less so to his orchestra.

—Vienna Symphony Orch., Henry Swoboda, cond. Westminster 12-in. (with *Symphony No. 64*). WL 5023. 23 min. \$5.95.





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**NO. 92, IN G, "OXFORD"**

Of the four editions listed below, two are outstanding. The smooth and forcible logic of Dr. Szell (least-sung of today's first-line conductors) seems to this writer more logical than the more foursquare and less gracious impulsion of Dr. Scherchen. Both orchestras are excellent and bent to the musical will of their chiefs. The reproduction of the Cleveland Orchestra on Columbia is impressively clean and sonorous, mighty for its age; while the Viennese orchestra as Westminster has perpetuated it has a living sting, a nervous, vibrant sounding of individual instruments, differently compelling and apprehended with a sense of physical excitement. In this opinion there is more adventure in the glittering sound given to Scherchen's romanticism than in the estimable sound of Szell's pithier classicism. The Szell would naturally be preferred if the sonic qualities were exchanged.

- Vienna National Opera Orch., Hermann Scherchen, cond. Westminster 12-in. (with *Symphony No. 94*). WL 5137. 24 min. \$5.95.
- Cleveland Orch., George Szell, cond. Columbia 12-in. (with *Symphony No. 101*). ML 4268. 23 min. \$5.45.
- Boston Symphony Orch., Serge Koussevitzky, cond. RCA Victor 12-in. (with Mozart: *Eine kleine Nachtmusik*). LM 1102. 23 min. \$5.72.
- Munich Philharmonic Orch., Fritz Rieger, cond. Mercury 10-in. MG 15040. 24 min. \$3.85.

**NO. 93, IN D**

The expert orchestral preparation of the Beecham version is so nice as hardly to be remarked in itself, but the disciplined ease of its motion creates a seemingly guileless but very real persuasiveness to a degree that the more intense Cantelli utterance does not equal. The Columbia recording excels also in clearer detail, although the sound in general has that unstrained good quality that requires no particular comment. —Royal Philharmonic Orch., Sir Thomas Beecham, cond. Columbia 12-in. (with Handel: *Pastor Fido Suite*). ML 4374. 22 min. \$5.45. —NBC Orch., Guido Cantelli, cond. RCA Victor 12-in. (with Hindemith: *Mathis der Maler*). LM 1089. 21 min. \$5.72.

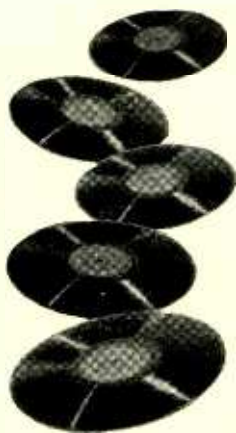
**NO. 94, IN G, "SURPRISE"**

There are *twelve* versions of this, of which nine are here compared. The three unavailable are the last listed below, without prejudice. Seven performances are in different ways good and six disks have satisfactory or better sound. Sonic values being easier to compute than interpretational, an examination of those *a priori* can narrow the field. In engineering competence four stand out, in this order: (1) Scherchen-Westminster, (2) Lehmann-Decca, (3) Beecham-Columbia, (4) Van Beinum-London. All are excellent, but not much like one another. In the less positive precincts of interpretation Lehmann-Decca and Schmidt-Isserstedt-Capitol are formidable presentations of the Symphony as we should think Haydn may have played it, score-true, free of external

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effect but blooming, smooth and direct. Van Beinum-London and Sargent-Columbia are not dissimilar to the first pair except in their briskness. Beecham, Scherchen and Furtwängler offer something special, the last two, in this opinion, something disadvantageous. The Scherchen slow pace in the first movement seems detractive, and the Furtwängler re-creation is soft and disappointing for all its ripe *cantilena*, delicate strings and lush texture. Enter Sir Thomas with equivalent *cantilena*, strings and texture, plus imposing and precise crescendos, whispered *pp*'s and a communication of exultancy. It is true that this conductor also inserts a few tricks of tempo to show how easy it is for the right man, and music-lovers may find this detrimental. If they do, Lehmann-Decca is the best version. If they do not, Beecham-Columbia is considerably the best.

Still, the demands of this Symphony are so simple, and its fabric so resilient, that its cheerful story emerges pretty sturdily after any kind of reasonable treatment. The discrepancies in general appeal are so slight that owners of the fifth and sixth listed below would gain only moderately by replacing them with the first or the second — disregarding, of course, the respective couplings.

—Royal Philharmonic Orch., Sir Thomas Beecham, cond. Columbia 12-in. (with *Symphony No. 103*). ML 4453. 23 min. \$5.45.

—Berlin Philharmonic Orch., Fritz Lehmann, cond. Decca 12-in. (with *Symphony No. 101*). DL 9617. 27 min. \$5.85.

—Concertgebouw Orch., Amsterdam, Eduard van Beinum, cond. London 12-in. (with Mozart: *Symphony No. 33*). LL 491. 22 min. \$5.95.

—Vienna National Opera Orch., Hermann Scherchen, cond. Westminster 12-in. (with *Symphony No. 92*). WL 5137. 25 min. \$5.95.

—Berlin Philharmonic Orch., Hans Schmidt-Isserstedt, cond. Capitol 12-in. (with Mozart: *Eine kleine Nachtmusik*). P 8038. 25 min. \$4.98.

—Liverpool Philharmonic Orch., Sir Malcolm Sargent, cond. Columbia 12-in. (with *Symphony No. 100*). ML 4276. 21 min. \$5.45.

—Vienna Philharmonic Orch., Wilhelm Furtwängler, cond. RCA Victor 12-in. (with Mozart: *Eine kleine Nachtmusik*). LHMV 1018. 23 min. \$5.95.

—Boston Symphony Orch., Serge Koussevitzky, cond. RCA Victor 10-in. LM 28. 23 min. \$4.67.

—Munich Philharmonic Orch., Alois Melichar, cond. Mercury 10-in. MG 15023. 26 min. \$3.85.

—There are versions on Parade 2008, Royale 6099 and Royale 1223.

#### NO. 95, IN C MINOR

Why the reticent mystery of this lovely thing has not captured a wider public is itself a mystery. There are two disks. Of the Period let it be said in charity that a far better one could not undergo comparison with Dr. Scherchen's interpretation as Westminster has seized it; and that coupled with the still-sensational "Military" Symphony, No. 100, the Scherchen record is irresistible.

—Vienna Symphony Orch., Hermann Scherchen, cond. Westminster 12-in. (with *Symphony No. 100*). WL 5045. 21 min. \$5.95.

—Mozarteum Orch., Salzburg, Paul Walter, cond. Period 12-in. (with *Symphony No. 86*). 516. 19 min. \$5.95.

#### NO. 96, IN D

The direct, innocent performance of Mr. Reinhardt suffers from the impact of the big Scherchen manner with its violent contrasts of burliness and delicacy; and the Vox sound, neatly detailed, with cutting violins, is pathetically wan in confrontation by the other's overwhelming chiseled mass, the distinctness of its every choir and its almost palpable vibration of strings and reeds and hides.

—Vienna National Opera Orch., Hermann Scherchen, cond. Westminster 12-in. (with *Symphony No. 98*). WL 5111. 22 min. \$5.95.

—Pro Musica Orch., Stuttgart, Rolf Reinhardt, cond. Vox 12-in. (with *Symphony No. 45*). PL 7310. 23 min. \$5.95.



Sir Thomas Beecham: Seemingly guileless.

#### NO. 97, IN C

Victor not long ago had a superb Beecham of this, on 78's. In the absence of that competition to Dr. Scherchen now, we have Paul Schubert and the Homburg Symphony Orchestra, and the disk regrettably could not be located for this survey. To command preference it must be good; for the Scherchen performance and sound are at his best, with the exceptional finesse of the *pianissimo* tracery in the adagio and the nimble maneuvering of the stunning minuet especially to be noted. The violins are slightly shrill in this reproduction, which has the customary Scherchen depth, detail and brilliance.

—Vienna Symphony Orch., Hermann Scherchen, cond. Westminster 12-in. (with *Symphony No. 102*). WL 5062. 25 min. \$5.95.

—Homburg Symphony Orch., Paul Schubert, cond. Regent 10-in. 5014. \$3.00.

#### NO. 98, IN B FLAT

Both recordings present comprehensive and intelligent assertions of the most Beethovenian (Beethoven not having written a symphony at the time of its composition) of Haydn symphonies, an eye-opener for music-lovers who have not heard it, as indeed they have had little opportunity to. Few expect Haydn to be domineering and infuriated, but here he is; and as may easily be expected, Dr. Scherchen drives the strong sentiments to the hilt. That the potent aggressiveness

of Mr. Rieger is as effective we cannot say, for with acknowledgments to some felicities in the Mercury sound, we cannot contend, and no one will, that it is as capable of realizing a strong interpretation as Dr. Scherchen's has been realized in No. 98. The engineers have wrought prodigiously to help Scherchen stress the Beethoven aspect. The sound is huge, brazen and tumultuous where that is proper. Withal, it has the analytic detail and consummate blending which feature Scherchen records, and a velvety string sound not commonplace on disks.

—Vienna National Opera Orch., Hermann Scherchen, cond. Westminster 12-in. (with *Symphony No. 96*). WL 5111. 29 min. \$5.95.

—Munich Philharmonic Orch., Fritz Rieger, cond. Mercury 10-in. MG 15039. 31 min. \$3.85.

#### NO. 99, IN E FLAT

Here is a supreme achievement neglected for lack of name. The ravishing slow movement is the most beautiful in a Haydn symphony. Of three versions the Mercury was not heard, but the others are decidedly commendable. Mr. Kisch's warm and fresh interpretation retains an unassuming sweet sound, spacious and easily managed, although three years old, and even though the change of sides is effected during the adagio, the disk is valuable. Dr. Scherchen's, after consideration of the merits of his performance and the brilliance of the engineering, seems to leave behind all other records of Haydn symphonies. Space is insufficient to describe the evidence, but this disk contains a few *diminuendos* perfectly expiring, a dozen coalescences of murmured wind-notes, a seductive violin-linearity and a sensitivity of timbre almost hypnotic when heard on a single record.

—Vienna National Opera Orch., Hermann Scherchen, cond. Westminster 12-in. (with *Symphony No. 101*). WL 5102. 27 min. \$5.95.

—London Symphony Orch., Roylton Kisch, cond. London 10-in. LS 171. 25 min. \$4.95.

—Bamberg Symphony Orch., Joseph Keilberth, cond. Mercury 12-in. (with *Symphony No. 100*). MG 10051. \$4.85.

#### NO. 100, IN G, "MILITARY"

There is no need to look beyond the version of Hermann Scherchen, whose celebrated first Haydn disk showed everyone how to play this work, which evokes an aspect of war in each movement. With a bang the Swiss conductor impressed himself on discophiles by putting to use the added percussion in this Symphony as Haydn intended. His work makes every other performance seem a little womanish; and the recording he then received has not yet been approached in the "Military" and seldom in anything else. This is too bad for Mr. van Beinum's alert and biting statement, his silken strings and regulation performance. Two others are not competitive; the Mercury was not available.

—Vienna Symphony Orch., Hermann Scherchen, cond. Westminster 12-in. (with *Symphony No. 95*). WL 5045. 24 min. \$5.95.

—London Philharmonic Orch., Eduard van Beinum, cond. London 12-in. (with *Symphony No. 104*). LL 339. 19 min. \$5.95.

—Liverpool Philharmonic Orch., Hugo Rignold, cond. Columbia 12-in. (with *Symphony No. 94*). ML 4276. 20 min. \$5.45.

—Mozarteum Orch., Salzburg, Fritz Weidlich, cond. Remington 10-in. 149-43. 23 min. \$1.89.

—Orch. of the Bavarian Radio, Hans Priegnitz, cond. Mercury 12-in. (with *Symphony No. 99*). MG 10051. \$4.85.

#### NO. 101, IN D, "CLOCK"

The eight versions present seven more or less satisfactory performances of which those of Messrs. Fricsay, Ormandy and Busch are the most appealing. There is little sonic distinction in the lot, with only Westminster and Columbia crisp in detail. While Dr. Scherchen's disk has as usual received the best engineering, it is still below the usual Scherchen standard, with very difficult violins. London and Mercury can be eliminated on the count of outmoded recording. Busch on Masterseal is a reprocessing of Busch on Remington, modifying the original characteristic and adding a rumble. The brilliant Toscanini clockwork has a sound too hard for comfort.

Busch's playing is the warmest, Fricsay's the most dashing, Scherchen's the broadest, not distinguished. Ormandy is truly gay. Fricsay and Ormandy are seconded by seductive orchestras faithfully enregistered at *mf* or lower, hard above. Ormandy's is less hard. Remington has made a poorer sound than these, but not a bad one. The Columbia disk on the sum of its merits is thus somewhat preferable to the Decca; whether its considerably superior performance makes it more alluring than the Westminster, with its considerably better sound, is a problem left to the listener.

—Philadelphia Orch., Eugene Ormandy, cond. Columbia 12-in. (with *Symphony No. 92*). ML 4268. 26 min. \$5.45.

—Vienna National Opera Orch., Hermann Scherchen, cond. Westminster 12-in. (with *Symphony No. 99*). WL 5102. 28 min. \$5.95.

—RIAS Orch., Ferenc Fricsay, cond. Decca 12-in. (with *Symphony No. 94*). DL 9617. 25 min. \$5.85.

—Sym. Orch., Fritz Busch, cond. Remington 10-in. 149-32. 28 min. \$1.89.

—Sym. Orch., Fritz Busch, cond. Masterseal 12-in. (with Beethoven: *Symphony No. 8*). 39. 28 min. \$6.45.

—NBC Orch., Arturo Toscanini, cond. RCA Victor 12-in. (with Mozart: *Symphony No. 35*). LM 1038. 27 min. \$5.72.

—Orch. de la Suisse Romande, Ernest Ansermet, cond. London 10-in. LS 54. 24 min. \$4.95.

—Munich Philharmonic Orch., Georg Reinwald, cond. Mercury 10-in. MG 15018. 30 min. \$3.85.

#### NO. 102, IN B FLAT

The only version heard was that of Dr. Scherchen, not one of his best efforts. The Symphony is very strong, and the big style of this conductor is becoming in that respect, but his deliberation chastens the florid mischief of the first movement, and grace is rationed in the second. Much is redeemed by the finale, a grand but puckish reaper tempest, aggressively managed in amusing bursts of sport and fury. First-class recording, a little over-reverberant, with a few wincing moments from the violins, but fine in timbre and splendid in contrapuntal demonstration—a feature of most of Scherchen's Haydn records.

—Vienna Symphony Orch., Hermann Scher-

chen, cond. Westminster 12-in. (with *Symphony No. 97*). WL 5062. 26 min. \$5.95.

—Munich Philharmonic Orch., Georg Reinwald, cond. Mercury 12-in. (with *Symphony No. 103*). MG 10084. \$4.85.

#### NO. 103, IN E FLAT, "DRUM-ROLL"

No other Haydn Symphony has four versions engineered with such skill as has been granted to this grand, ever-entertaining and inexhaustible masterpiece of complex good spirits. The disparate excellences of the four create a problem which will not be settled here. In descending order of value we find this heirarchy: Concept—(1) Beecham on Columbia; (2) Scherchen on Westminster; (3) Solti on London; (4) Munch on Victor. Realization in performance: (1) Munch and Beecham, drawn; (3) Scherchen; (4) Solti. Achievement in engineering: (1) Scherchen and Munch; (3) Solti; (4) Beecham.

Sir Thomas and Dr. Scherchen have the requisite finesse, and orchestras in complete subjugation to express it. The Scherchen finesse is revealed in stunning contrasts of the very loud and the very soft, with a delicate line of extreme tenuity admirable for its own sake. The Beecham method eschews obvious dazzling. It propounds an even swell and deflation in a restrained and subtle drama more convincing than Scherchen's bigger excitement. Mr. Solti's performance is spry and able except in the latter part of the andante, where control of pace escapes him. He has built the best climax. Dr. Munch in bluff fashion marches directly across the field without care for subtlety.

The last—Munch's—is the easiest way, but it has been accomplished with such transcendence of orchestral bloom as we almost never hear from any orchestra. The essay is the least penetrating but the style is the most seductive. The tonal beauty of woodwinds and strings is breathtaking. For his part, Sir Thomas has exacted for his infinitely superior concept a wonderful blend of choirs, an exactitude of phrase, a painstaking thoroughness of bowing and a supremacy in shading that none of the others has attempted. The difficult demands set by Dr. Scherchen are well realized, but that realization has not the plump beauty of the Bostonians nor the gemlike gleam of the Beecham poetry. The London Philharmonic gives a lusty and competent support to Mr. Solti's healthy spirits.

The wonderful sound of the Boston orchestra here, wherein a single chord, if we could isolate it aloof from a musical phrase, would have a beauty and interest in itself, is primarily an orchestral, secondarily an engineering triumph. In engineering terms the Westminster, in exactitude of timbre, luminosity of detail and chiseled substance of the mass, is second to no recording of the medium-sized classic orchestra. But the Vienna Symphony has not a tonal potential like the Boston Symphony, and thus we find that if Boston-Victor has the lovelier sound, Vienna-Westminster is a truer mirror. The London and Columbia engineering is excellent but definitely below the other two. The Mercury record could not be obtained.

—Royal Philharmonic Orch., Sir Thomas Beecham, cond. Columbia 12-in. (with *Symphony No. 94*). ML 4453. 25 min. \$5.45.

—Vienna Symphony Orch., Hermann Scherchen, cond. Westminster 12-in. (with *Symphony No. 80*). WL 5050. 31 min. \$5.95.

—Boston Symphony Orch., Charles Munch, cond. RCA Victor 12-in. (with Beethoven: *Symphony No. 1*). LM 1200. 27 min. \$5.72.

—London Philharmonic Orch., George Solti, cond. London 10-in. LD 124. 25 min. \$4.95.

—Bamberg Symphony Orch., Robert Heger, cond. Mercury 12-in. (with *Symphony No. 102*). MG 10084. \$4.85.

#### NO. 104, IN D, "LONDON"

So ends the beguiling procession of Haydn's symphonies, in healthy, full-throated glory. The last of twelve London Symphonies, No. 104 is everywhere known as the "London", with a cozy indifference to good sense. Of the five recordings three—Westminster, Remington and Mercury—are well led by Scherchen, Annovazzi and Dressel, but the sound engineered for the last is difficult. London has given to Mr. Krips a sweet, small and pleasant sound, but his performance is languid. The Boston record, softened by too much reverberation, has nevertheless the virtues of beautiful tone and good detail, benefits unfortunately incapable of erasing the depression caused by the *laissez-faire* of Dr. Munch's direction.

This leaves Westminster and Remington leading the field. The latter is commendable, the former outstanding, since it is one of Dr. Scherchen's most successful projections and a prime example of Westminster's painstaking engineering. The values implicit in that alliance have been stated and restated throughout this survey: suffice it now to say that to the solidity of the orchestral mass is opposed a crystalline string-line and wind-timbre as apparent in *ppp* as in *fff*; and that the considered analysis of the conductor has wrought, for this honest Symphony, its sturdiest outline and most varied texture. By the fundamental device of giving the fullest play to everything latent in the score.

Mr. Annovazzi's steady realization has not the dramatic sweep of the Scherchen concept, and his orchestra is rougher, but he has kept his men subjected to the requirements of a vivid and symmetrical plan. His sound is remarkably symphonic. In revelation of counterpoint and timbre, the Remington is not inferior to the Westminster. In polish and tone it belongs to a lower class, but the fault seems to be the orchestra's own, particularly in some harshness of the violins, which can be attributed to a shortage of personnel.

—Vienna Symphony Orch., Hermann Scherchen, cond. Westminster 12-in. (with *Symphony No. 55*). WL 5066. 28 min. \$5.95.

—Symphony Orch., Napoleone Annovazzi, cond. Remington 12-in. (with Mozart: *Symphony No. 28*). 199-56. 27 min. \$2.49.

—Boston Symphony Orch., Charles Munch, cond. RCA Victor 10-in. LM 49. 25 min. \$4.67.

—London Philharmonic Orch., Josef Krips, cond. London 12-in. (with *Symphony No. 100*). LLP 339. 24 min. \$5.95.

—Orch. of the Bavarian Radio, Alfons Dressel, cond. Mercury 12-in. (with *Symphony No. 82*). MG 10050. 27 min. \$4.85.

(In addition to the one hundred and four symphonies indubitably Haydn's, there are others ascribed to the composer on small



evidence. Two of these have found their way to records. One is the famous Toy Symphony, which according to Mr. Robbins Landon, writing in the *Saturday Review* is the work of Leopold Mozart. There is a pleasant recording of this by Serge Koussevitsky and the Boston Symphony Orchestra on RCA Victor 49-3013, a 45 rpm, but with no intra-movement interruption. An agreeable little Symphony in C, edited by Zoltan Fekete, obviously written in one of the last three decades of the Eighteenth Century, has been cautiously put forward as Haydn's work. There is a robust performance without nuance of this in a fair Mercury recording (MG 10066) conducted by the editor. Parts do sound like Haydn (who influenced all his contemporaries) but the shape of some of its thematic material and ornaments justifies skepticism.)

### MISCELLANEOUS

**DANCES FOR THE REDOUTENSAAL**  
Twenty-four dances for court use, ländler alternating with minuets in the full vigor and inventiveness of the old master's belated prime. The richly imaginative orchestration of the German dances is a delight in itself. Dr. Gillesberger is an eminent conductor of church music whose realization of the ländler is broad and jovial. Properly trying to contrast the bucolic athleticism of these by emphasizing the severe demeanor of the danceable minuets, he has made the latter less engaging than need be, although admittedly the former are in consequence more eagerly anticipated. Effective sound.

—Vienna National Opera Orch., Hans Gillesberger, cond. Haydn Society 12-in. 1022. 41 min. \$5.95.

**MARCHES (FOUR)**  
These are highly sophisticated fanfares for wind and percussion, competently played and brilliantly recorded.

—London Baroque Ensemble, Karl Haas, cond. Westminster 12-in. (with a miscellany of Boccherini, J. Haydn and M. Haydn). WL 5080. 6 min. \$5.95.

**(TWO HOFBALL) MINUETS**  
The group is too small for a true expression, and the engineering traits are unsubstantial.

—London Baroque Ensemble, Karl Haas, cond. Decca 12-in. (with *Symphony No. 22* and *Concerto for Harpsichord and Violin*). DL 9561. 4 min. \$5.85.

*In the January-February issue, Mr. Burke will continue his exhaustive Haydn diskography, covering the concertos, divertimentos, operas, oratorios, masses, songs and chamber music, the latter embracing sonatas, trios and an octet as well as the famous quartets.*

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# The Spoken Word on Records

One propitious day in 1937, engineers at what is now called "old" Columbia (Columbia Records before it was purchased by CBS), hooked up their microphones and took down four scenes of Shakespeare's *Richard II*, as performed by Maurice Evans and members of his repertory company. The resulting album was something of what the trade calls a "dog", it wasn't much good. But it *was* an album, and it *was* devoted to the human speaking voice in a unified, 40-minute dramatic effort.

The years since have brought forth much more golden talk, the first great effort for microgroove being (new) Columbia's 1949 cutting of the Robeson-Hagen-Ferrer *Othello*, on three LP's, still a fabulous and blood-curdling set. Decca got into the act, somewhat later, with two plays which almost could almost have been written for the wonderful combination of phonograph and visual imagination, T. S. Eliot's *The Cocktail Party* and Christopher Fry's *The Lady's Not For Burning*, and another of less, but still potent, effect, Arthur Miller's *Death of a Salesman*. Columbia countered with something lightsome but delightfully engrossing: Noel Coward, with Lily Pons, in his own semi-musical whimsy, *Conversation Piece*. It also spiced proceedings with four albums of history, *I Can Hear It Now*. In Washington, the Library of Congress began taking down poets' recitations of their own works on low-fi 78's. A small LP company, Polymusic, issued an excellent two-LP version of *The Tempest*, featuring Raymond Massey and some very hi-fi indeed.

This year has been a rich one for people who like the mother tongue at its best work. Most notable are three bright new efforts. One comes from a new company named Caedmon. It is a 12-in. LP presenting the young

Welsh poet Dylan Thomas in readings from his own works. The recording is gorgeous, and Thomas talks English in a way to make most of the rest of us shrink with shame for our abuse of this great instrument. The poems, mostly impressionistic, are *Fern Hill*, *Do Not Go Gentle, In the White Giant's Thigh*, *Ballad of the Long Legged Bait* and *Ceremony After a Fire-Raid*. But prize item is the half-hour metrical short story. *A Child's Christmas in Wales*, a straight, tangibly atmospheric recital and very, very funny.

A real surprise is an offering from Atlantic Records, heretofore known chiefly as a purveyor of LP jazz. This is a two-LP performance by Eva LeGallienne, Dennis King, Richard Waring and the Margaret Webster repertory players of Shakespeare's *Romeo and Juliet*. No one LeGallienne's age could look like 14-year-old Juliet, no one younger could sound so convincingly as she ought. This is a tear jerker. Aptly backing the aurally realistic stage doings is some handsomely arranged Tchaikowsky music, which (and this is a tribute to its cleverness) employs an electric organ without the slightest offense. Since Herbert Abramson, producer of the album, has labeled it "Living Shakespeare Series", it is to be presumed, and hoped, that he plans others.

In the wake of Decca's success with its Eliot and Fry plays, wherein the words served adequately without viewed action, Columbia has come forth with a work proven in advance to have no need of stage action for maximum effect. This is the central scene of G. B. Shaw's *Man and Superman*, subtitled *Don Juan in Hell*, and played to capacity audiences across the nation by the so-called First Drama Quartette, who sat around a table on the stage and read it.

The FDQ consists of Charles Boyer, Charles Lawton, Sir Cedric Hardwicke and Agnes Moorehead, and they really bring Shaw's civilized, sophisticated, pleasure-ridden hell right into Mr. Doakes' living room. They are accompanied by a slight pre-echo, the result of cramming the grooves too close together, to get the whole thing on two LP's, but this sounds proper and fitting in the halls of Hell. All that is lacking is the Mozart music, which Shaw could have wished for (the characters are Mozart's libertine Don Juan, his wife, her father — younger than she, having died earlier — and the devil.) This album actually provokes cerebration in the listening, but it may sell well all the same.

J. M. C.



First Drama Quartette: Mr. Shaw's sophisticated Hell breaks loose in the living room.



# Tested in the Home

## THE NEWCOMB CLASSIC 25

Last May, Newcomb Audio Products Company of Hollywood previewed their new line of amplifiers at the Parts Show in Chicago. Two features — strangely enough, mechanical rather than electronic ones — caught our eye: a true remote control unit, and an adjustable panel-and-knob arrangement.

Electrically, the eight amplifiers in the Newcomb line were as carefully designed as they were well manufactured; sound was impressive, control ample; the price range complete: from \$39.50 (audiophile net) for a 10-watt without preamplifier to \$269.50 for the Classic 25.

### Remote Control without Quotes

Practically all amplifiers are available with "remote" control units, but the degree of remoteness varies considerably, as does the answer to the question, remote from what? Remote from *all* equipment? Remote from the amplifier chassis?

The importance to the audiophile of the answers to those questions depends entirely on the individual installation. The number of arrangements possible is legion; let's review briefly what might be called separation factors for various pieces of equipment.

Under nearly all conditions, speakers can be separated from power amplifiers by anywhere from 25 to 50 ft. without noticeable losses. Of course, the longer the distance, the heavier the wire which should be used, but this factor is almost inconsequential. For instance, according to Rider,<sup>1</sup> 100 ft. of No. 18 wire (common lamp cord wire) will introduce a power loss of 15% when used with 8-ohm speakers. — The location of dividing networks is of no importance in this separation factor; they can be put at the amplifier or at the speaker end, depending on convenience.

The separation factor for a control-pre-amplifier — the distance between it and the power amplifier — depends almost entirely on the design of the unit. Most of the newer equipment uses cathode follower design which permits separation of from 10 to 50 ft. with, at the greater distance, only a very slight attenuation of the highs — and how much attenuation over, say, a 35-ft. distance depends on the type of cable used for the interconnection. Prospective purchasers should obtain specific information on this subject from the manufacturer of the equipment they are considering: it is freely and willingly given.

The older types of control-preamplifiers had to be kept close to the power amplifier except in cases of specially built equipment.

Note that we have hyphenated "control-pre-amplifier" and considered this as one piece of equipment, for it is common practice today to combine the separate functions of preamplification and control (of

tone, volume, and switching) into one unit. But the two functions can be, often are, and sometimes must be (for convenience sake) separate units. Then the separation factor of each unit may be different. For instance, the Brociner preamplifier-equalizer can be as much as 30 ft. away from whatever control unit or amplifier is used in conjunction with it, but a G-E preamplifier should be within 6 ft. of the next piece of equipment in the chain. The Brociner control amplifier, however, has a high separation factor; a 30-ft. wire from it to a power amplifier is not excessive.

There is not nearly as much flexibility of separation factors for phonograph cartridges — and here is where we come back to our starting point of remote control without quotes. To avoid unduly complicating matters, let it be stated that the usual magnetic cartridge should be connected to the preamplifier unit by as short a wire as possible; 3 to 6 ft. is considered optimum; anything much over 6 ft. is dangerous. There are some exceptions, due to design factors; see the "Tested in the Home" report in this issue on the Fairchild cartridge.

Thus, we return to our question, remote from what? And that brings us to the question which audiophiles should ask: where do you plug in the wire from the phonograph cartridge? If the answer is, on the remote control unit, then *that* unit must be located within 6 ft. or less of the pickup.

side. Two easy chairs are located at a comfortable viewing and listening distance. Now, unless Mr. Ilt wants to pop up and dash for the volume controls every time the phone rings, the answer for him is a remote control and amplifier system wherein the phonograph and TV wires plug into the amplifier chassis, the remote control being connected by a single cable (run under the floor, probably) to the amplifier.

Mr. Ihi, of course, does not have a television set. He has the same two armchairs as Mr. Ilt. His speakers are located along a facing wall or in a corner of the room. He has either a changer or a turntable. But, unlike Mr. Ilt, Mr. Ihi has his pickup in a neat cabinet right alongside his armchair. You see, he likes to play individual records, and he doesn't want to have to hop up at the end of each one to turn it over. So, for Mr. Ihi, the type of remote control in which the lead from the pickup plugs into the remote control unit is just fine. His power amplifier can be either in the same chairside cabinet or across the room with the speakers.

For the same results, Mr. Ihi's system will cost a little less. It complicates engineering design very considerably to have the pickup, TV, FM tuner, and other wires plug into the amplifier chassis, yet have input selection, volume, bass and treble tone, and record equalization controlled from a distance.



Fig. 1. Remote control unit on the Newcomb has four "minor" and two "major" controls.

If the answer is, on the power amplifier chassis, then that is the unit which must be within 6 ft. of the pickup. Which is best depends, as we said, on the installation.

Let's examine two typical (?) installations: that of Mr. Ilt (I Love Television) and Mr. IHI (I Hate It).

Mr. Ilt has his TV set located in the middle of one wall, with a fine loudspeaker system under it, neat record storage shelves at one side, a record changer at the other

The extra cost may be worth it. If Mr. Ihi developed a taste for television, he would not be able to control volume and so forth from his chairside unit, simply because TV sets generally have to be connected to the control equipment by a short wire. The same applies to tape recorders and FM tuners — in fact, to nearly all equipment in the average home installation.

It may be felt that we have gone far afield from a report on the Newcomb Classic 25 amplifier, but this unit is of the type

<sup>1</sup>Low Power P. A. Systems, John F. Rider, 1948

wherein the connections from FM and TV tuners, phonograph pickups, and what have you are made to the amplifier chassis — and this may well be a deciding factor in many installations. Since very few manufacturers produce this type of equipment, we felt it important to clarify exactly what was meant by "remote control".

The Newcomb remote control unit is shown in Fig. 1. It is connected to the amplifier by a single cable which may be up to 100 ft. long. The control is supplied with a 5-ft. cable attached; 20-ft. extensions are available. The cable may be run anywhere — along the baseboard, under the floor, or loose on the floor so that control can be moved easily to different parts of the room. It should not be run too close to 110-volt AC lines, lest it pick up hum.

The control unit has six knobs. The two small ones at the left regulate bass and treble response. The adjustment range is -16 to +23 db for the bass, -25 to +23 db on the treble.

The large left hand knob is a "record condition compensator". It is in essence a sharp treble cut-off control utilizing an L-C circuit which provides the following cuts:

Position	Down 3 db	Down 12 db	Down 22 db
5	3,000	4,000	5,000
4	4,000	5,500	7,000
3	5,500	7,500	9,200
2	7,000	10,500	13,000
1	Flat	Flat	Flat

The large right hand knob is the recording characteristic equalization control. Two microgroove and three 78 rpm. positions are provided. One microgroove curve matches the AES standard, the second is labelled "microgroove standard" and is the same as the AES as far as turnover point is concerned, but the treble is flat (the AES droops about 12 db at 10,000 cycles). On the 78 rpm. side, the AES curve corresponds

to AES position on microgrooves, the "standard 78" has the same turnover point as the AES position but the treble is not deemphasized and the bass continues to rise, rather than rolling off gently below 100 cycles. The "foreign 78" position is identical to the AES at the high end but the turnover point is dropped to 250 cycles.

One other feature distinguishes the three 78 rpm. positions from the microgroove curves: because the output of pickups for 78 rpm. records is usually higher than that from microgroove records and pickups, the volume level on the 78 side has been reduced. Thus the change in volume level when switching from 78 rpm. records and cartridge, is compensated for automatically.

The two small knobs at the right of the control unit's panel are a two-position selector (at top) and a loudness control (at bottom). The loudness or volume control is effectively compensated for the changes in hearing characteristics which occur at low volume levels.

### Taking the Pain out of Panels

As we said at the beginning of this discourse, the second feature of the Newcomb line which caught our eye was an adjustable panel-and-knob arrangement.

Time was when manufacturers supplied their equipment in metal chassis having a front panel about 1/32-in. thick and cut the shaft lengths which stuck through the front panel so that the knobs would fit neatly against the panel with absolute minimum clearance. It was just about impossible to do anything with such equipment except to leave it lying around on top of the table, because about the thinnest material the average home owner could find for a panel was 1/8-in. Masonite or plywood which, all too often, was so thick (relatively) that the knobs wouldn't stay on.

*Continued on page 105*

## THE WEATHERS PICKUP

If you can devise a way to hold the record in place, you can amaze and startle your friends by playing records with your turntable upside down — if you use the new Weathers pickup arm. We do not see any immediate practical application for this feature, but we do find the mechanical method of securing the correct stylus pressure, which Paul Weathers has used, an interesting, decidedly novel, and practical departure from the customary. Instead of relying on weight, achieved in one way or another, Weathers uses a spring to hold the stylus down on the record. Thus pressure is constant, regardless of the position of the turntable. Also, just as the stylus is held down against the record, if it is held up, away from the record, when the arm is lifted above a halfway point.

When we photographed the arm for Fig. 1, it was in its up position. If it is pushed down gently, it reaches an approximately horizontal position with spring pressure exerted upwards. Then, the spring appears to reverse itself and the pressure is exerted downwards.



Fig. 1. Special arm for Weathers cartridge.

The arm is made of wood, and is counter-balanced with a factory-adjusted weight so that, with spring pressures removed, it is exactly balanced both vertically and laterally around the pivot point.

The Weathers cartridge is held in place by a spring clip; the correct length of shielded wire is supplied with the arm. Installation is simplicity itself.

Also supplied with the arm are two round blocks of drilled and cut wood, each 1/2-in. thick, to be used to adjust the height of the base in relation to the turntable surface. This is a neat, simple, and inexpensive idea, one which we have not seen before. Incidentally, the height of the arm is not critical: the base should be from 1 to 1-1/2 ins. below the turntable surface. As manufactured, and without resorting to the shims provided, the height is correct from such turntables as the Rek-O-Kut 743.

Certainly the new arm is the answer to the troubles along these lines which we reported in HIGH-FIDELITY No. 5. In that issue, we pointed out that the cartridge was hard to adapt to several of the better-known pickup arms. Further, most of the arms required considerable readjustment of counter-balances to provide the correct weight for the Weathers. The new arm cannot be adjusted for different weights, nor can it accommodate cartridges other than the Weathers — but this is in its favor. Used with the cartridge for which it is specifically designed, optimum operating conditions are ensured.

*Continued on page 115*

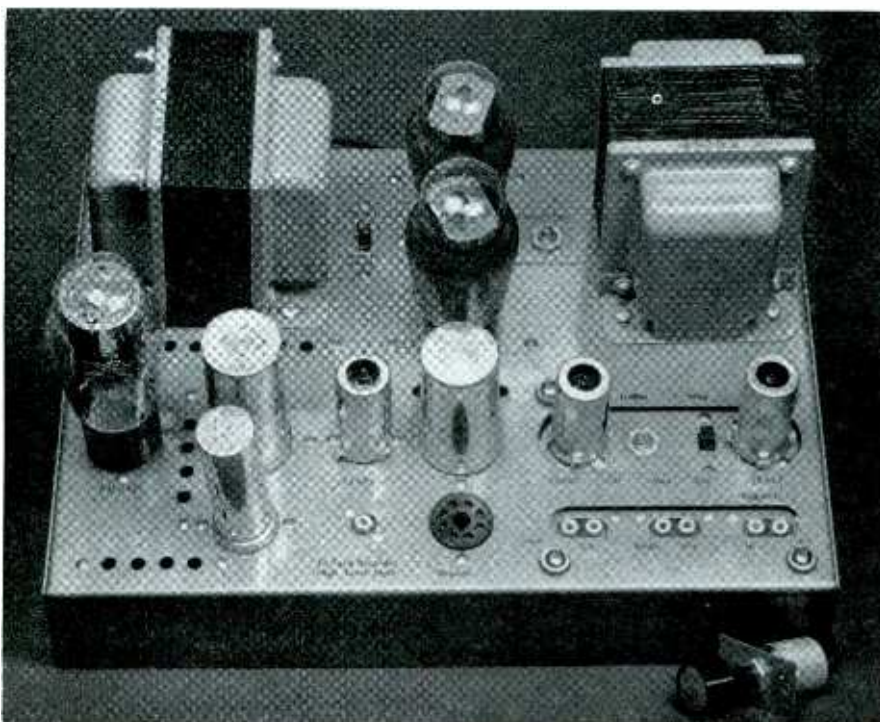


Fig. 2. Note rubber shock mounts lower right, separating preamp from main chassis.



## THE TANNOY FIFTEEN

In wartime Britain, every raucous device that blared unwelcome orders from a wall-box was known to members of the armed forces as a "Tannoy." This was a fact hardly likely to encourage exacting high-fidelity enthusiasts to listen when, early this year, Beam Instruments Corp., New York, began marketing a line of British speakers called Tannoy. Fortunately, however, the speakers could speak for themselves — but eloquently!

Tannoy Dual Concentric (co-axial) loudspeakers come in two sizes, 15-in. and 12-in. diameters. Only the former will be discussed here. The latter is much like it, except for its size and that it is designed to handle only 15 watts instead of 25.



*Cross-section of Tannoy 15-in. speaker.*

A Tannoy 15 was substituted in a 10-cu. ft. bass-reflex cabinet for an American speaker system priced at \$55 more than the Tannoy. It became immediately apparent that the American system came off best in only one respect: it was more efficient. In all other ways, the Tannoy made it look sick. Most important, the Tannoy was smooth; there was no shrill disagreement between tweeter and woofer at the crossover point. Also, and this was something of a revelation, it was remarkably versatile. It could be turned down to an operating volume which must have consumed about one-third of a watt, and listened to from six feet away, and it still sounded full and pleasant. Alternatively, when it was opened up a little, it delivered the Benny Goodman Trio to the lawn outside the French windows, 40 feet away, with enough vigor to justify critical comment on Gene Krupa's snare technique. It showed small trace of treble "beaming", being perhaps most free of this complaint of any co-axial yet heard by this reviewer. By the same token, its high-end distribution was fine and wide, very satisfactory at 40° off-axis.

In the 10-ft. box, experiment disclosed, it worked best with no bass-port aperture at all. In an 8-ft. box, a port noticeably improved bass response. In a corner folded-horn enclosure, it delivered almost too much bass, making the high end seem muted. The immediate inclination was to call it just about the best living-room, box-

*Continued on page 119*

## THE FAIRCHILD ARM

In HIGH-FIDELITY No. 3, we "Tested in the Home" the Fairchild transcription arm and cartridges. The report herewith will bring readers up to date with a redesigned arm, and furnish more information about the cartridges.

Until recently, Fairchild equipment has been marketed almost exclusively to professional users, and the arm continues to be designed to permit playback of 16-in. transcription disks as well as standard 7, 10, and 12-in. records. In regard to the old arm we said, "the method of mounting makes for perfect tracking, but it also means that operating conditions must be perfect". The primary advantage of the new design is that the arm will operate better under less perfect conditions, *i.e.*, those encountered in the home.

In the old arm, there was a ball attached to the arm itself. The ball rested in an inverted cone which formed the top of the base. The inverted cone was partially filled with a viscous damping "goo" so that the ball literally floated in the base cup. The weight of the turret head, with its three cartridges, and of that part of the arm in front of the base, was counterbalanced by a very heavy weight in the rear overhang portion of the arm. The weight was adjusted for use with 78 rpm. cartridges. When the turret was turned to its LP position, a spring was actuated which had the effect of lifting some of the weight from the cartridge end of the arm.

This was fine — with careful handling and under near-perfect professional operating conditions. But what happened when the arm was domesticated? On a bumpy LP record the arm would ride up the bump, but drift down — sometimes skipping a groove in the process. Only the weight of gravity, duly damped by the viscous goo, tended to pull the arm back into place, and the stickiness of the goo slowed the pulling back process.

Also, since the arm moved freely if a bit lugubriously in *all* directions, if it was not picked up and moved to playing position with care, it would twist — that is, rotate counterclockwise, so that the stylus would ride in the groove at a slight angle instead of exactly perpendicular to the disk. Again, matters would straighten out after a few grooves, but one tends to expect a

professional arm to operate perfectly at all times, regardless of the amateurishness of the operator.

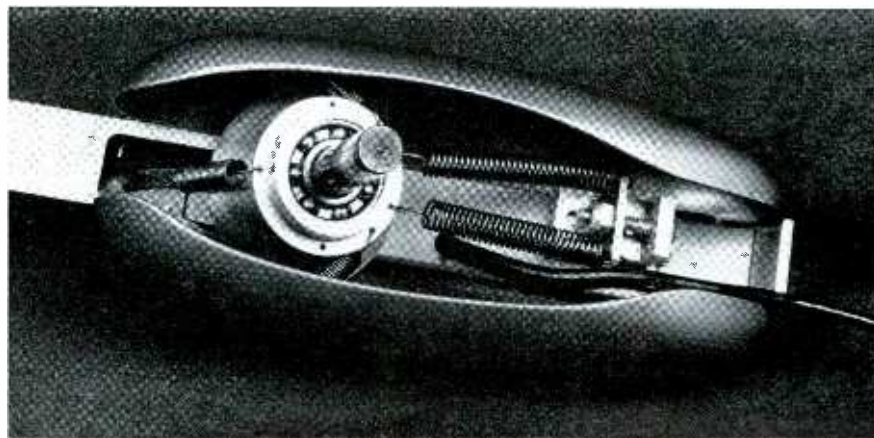
Late last Winter, Fairchild started redesigning the method of counterbalancing the arm. The final design, shown in Fig. 1, is just now reaching the market. As can be seen from the illustration, the weight has been removed from the overhanging rear of the arm and replaced by a system of springs. The two springs to the right in Fig. 1 are the basic equivalent of the old counterweight. Then, whereas the cup (of the ball and cup base) in the old arm was part of the base, in the new design it is part of the arm, held against the ball by the three springs visible around the periphery of the cup. The two side springs hold the arm in a position exactly parallel to the base or turntable; any tendency to rotate (or be rotated, by the operator, as discussed above) is counteracted by the side springs.

The spring to the front of the cup (at the left in Fig. 1) counterbalances the two main springs. It will be noted that there is a small cord running from the spring over a pulley and up into the forward part of the arm. This is interconnected with the turret head so that when the head is rotated from the 78 to the 33 rpm. cartridge position, the cord is relaxed a little and less pull exerted on the front spring, so that the two rear springs exert *more* pull, with the final effect of reducing the stylus tip pressure.

Essentially, springs have replaced gravity in the new arm. The advantage is that the increase in pressure exerted by a spring, as it is stretched further and further, is far greater than the increase exerted by gravity alone. Thus, with a tiny bump on the record, the action of the new arm is almost identical with the old design. But — if we can imagine a really enormous bump — the springs may be thought of as pulling the arm back toward its original position very quickly over the first 50% of the distance, quickly over the next 30%, but allowing it to "drift" down for the final 20%.

The overall result is a much better arm from the point of view of the non-professional user, yet at no sacrifice to the professional. The matter can be summarized, perhaps, by saying that the new Fairchild arm, in the professional zone of operation, functions almost identically with the old

*Continued on page 111*



*Fig. 1. A system of springs replaces the counterbalance on the new Fairchild arm.*

# THE BIAMPLIFIER SYSTEM

ROY F. ALLISON

*Trifles make perfection . . .*

That quotation explains, in a nutshell, the motivation for the development of an audio system employing two amplifiers instead of the customary single unit.

The audible difference may be small, but it is there. With continued listening, it becomes more and more apparent. There are sound technical reasons for achieving a noticeable improvement and, in addition, the solution of tough acoustic and matching problems is made easier through the use of a two-amplifier — or, as we shall call it — a biamplifier system.

The biamplifier system consists essentially of a filter network inserted between a preamplifier or control unit and two or more amplifiers. Each amplifier is then connected directly to a speaker.

Customarily, systems employing multiple speakers utilize a single amplifier followed by a dividing network, the output of which is connected to the speakers. In effect, the biamplifier system moves the network from a position in the amplifier *output* circuit to one on the amplifier *input* side.

## What's Wrong With What We Have?

In a conventional multi-speaker sound system, the various sources of audio such as phonograph pickups, tape recorders, and tuners, are usually fed to a control unit which performs the functions of preamplification, input switching, and volume and tone control. The output is then fed into a power amplifier which is charged with the tremendous task of magnifying by some 10 million times the puny electrical signals entering it, without making the slightest change in any characteristic except size. A dividing network, consisting of one or more large coils, capacitors, and level controls, is connected to the output of the amplifier. This network is supposed to sort the composite electrical signals according to frequency or pitch; one section routes the low tones below a certain crossover frequency to a low frequency speaker and enclosure, such as an air coupler, and the other section of the network feeds the high tones to a coaxial speaker or a tweeter directly, or to a mid-range speaker and a tweeter through another dividing network.

This basic system, while superior by far to one where in all frequencies are fed from the amplifier to a speaker or a combination of speakers *without* a dividing network, has still a few undesirable features.

First, and most obvious, is the lack of standardization of dividing network design. Because the correct values of network components are determined by the individual speaker impedances, by the crossover frequency desired, and by the method of wiring the components together, each installation must be custom-designed for best results.

Even when the right components have been selected and wired in accordance to recommendations, dividing networks are still not infallible because, as has been pointed out, their correct operation depends on speaker impedance. Unfortunately, speaker impedance varies according to the frequency of the signal fed to it, and is affected also by the speaker enclosure. Only in the middle frequency range is the impedance likely to be close to the rated value. At both high and low ends, the actual impedance increases radically and unevenly. The variation of impedance with frequency means that a network designed to operate with, let us say, 8-ohm speakers, is mismatched over a good part of the frequency spectrum.

One of the achievements of modern amplifier design is the ability of the amplifier to compensate automatically for wide changes in impedance at the speaker. Thus, with a speaker connected directly to the amplifier, mismatch due to variations in impedance becomes relatively insignificant.

However, when a dividing network is inserted between an amplifier and a speaker, the amplifier's "automatic" matching ability is largely negated.

Another basic difficulty in the usual multi-speaker installation is the matter of speaker efficiency. Some woofers tend to be quite inefficient when compared to mid-range speakers and tweeters. Therefore, more driving power is required for the woofer in order that a balance may be obtained with the rest of the system. It is for this reason that dividing networks are fitted with individual volume or level controls which can be set to reduce the driving power to the individual speakers. Now, it will be recalled that one of the basic requirements of a fine amplifier is flat frequency response — that is, with equivalent input, the amplifier provides the same power output at 30 cycles as at 1,000 cycles or 15,000 cycles. If the woofer must have 5 watts at 50 cycles to be balanced with a tweeter requiring only ½ watt at 5,000 cycles, then the amplifier must be driven hard enough to put out 5 watts at each frequency. The level control at the output of the dividing network which feeds the tweeter must be turned down and 90% of the power at 5,000 cycles is absorbed — wasted — by the level control. In other words, so far as the high frequen-



cies are concerned, the amplifier is working ten times as hard as necessary. This may seem an unimportant matter until two other facts are considered: first, the harder an amplifier works, the more distortion it produces; and second, it is agreed generally that distortion is much more objectionable at high frequencies than at low frequencies. Thus, because of low woofer efficiency, high frequencies may be reproduced in a single-amplifier system with a good deal more distortion than is desirable. The effect may be noticeable particularly on low passages of music with significant low frequency content.

Two more ills can be charged to the level controls. Even when turned to the maximum ON position, these controls consume some power. When added to the power consumed by the resistance of the network itself, the loss may be such that the apparent loss of amplifier gain becomes significant. Finally, resistance between the speaker voice coil and the amplifier terminals reduces markedly and may even nullify the damping properties of a good amplifier.

To summarize, the major disadvantages of conventional multi-speaker systems are occasioned by the necessity for driving all speakers with the same amplifier, and inserting a dividing network between the amplifier and the speakers.

Some may say — and rightly so — that sound reproduction today, with a single amplifier, dividing network, and a multiple-speaker system, is remarkably perfect — and why bother with what to most are almost undetectable flaws.

The point is, here we are after perfection. If our present *modus operandi* has known shortcomings, let us undertake to eliminate at least some of them. Thus, from our statement of flaws, we move onto the logical thought that it would seem to be a good idea to split the frequency range into two parts directly after the preamplifier-control unit, and to use two amplifiers, each connected directly to a speaker. The low frequency range, which causes most of the trouble, could be isolated completely from the middle and high ranges, with no chance

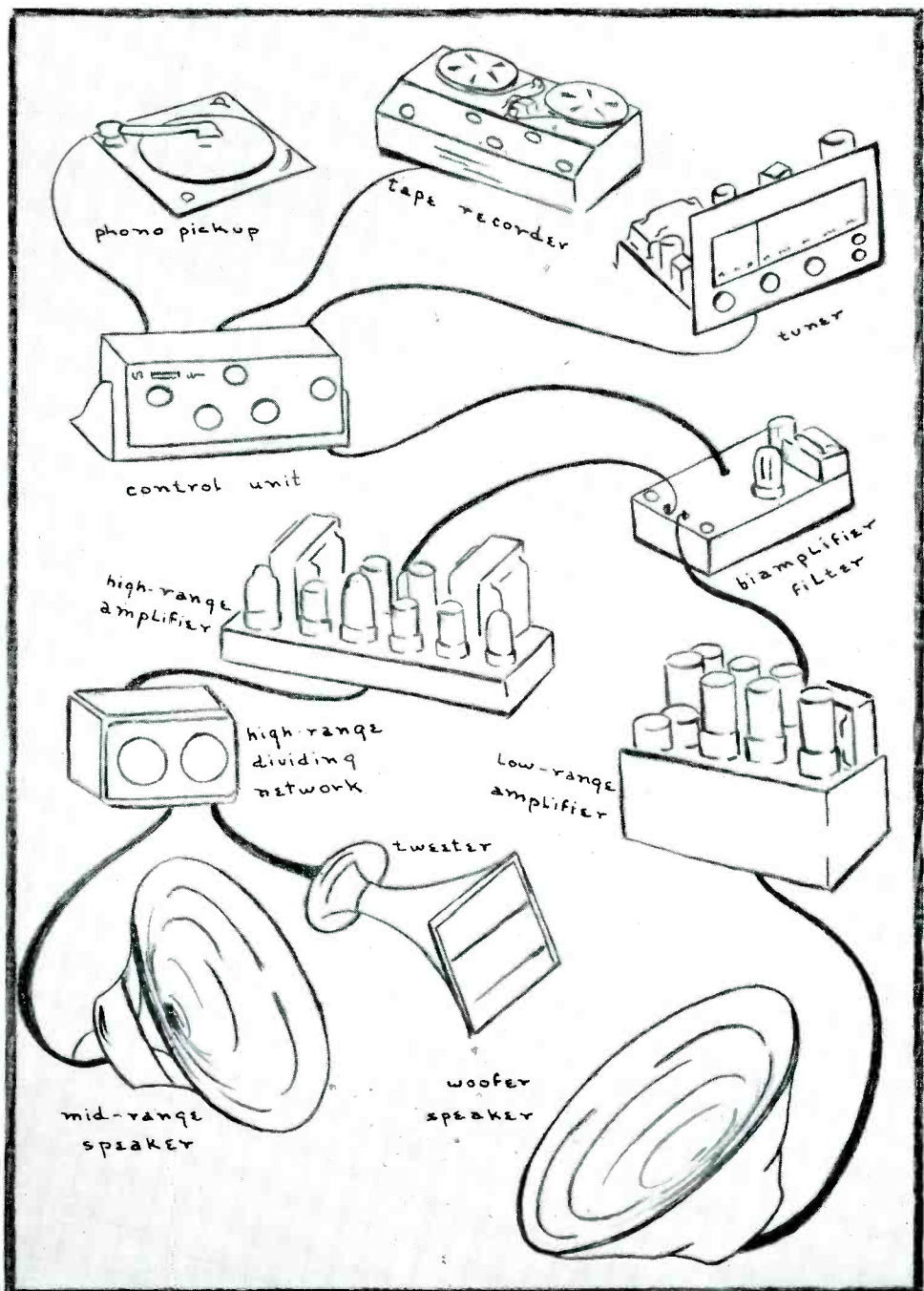


Fig. 1. This pictorialized block diagram shows how the bi-amplifier filter fits in between the pre-amplifier-control unit and the two amplifiers. Connections ahead of the filter are normal.

of interaction at high power levels. The individual amplifiers could be operated at the power levels actually required, with none wasted. Low frequency high amplitude tones would not be amplified together with high frequency tones, so that intermodulation distortion would be almost completely avoided and, because the high frequency amplifier would probably be operating at a much lower level, distortion would be reduced even further.

Other important advantages can be realized with such an arrangement. Speaker impedance variations would have very little effect because a direct connection could be made between the woofer amplifier and speaker, preserving desirable damping action.

## The Biampifier System

A pictorial diagram of such a biampifier system is given in Fig. 1. It can be seen that the ordinary connections are made from phonograph pickup, tuners, and tape recorder to the preamplifier and control unit. From that point on, however, the system is unconventional. The signal from the control unit is fed to the biampifier filter, described later, which serves the same purpose as the original dividing network—that is, it splits the sound spectrum into two parts, feeding the low tones to the low frequency amplifier and the rest of the range to the

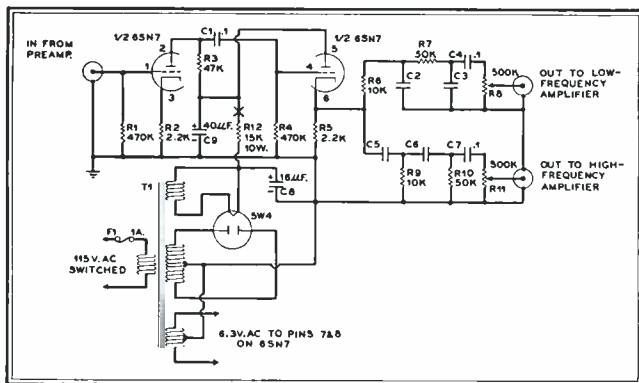


Fig. 2. Double R-C filters divide frequencies into two bands

high frequency amplifier. The crossover frequency can be any desired. Volume controls on the output of each filter channel can be used to adjust the drive to the amplifiers for speaker balancing. Note that the inputs to the amplifiers are adjusted for balance, not the outputs, so that neither amplifier is driven harder than necessary. A woofer speaker mounted in a suitable enclosure can be connected directly to the output terminals of the low frequency amplifier, with a mid-range cone speaker and a horn tweeter connected through a dividing network to the high frequency amplifier. It should be noted that the effects of a dividing network at high frequencies do not appear to be as deleterious as at low frequencies. Among many reasons, two may be advanced: power is low, and with the horn loading normally used for tweeters, impedance mismatch is not as great.

In such an installation, the crossover frequency of the biampifier filter would probably be from 75 to 400 cycles, and the crossover frequency of the dividing network from 1,100 to 4,000 cycles. Many other combinations are possible for both the woofer and the high range system. For instance, a coaxial speaker might be used rather than the two separate high range speakers shown.

Thus the basic idea behind our experiments was that an improvement in sound reproduction could be achieved by dividing the frequencies ahead of the power amplification function. To do so would eliminate the somewhat uncertain quantity of a dividing network and would permit securing maximum advantage from efficient, well-damped modern

amplifiers. Our work was directed primarily at the low frequency problem (400 cycles and below), although there is no reason why a triampifier system, employing a third amplifier for the extreme high frequencies, should not be used. It is doubted, however, that the improvement so obtained would be worth the extra trouble and cost.

## Design of the Filter Network

Two basic types of filter network were considered: those designed around the L-C principle, which requires inductances and capacitances, and those operating on the R-C or resistance-capacitance principle.

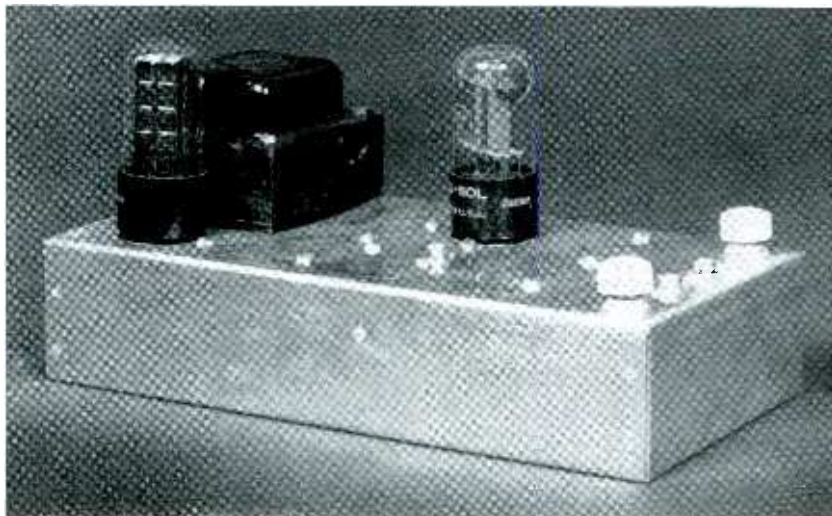
A deciding factor in the final design was that a universal filter was needed. We were faced with the impedance matching problem—a headache of dividing network design from which we wanted to escape once and for all. The matching difficulty arose with ahead-of-the-amplifier filters because of variations in design used in preamplifier-controls as well as in amplifiers.

Actually any filter design that will provide a constant load of the necessary magnitude on the control unit, function properly when terminated by the two amplifiers concerned, and not introduce undue attenuation into the system, can be used as the biampifier filter. The optimum crossover frequency will vary according to the speakers and enclosures used in the system and, of course, the preference of the user.

First consideration was given to the standard coil-capacitor network configuration as used for speaker-system dividing networks. This was rejected for the following reasons:

1. Component values depend on both output and input impedances.
2. If any of the units (preamplifier-control or amplifiers) were replaced, it is likely that the network would have to be redesigned.
3. Suitable coils are not generally available, and would have to be custom made or wound by the user.
4. Because the network would be of high impedance and would be used in the system at a relatively low audio

Fig. 3. At the right of chassis are two level controls and output jacks





signal level, it would be difficult to shield the coils adequately to prevent objectionable hum pickup.

The alternative was a simple resistance-capacitance network. Since attenuation approaching 12 db per octave was required, it was necessary to use two RC sections, well isolated, in each filter section. Also, in order to avoid a low impedance load on the control unit (which might or might not have a low-impedance output), a minimum-loss isolator would be needed. This requirement was best met by a cathode-follower stage, which provided also a low impedance input for the RC networks. Then, in order to compensate for the insertion loss of the cathode-follower and the RC networks, and to increase the audio signal level enough so that no hum problems would be encountered in the filter section, it was decided to add a stage of amplification. This was accomplished simply by using a double-triode tube. One section serves as the amplifier stage, and the other as the cathode-follower.

Fig. 2 is a schematic diagram of the complete filter, including a power supply for the tube. The power supply can be omitted if desired, and the power obtained from one of the amplifiers. If this is done, four power leads are required: one providing approximately 250 volts DC, which should be connected at the point marked "X" on the diagram; one lead connecting the ground buses between the two units; and two leads (twisted or shielded) from the 6.3-volt filament supply to pins 7 and 8 on the 6SN7-GT socket.

If a power supply is to be included, all leads entering and leaving the power transformer should be twisted and should lie close to the chassis. The transformer itself should be completely cased in order to avoid hum difficulties.

Standard wiring practice should be observed throughout, with only one ground connection made directly to the chassis.

The parts layout for the filter is shown in Figs. 3 and 4. As can be seen, the power transformer, rectifier tube, and associated components are mounted at one end of a chassis approximately  $9\frac{1}{2}$  by 5 by 2 ins. The input receptacle, the 6SN7 tube, and the amplifier components are grouped at the center of the chassis. Next to the amplifier and cathode follower stages are mounted the RC network components for the filters, and at the end of the chassis are the volume controls and the output receptacles for the two channels. Foot-mounted terminal strips are used as intermediate wiring points throughout, and as mounts for the filter components.

Resistors in the RC networks are fixed in value, no matter what crossover frequency is selected. R6, R7, R9, and R10 should be within 1% of the values indicated, and should be of at least  $\frac{1}{2}$ -watt rating. The filters will work, of course, if the components are more than 1% off nominal value, but the system response in the region of crossover is likely to be accentuated or depressed.

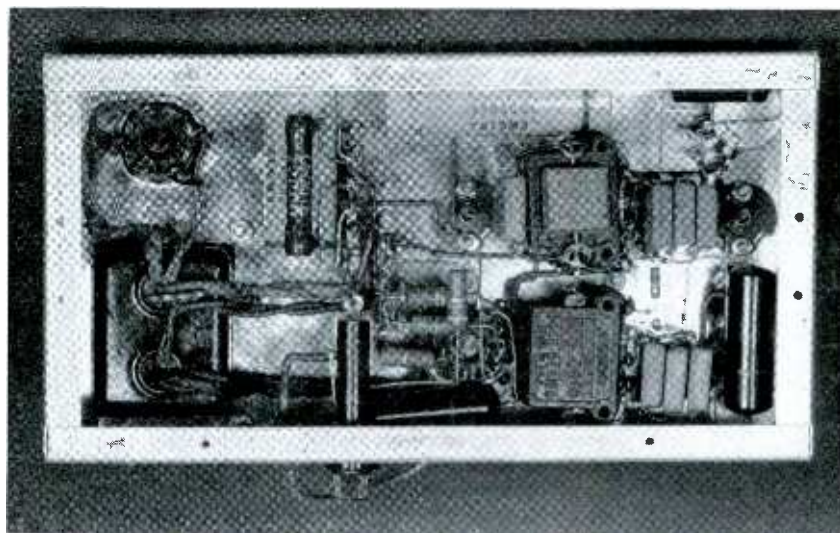


Fig. 4. Packs of capacitors at right comprise "C" part of R-C networks

Under no circumstances should an error of 5% be exceeded.

Table I gives the list of components used in the original design. Because it is likely that other crossover frequencies will be desired, Table II lists values of C2, C3, C5, and C6 for frequencies from 75 to 1000 cycles. Mica capacitors of at least 300-volt rating should be used. Preferred tolerance on these capacitors is 2%. As before, 5% deviation from the nominal value is the outside limit.

Such tolerances for the filter components are required not because the actual crossover frequency is very critical, but because it is important that all components be set to provide the *same* crossover frequency. It will be necessary to use combinations of standard capacitor values to make up the nominal values indicated. Some of these units are quite large physically and adequate room for them should be allotted on the chassis.

## Conclusion

The final test of any idea or equipment is how it sounds. The idea may be wonderful, and the equipment may be perfectly designed, but if it doesn't sound "right", it must be considered useless. Therefore the filter network described in the foregoing paragraphs was examined under the same conditions as those used for the "Tested In The Home" reports in this Magazine.

The equipment was connected in such a fashion that we could A-B test two arrangements. First, the output of a preamplifier-control unit was connected directly to the input of a single amplifier. A dividing network was used with a three-speaker system. This dividing network was a two-way network: it divided the frequency spectrum into a low and a high section. The woofer was, of course, connected to the low side. A 12-in. speaker was connected to the high side, and a tweeter was connected in parallel to the 12-in. unit but isolated (or filtered) from it by a single 1 mfd. capacitor.

For the second arrangement, the speakers were identical, but the filter network was connected to the output of the preamplifier-control unit. Two identical amplifiers were then wired to output connections of the *Continued on page 92*

Continued from page 32

performance. The most convenient or attractive arrangement may not be the best acoustically. You may need expert advice on this detail.

Additional speakers with individual volume controls can be installed in various rooms, together with switches to turn the equipment on and off. Thus you can load up your record-changer, or tune in the radio before you go to bed, switch on either one when you are ready, adjust the volume of your bedroom speaker, and switch off

the entire radio-phonograph system before you go to sleep.

Also, you can have a connection for a permanent or plug-in speaker outdoors on the lawn or hidden in the trees, on a terrace, or inside a patio. This calls for running wires in conduit, with a waterproof mounting for the connector, switch and volume control.

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## 8. INSTALLATION OF EQUIPMENT

This item was set up on the assumption that you will want to have some kind of special mounting for your equipment, which will involve a certain amount of labor. It may be only a simple arrangement in a bookcase. Perhaps you have ideas about a complete music wall, or the reconstruction of a cabinet or closet. All that expense can be saved if you do the work yourself, but you may find it more satisfactory to employ a custom installation expert, or a serviceman who has a thorough knowledge of audio equipment.

Whatever kind of an installation you plan, don't skimp on cost at this point. If the performance of some simple part is not satisfactory, you can replace it. But if the wires are run carelessly, they will be broken in the course of housecleaning. What is worse, they may develop mysterious, intermittent open or short circuits that are diffi-

cult to find. Generous ventilation must be provided for the amplifier and tuner, as a protection against overheating. Cabinet work must be well done, and of solid construction. This applies particularly to record-changer and speaker mountings. Pickup pressure is so light that any jar transmitted to the changer may cause the pickup to jump a few grooves. Loud notes from the speaker will cause anything loose in the room to rattle, including joints in the speaker cabinet.

Your hi-fi system should be a source of pleasure and satisfaction to see as well as hear. Otherwise it will be only an irritation and disappointment, and a waste of money.

CABINET WORK \$ \_\_\_\_\_  
INSTALLATION OF THE SYSTEM \$ \_\_\_\_\_

## FINAL SELECTION OF EQUIPMENT

After you have read the foregoing discussion of the possible variations that can be incorporated in your hi-fi system, you may have the feeling that the project is just too complicated for a layman to tackle. It would be the same if, at the first session with your architect, he presented all the factors that you would ultimately decide upon in planning a house. You would throw up your hands and say: "This is beyond me! I'm going to look at houses that are already built, and take my chances on finding one that will prove satisfactory after I move in."

Well, that's one way to decide on a hi-fi system, too. Several companies are offering very handsome cabinets of functional design, so simple in line and appearance that they do not argue with furnishings of any period. And they offer a choice of facilities and fine equipment all installed and ready to operate. You can set up such a unit in your living room, connect the AC current and the antenna, and have everything working in a matter of fifteen minutes. That is a solution worth considering.

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by WEBSTER-CHICAGO



Continued from page 88

installation for your home shouldn't discourage you. As you study the various elements and begin to understand what they will mean to you, you will be able to think of them in their order of relative importance in function and cost. Then you will be ready to compare the pieces of equipment as described in catalogues, or to go to a dealer and say: "I have a tentative plan for a hi-fi installation and I'd like to hear a combination of instruments that will come to about the figure I have set as a budget." If you have a capable man to assist you in

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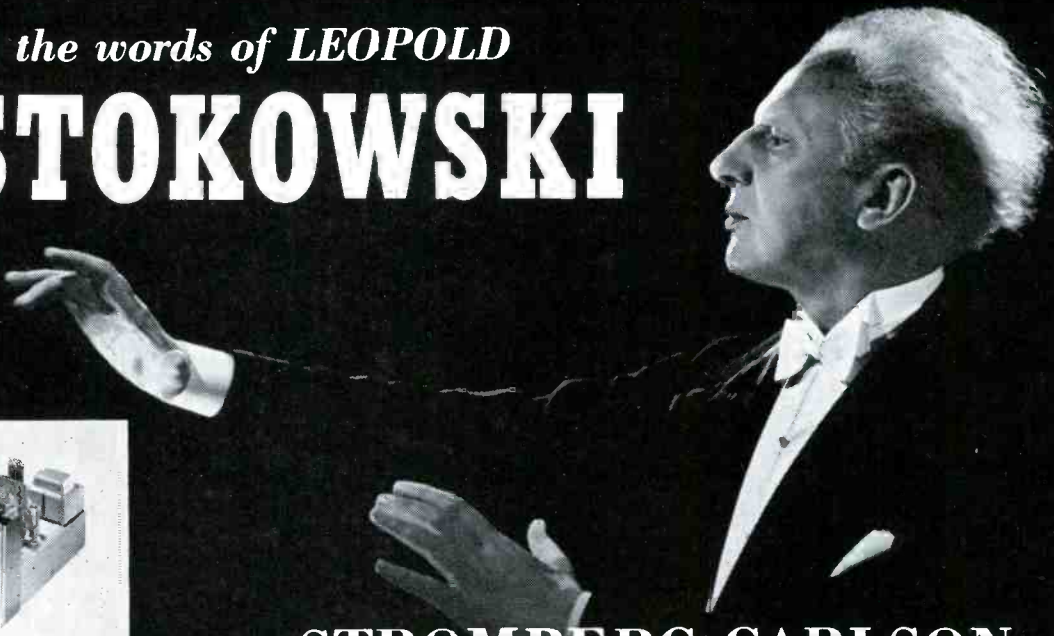
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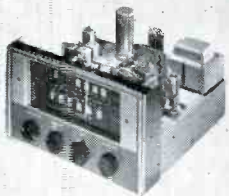
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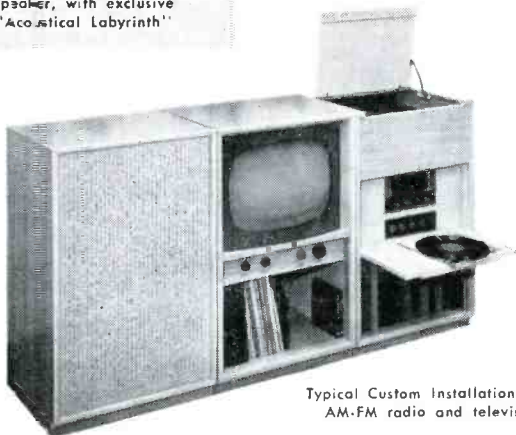
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## BIAMPLIFIER SYSTEM

*Continued from page 87*

filter. The output of one amplifier ran to the woofer; the output of the other was fed the 12-in.-and-tweeter setup.

Switching back and forth produced a subtle but distinct difference in listening pleasure. The low frequencies seemed a little more pure and less obscured, the middles and highs cleaner. The overall effect was that we had moved one step forward toward exact reproduction of the music as inscribed on the phonograph disk. There was a definite improvement in sound over a considerably better than average single amplifier system with a carefully designed dividing network and well balanced speakers. But we hesitate to claim that the improvement was sufficiently marked to warrant purchase of a new hi-fi amplifier—except for the most critical.

The advantages of the filter and of the biamplifier system were much more apparent in other ways. For example, we tried a combination of a moderately efficient woofer with a highly efficient 12-in. speaker. With a single amplifier system, the power going into the efficient 12-in. mid-frequency speaker had to be cut drastically by use of the level control in its voice coil circuit. The sound then seemed thin and restricted in dynamic range when compared with tests utilizing for the mid-frequencies a speaker identical with the moderate-efficiency woofer.

When the filter network was used, with separate amplifiers feeding the woofer and the high-efficiency 12-in. mid-frequency speaker, no such "thinning" effect was noticed. It was possible to match the volume output of the woofer and the mid-frequency speaker by adjustment of the volume controls on the filter network; the effect was akin to turning down the volume on a single amplifier, single speaker system, rather than forcibly restraining the speaker.

Another advantage of the biamplifier system is that of matching speakers having different voice coil impedances. For instance, if we were to try to use a 16 and an 8-ohm speaker with a dividing network and a single amplifier, there will have to be mismatch somewhere. The dividing network will have to be designed for one impedance. With a biamplifier system, the 16-ohm speaker would be connected to the 16-ohm output taps on its amplifier, and the 8-ohm taps used for the corresponding speaker on the second amplifier. Each amplifier and speaker would operate under optimum conditions. This is an important advantage, particularly for those who want to combine 4-ohm and 16-ohm speakers. Such mismatch is considered "intolerable" for a dividing network (two to one is acceptable, by customary standards). In a biamplifier system, there would be no problem.

Just as differences in speaker efficiencies can be balanced easily with the volume controls on the filter network, so too differences of gain in amplifiers can be equalized. We tried pairing a low gain amplifier with a high gain unit; no problem.

There is no doubt, the biamplifier system is a luxury system. It is a touch of refinement which may be considered superfluous.

*Continued on page 96*





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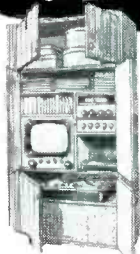
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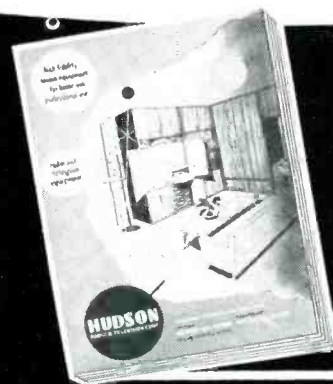
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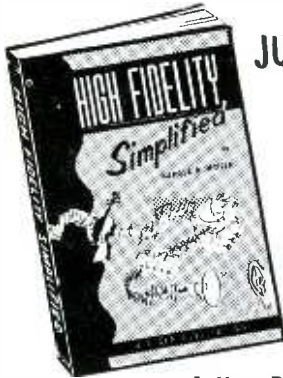
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Should Know!



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SIMPLIFIED**  
by  
Harold D. Weiler

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**HIGH FIDELITY SIMPLIFIED** is written for those who now own, intend to purchase or improve a high fidelity music system. It is the complete story of high fidelity from the point of origin, through the tuner, into the amplifier, and then into the loudspeaker. The author provides a thorough explanation of the characteristics required for high fidelity reproduction.

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**CHAPTER HEADINGS:**

- |   |                                      |
|---|--------------------------------------|
| 1—THE HOW, WHAT, WHY AND WHERE OF HIGH FIDELITY | 7—THE AMPLIFIER                      |
| 2—SOUND!  | 8—THE AMPLIFIER PART 2               |
| 3—ACOUSTICS, ELECTRONICS AND MUS.C!             | 9—THE RECORD CHANGER                 |
| 4—THE SIMPLE LOUDSPEAKER                        | 10—THE RECORD PLAYER                 |
| 5—THE HIGH-FIDELITY LOUDSPEAKER                 | 11—THE TUNER                         |
| 6—LOUDSPEAKER ENCLOSURES                        | 12—THE COMPLETE HIGH-FIDELITY SYSTEM |
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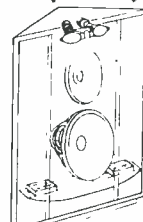
NET  
**\$26.46**



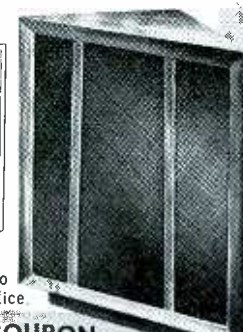
### UNIVERSITY MODEL 4410 CROSSOVER NETWORK

600 cps crossover. Genuine L/C filter effectively blocks "highs" from entering woofer. Provides cleaner reproduction. Complete with variable attenuator to balance high and low frequencies. Input impedance 6-12 ohms. NET **\$20.58**  
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What causes damage to a record? One play with a worn needle is only the beginning . . . when you can hear it, the record is already ruined.

How fast do needles start to wear and damage records? The facts—an osmium (precious metal) needle gives about 25 safe plays. A sapphire gives about 50 safe plays. A diamond, giving thousands of safe plays, is 90 times more durable than sapphire. Yet a Duotone diamond costs but one-ninth the price of 90 sapphires. This means true economy for you . . . lasting protection for your records. Remember, whatever you use . . . there is no such thing as a permanent needle. And when you think of needles . . . think of Duotone whose reputation for quality is based on performance. Duotone has the correct replacement needle for any record player . . . at your dealers now.

**DUOTONE**  
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## THE BIAMPLIFIER SYSTEM

Continued from page 92

But many of us have an extra amplifier lying around . . . put it to use in a biampifier set-up! It's likely to be well worth the trouble.

TABLE I

Crossover Frequency	Capacitor Values, Microfarads			
	C2	C3	C5	C6
75	.138	.0276	.326	.0652
125	.083	.0165	.196	.0391
200	.0517	.0103	.122	.0244
300	.0345	.0069	.0815	.0163
400	.0259	.00518	.0611	.0122
500	.0207	.00414	.0489	.00978
600	.0172	.00345	.0407	.00815
700	.0148	.00296	.0349	.00698
800	.0129	.00295	.0306	.00611
900	.0115	.0023	.0272	.00543
1000	.0103	.00207	.0245	.00489

TABLE II

### RESISTORS

- R1, R4 — 470K, ½ watt, 20%
- R2, R5 — 2.2 K, ½ watt, 20%
- R3 — 47 K, 1 watt, 20%
- R6, R9 — 10 K, ½ watt. Tolerance — 1% preferred, 5% max.
- R7, R10 — 50 K, ½ watt. Tolerance — 1% preferred, 5% max.
- R8, R11 — 500 K, potentiometer, audio taper
- R12 — 15 K, 10 watts.

### CAPACITORS

- C1, C4 — .1 mfd., 400 volts, paper, 20%
- C2, C3, C5, C6 — see table and text
- C7 — .01 mfd., 400 volts, paper, 20%
- C8 — 16 mfd., 600 volts, electrolytic
- C9 — 40 mfd., 450 volts, electrolytic

### TUBES

- 1 — 6SN7GT
- 1 — 5W4GT

### TRANSFORMER

- UTC R-110, Stancor P-6010, or equivalent.
- Secondary winding requirements: 5 volts at 1.5 amperes minimum; 600 to 650 volts, center-tapped, at 25 milliamperes DC minimum; 6.3 volts, center-tapped, at 1 ampere minimum

### MISCELLANEOUS

- 3 — RCA phono receptacles
- 2 — octal tube sockets
- 2 — potentiometer control knobs
- 1 — chassis, approximately 5 by 9½ by 2 ins.
- 1 — chassis-mounted fuse receptacle and 1-ampere fuse
- 4 — 4-lug terminal strips, foot-mounted
- Machine screws and nuts — hookup wire — AC cord

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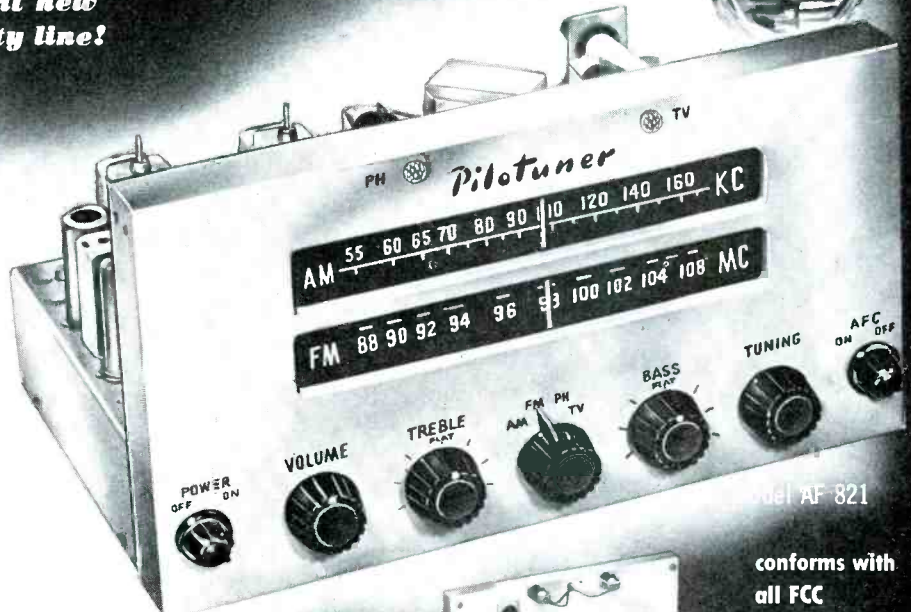
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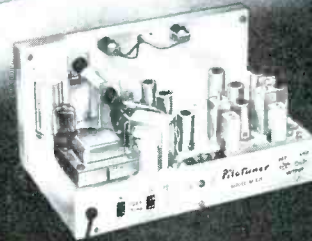
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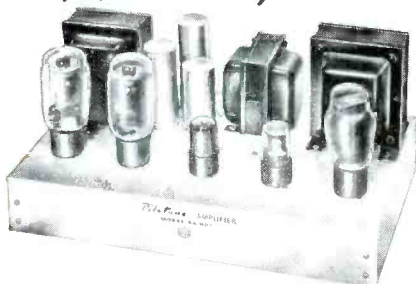


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Superb new amplifier with full Williamson circuit. Constructed in accordance with rigid Pilot specifications. Contains 4 amplifier tubes, 1 rectifier tube. Power output, 10 watts. Total harmonic distortion, less than .1% at 10 watts output. Sensitivity, 1.5 volts RMS input for rated output; input resistance 470,000 ohms. Speaker output, 8 and 16 ohms. Front Pilot light; on-and-off switch. Hum and noise level 80 db. below full rated output. KT 66 English Tubes. Dimensions: 14" wide; 7" deep; 7½" high.

A luxury instrument, priced at **\$99.50**

*High Fidelity* **PILOTONE Pre-Amplifier**



Model PA-911

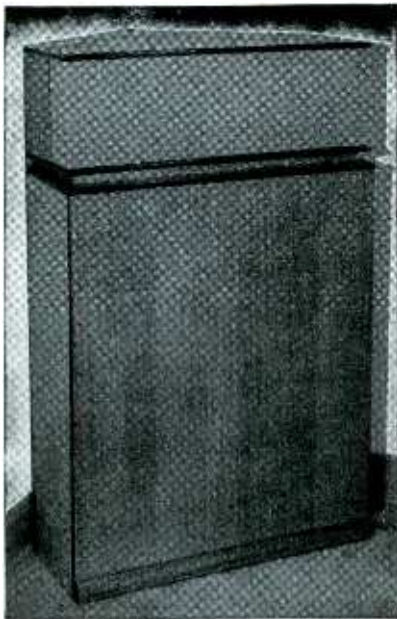
A companion unit for PILOTONE AMPLIFIER Model AA 901. Selector switch allows quick choice of Auxiliary, TV, Radio or Phono inputs. Three positions of switch for phono input give proper compensation for records made to AES, NAB and foreign standards. Seven input jacks on back permit quick connection of various types of signal. Separate microphone input channel permits voice to be superimposed on radio, TV or phonograph. 12" long x 5½" x 5½".

An exceptional "buy" at **\$29.95**

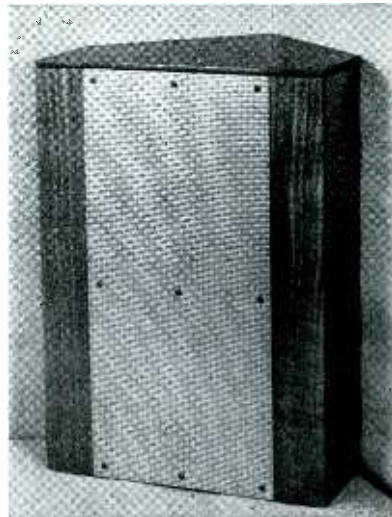
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Write for circular HF-1 describing these superb PILOT High Fidelity Instruments in complete detail.

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## READERS' FORUM

*Continued from page 19*

manipulation, handling each record (except the middle one) twice to play the work?

b) Why Don't They: Issue long-playing records with different colored labels on each side, so that the owners can tell at a glance whether they are playing side A or side B, without close scrutiny of the label?

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*William D. Diemer*

Chicago 37, Illinois

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SIR:

The current article on care of LP records, makes no mention of the stuff in the little bottles, for sale hereabouts, for rubbing on records, and magically removing all static electricity, dust, etc.

My experience is that it does work, and makes for a very quiet-playing record. But, as it is all a mystery what is in the bottle, whether just milky dish water, or some magic chemical, I am still skeptical. I should not want to put anything on the records which might be fine at first but turn gummy or something later.

If it is worth while, then the manufacturers ought to give us records already treated, as the camera folks give us coated lenses.

*W. R. Augur*

New York, N. Y.

SIR:

The United States mails work wondrous slow, but they have finally disgorged my first three issues of HIGH-FIDELITY. My congratulations, and a long life to you!

Since these magazines arrived, I've spent lots of time mentally revising my rig for that far distant day when I get back to Texas, and regretting not taking the 3-year offer. Don't forget to bill me for renewals for I don't want to miss an issue.

As one gentle suggestion, how about doubly wrapping the issues for overseas. Between Great Barrington and Japan mine got pretty beat up.

Again congratulations and add me to your list of satisfied readers.

*1/Lt. Robert R. Jackson USAF (MC)*

**How are copies arriving now? We're on our third wrapper design — in an effort to outwit the muscle-men in the post office.**

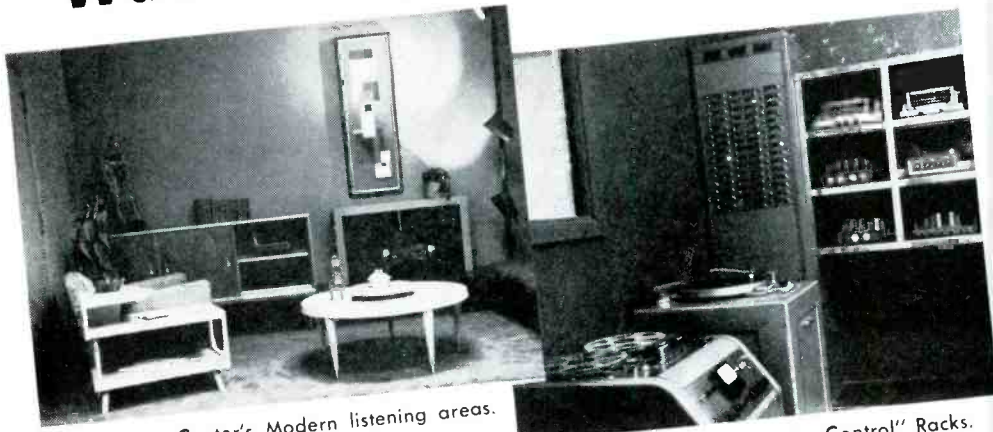
SIR:

I would like to call to your attention the existence of the Louisville Audio Society, for we are proud of our organization which, though it has been in existence for only 6 months, has had a very interesting life. Our membership runs the gamut from broadcasters to music hobbyists. The

*Continued on page 100*



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Take for instance, the recording of "South Pacific" (Columbia) — an LP 33 $\frac{1}{3}$  rpm recording; one side contains half the score of this musical — and the other side contains the other half. Only with the MARKEL Playmaster can you hear *both* sides of this recording — without getting up and turning the record over! The conventional automatic drop record changer *cannot* play this record automatically!

And this same problem of playing both sides in sequence *without interruption* — without getting up — exists with practically all 33 $\frac{1}{3}$  rpm recordings — regardless of whether they are RCA Victor, Columbia, Decca, London ffrr or any other of the famous labels.

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Now you can enjoy true concert clarity and realism in your own home . . . hear complete symphonies and operas *without annoying interruptions to turn and restack records* . . . and with each note clean and brilliant, each instrument in full natural voice!

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Extremely low distortion over the entire frequency range (40 to 15,000 cycles) . . . concert hall brilliance even at reduced volume.
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The Playmaster easily fits into any conversion or modernization you may have in mind. Whether you wish your changer to play through your television set or replace the unit now in your radio-phonograph or plan to build a new record recording system, there is a Playmaster to suit your needs. No special tools are required to convert. Just plug in.

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**READERS' FORUM**

*Continued from page 98*

monthly meetings are well attended and have featured many talks, films, and demonstrations including an excellent demonstration on binaural tape recording of the Louisville Orchestra and Capel.

We invite any visiting hobbyists to join us, and we welcome as members anyone within easy travelling distance. The meetings are held the first Friday in every month; the time and place may be ascertained by contacting me by card or phone.

*David Kling*

Louisville, Kentucky

SIR:

San Antonio's high fidelity organization, the "Audiophiles" came into being March 29, 1952, at the home of Mr. Robert R. Culmer. The first name chosen, the "High Fidelity Music Reproduction Club", was changed to "Audiophiles", due to criticism of its length.

Mr. Culmer, the president, has a thirty minute classical record program on Sunday mornings on 50 kilowatt NBC outlet WOAI. KITE, an FM station, has asked for a list of members, and is requesting that we make suggestions as regards programming.

A local newspaper columnist has given us a plug; we are hoping to have a feature in the Sunday magazine section of one of the papers. We are inviting new members, but the organization has not exactly been thrown open to the general public, as we rather want people who have a reasonable taste in music, and want their music reproduced as faithfully as possible.

We would like to contact other such organizations with the idea of being of mutual aid as regards programs and projects, and also with the thought of forming a national organization of affiliated clubs.

*Bill Case*

San Antonio, Texas

SIR:

I should like to see more in your magazine about the disparity in fidelity between domestic and foreign recordings mentioned in Geoffrey Sharpe's letter in the Spring issue. With all our new-found improvement in recording and reproducing, have we still only just approached the long-standing high-quality of European 78-rpm. discs, as implied?

*Karl F. Ockert*

Roselle, N. J.

We sent Mr. Sharpe some samples of the best work being done over here, and are looking forward to a report from him.

SIR:

I am interested in locating a firm which is outstanding for its quality of workmanship in making recordings, both the masters and stampings. I thought perhaps you could supply me with such information. If you are able to do this, please send only the names and addresses of firms in and around

*Continued on page 102*



# AT HARVEY You can Hear Them All and Choose the Finest



## THE NEW JENSEN TRI-PLEX 3-Way Reproducer System

The result of exhaustive research to obtain the ideal system. The Tri-Plex consists of the P15-LL 'woofer', the A-201 mid-frequency driver and horn, the RP-302 'super-tweeter', and crossovers, all housed in a handsome, solidly constructed enclosure which provides folded-horn back loading for the 'woofer,' and is designed for either wall or corner placement. Frequency

range: 30-18000 cps. Power Handling: 35 watts. Impedance: 16 ohms. Dimensions: 38 1/4" h. x 25 1/2" w. x 18 3/4" d.

ST-903 — Mahogany .....\$292.15  
ST-902 — Blande Korina ..... 299.29

## McINTOSH

Model C104

### PHONO PREAMPLIFIER and EQUALIZER



An extremely flexible unit designed for the most discriminating and acute listener. Provided with five inputs and selector switch, it accommodates crystal pickup, FM-AM tuner, low level microphone, as well as high level and low level magnetic pickups. A 3-position switch selects the correct compensation to match the three recording characteristics most often used. In addition, the C104 features treble and bass boost and attenuation, each with separate controls. Connectors are furnished for obtaining power from the main amplifier. A master power switch and volume control completes the attractive brown hometone panel. Supplied complete with tubes and connectors.

In Mahogany-finish Cabinet .....\$57.50  
Less Cabinet ..... 49.50

## NEW TECH-MASTER HIGH FIDELITY AMPLIFIER KITS

### TECH-MASTER TM-15A Ultra-Linear Williamson

The famous Williamson circuit, uniquely modified to provide equally high fidelity performance at considerably increased power output. A specially wound Peerless Output Transformer and other top quality components are used throughout. Undistorted power output is 15 watts. Frequency response at 5 watts is  $\pm 1$  db., 8 to 80,000 cps. Kit is complete with pre-punched chassis, transformers, tubes, and all other necessary parts and components, together with detailed wiring and assembly instructions.



\$49.95

### TECH-MASTER TM-15P Preamplifier Kit

A versatile phono-preamp and tone control providing utmost flexibility to any sound system. Input selector switch has four channels for: FM/AM or TV tuner, crystal pickup or variable reluctance type, tape recorder, or other signal source. Three-position phono-equalizer switch permits selection of characteristics to match recordings. Has independent bass and treble, attenuation and boost controls. Power obtained from main amplifier. Kit is furnished complete with pre-punched chassis with novel imprint of pictorial diagram for easy assembly, together with tubes, cabinet, components, and detailed instructions.



\$19.95

## HI-FI PICKUP CARTRIDGES

High quality record reproduction begins with the cartridge. Harvey carries a complete line to suit the taste and requirements of the most discriminating audio enthusiast.



### AUDAX POLYPHASE

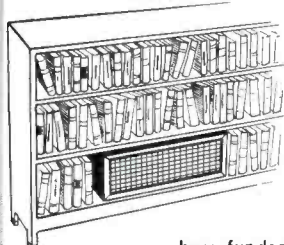
DL-6 "Chromatic"—.001" Diamond and .003" Sapphire Styli .....\$41.70  
L-6 Sapphire Styli, .001" and .003" ..... 20.70  
KL-4 Same as L-6, but with higher output (for record changers) ..... 20.70

### G. E. VARIABLE RELUCTANCE

RPX-040 Sapphire .003" for 78 rpm records .....\$5.97  
RPX-041 Sapphire .001" for 45 and 33 1/3 rpm records ..... 5.97  
RPX-050 "Triple Play"—.001" and .003" Sapphire Styli ..... 8.37

### PICKERING

S-140S Sapphire .001" for 45 and 33 1/3 rpm records .....\$15.00  
D-140S Same as S-140S, but with Diamond Stylus ..... 36.00  
S-120M Sapphire .0027" for 78 rpm records ..... 9.90  
D-120M Same as S-120M, but with .0025 Diamond Stylus ..... 24.90  
.001" for 33 1/3 & 45 rpm  
.003" & .0025" for 78 rpm



## R-J SPEAKER ENCLOSURE BOOKSHELF MODEL FOR 8 INCH SPEAKER

The now famous R-J cabinet developed to new dimensions. Small enough to permit it to be inconspicuously mounted on a bookcase shelf. Reproduces amazingly clean, smooth,

bass fundamentals while permitting direct radiation of high frequencies. An ideal system

where space is at a premium or as an extension reproducer in an extra room. May be finished to match the decor.

Dimensions: 11" h. x 10" d. x 23 1/2" l.

S-8-U — (Single-shelf height) .....\$24.50

## A HARVEY SPECIAL

## BASS REFLEX SPEAKER ENCLOSURES

For 12 and 15 Inch Speakers



Dimensions—  
Height; 36" Width; 24"  
Depth; 19"

Blonde or Mahogany

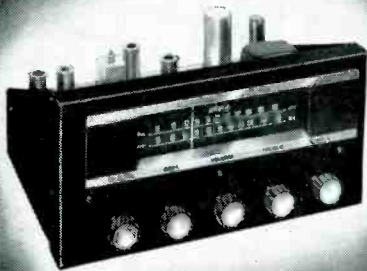
SPECIAL \$43.75

VISIT HARVEY'S AUDIOTORIUM—Come in and visit our new Sound Department ... all these items and many more on working display at all times.

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**HARVEY**  
RADIO COMPANY, INC.  
103 West 43rd St., New York 18, N. Y.

NOTE: In view of the rapidly changing price situation in both complete units and components we wish to emphasize that all prices are subject to change without notice, and are Net, F.O.B., N.Y.C.

The C-800 is here  
to bring you new  
record performance!



the new  
**craftsmen 800**  
FM-AM TUNER

with built-in phono  
preamplifier and  
record equalizer

Now—Craftsmen brings you a tuner that matches all your finest records... is setting new records for versatility, too. The C-800 is further evidence that Craftsmen leadership in high fidelity is something you can put your finger on, something you can hear.

- Front-panel-selected equalization for AES, LP or EUROpean recording characteristics. Inverse feedback compensated dual-triode phono preamp for correct turnover and roll-off characteristics.
- Improved AM reception. Wider bandwidth for better fidelity, and sharper IF bandpass "skirts" for greater selectivity.
- Double-shadow tuning eye and AFC (no drift) on FM simplifies tuning. Front-panel AFC cut-out for tuning weak stations.
- Efficient new layout. Bottom plate, completely shielded chassis minimize oscillator radiation, assure tuner isolation.
- Cathode follower audio output for remote installations; 2 volts at less than 1/2% dist. Detector output also has cathode follower for recording applications.
- Bass and treble controls continuously variable from attenuation to boost—flat position clearly marked. Selector positions: FM, FM with AFC, AM, TV, LP, AES, EUR, and SPare.
- Mahogany-finish wood cabinet available.

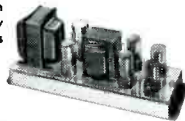
**HIGH FIDELITY — LOW COST!** C-400 audio amplifier offers 10 watts ± 1 db., 15—20,000 cps., less than 1% distortion. New streamlined chassis design.

Write today for information

THE RADIO

**craftsmen** INC.

Dept. H-11, 4401 N. Ravenswood Ave.  
Chicago 40, Ill.



READERS' FORUM

Continued from page 100

Springfield, Illinois, and Indianapolis, Indiana.

Thank you very much.

Jack D. Campbell

Danville, Illinois.

We have had a fine response to our request for names of good carpenters and cabinet-makers. Can we do "as well" on this? What experiences have readers had with companies which make recordings?

SIR:

I received my fifth issue of your publication the other day and I find each edition successively more interesting.

I have familiarized the majority of personnel on the base with a degree of fidelity they did not know existed today. Many have learned to appreciate classics when they never cared for them before, since they could hear the music with all the overtones present rather than, as they had heard it before, with only fundamentals. The dynamic range possible was a surprise to those who were used to hearing the compressed range obtainable through AM radio and low fidelity systems.

The interest in your Air Coupler has increased since I first installed it. People have to get used to not hearing the juke-box one-note bass with no extended high frequency response. The one-note bass they are used to hearing is missed since the bass from the Air Coupler is more evenly distributed over the range. The ears really turn, however, when I play the 32-ft. pedal note in the Poulenc organ recording by Columbia.

One fact I have had trouble educating people to is the fact that high fidelity is not an effort to reproduce what we think the orchestra should sound like but, as nearly as possible, to reproduce exactly the sound source, whether it be FM, tape or disc, no matter how bad that source may be. As these sources improve, true reproduction will more nearly be approached without change in the reproducing equipment.

A few years ago before true high fidelity tape recorders were within the reach of the average home enthusiast, records would have been remarkable. Now, however, tape has so much less distortion, is almost completely free of any extraneous noises, regardless of number of playings, and has an added feature of a signal almost impossible to ruin as a complete unit. To explain the last statement: discs, no matter how few times they are played, are physically deformed at each playing. I recorded (tape) a copy of a new noise-free LP, played the record five times and re-recorded it. I spliced these two together and was surprised at the increased surface noise in even five playings. Discs are capable of being damaged a few grooves at a time or scratched as a unit, both sides at one time. Tape, however, can only be ruined as a unit when placed in a very strong magnetic field. Tape is not particularly in

Continued on page 104



We rest our case  
on evidence  
you can hear



Words can't prove the performance of this superb High Fidelity Tuner.

Neither can witnesses. When it's time for

a decision, your judgement of the CRAFTSMEN 10 is based on one thing: evidence you hear with your own ears. Listen—and the conclusive evidence of incomparable sensitivity and flexibility will turn your trial into a lifetime of distinctly better listening.

the  
**craftsmen 10**  
high fidelity  
FM-AM tuner

- Two cathode followers furnish both audio output and detector output for remote installations.
- Built-in pre-amplifier, compensated for variable reluctance pick-ups.
- Automatic Frequency Control entirely eliminates drift, simplifies tuning.
- 5 microvolts sensitivity on both FM and AM.
- 10 kc filter on AM eliminates inter-station squeal.
- Bass and treble tone controls for boost, cut, or 20-20,000 cycle flat response.

JUDGE THE C-500 TOO!  
Williamson all-triode circuit—99.99% distortion-free!



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For information, write to:

The radio CRAFTSMEN, Inc.  
Dept. H-11, 4401 N. Ravenswood Ave.,  
Chicago 40, Ill.



# AUDIO-PHILE'S BOOKSHELF

A list of books which will be of interest and value to you, carefully selected from the many publications related to music, records, and sound. Using our Book Service, you can have your choice by return mail. Just send the coupon with your remittance.

**RELAX AND LISTEN:** John Hallstrom, 5¾ x 8½, cloth.

Here is a popular book which provides the average reader with a clear understanding of the basic nature of music, its major forms and their definitions and functions, and an acquaintance with many composers. Included is a comprehensive phonograph record listing, organized with reference to the subject matter of the text.  
No. 88.....\$3.00

**WILLIAMSON AMPLIFIER BOOKLET:** D. T. N. Williamson, 36 pages, 31 illustrations, new edition, paper.

This booklet contains complete design data for constructing this famous high-fidelity amplifier. In this new edition, the author has added a considerable amount of information on tone controls, low pass filters and record compensating circuits.  
No. 94.....\$1.00

## G. A. BRIGGS

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We now have available in good supply these two important books:

**PIANOS, PIANISTS AND SONICS:** 190 pages, 102 illustrations, 5½ x 8½, cloth.

Written in non-technical terms, this book is intended for all music lovers and sound enthusiasts. The complete story of the piano, including history, construction, aids in selection and care, and the relationship between the instrument and sound-recording, reproduction, and room acoustics.

No. 55.....\$2.50

**LOUDSPEAKERS:** 88 pages, 44 illustrations.

Much material has been added in the third edition of this book to provide complete answers to questions on speakers and enclosure designs. It is a thorough treatise, written in non-technical terms.

No. 56.....\$1.25

**THE RECORDING AND REPRODUCTION OF SOUND:** Oliver Read, Second Edition, 805 pages, over 700 illustrations, 6½ x 9¼, cloth.

A complete and authoritative treatment of the entire subject of sound, this book covers all aspects of recording including a complete analysis of recorders, as well as full data on reproduction equipment such as amplifiers, speakers, microphones and phonograph equipment. Everything that was in the first edition is here in the second, revised, brought up to date, and supplemented by 430 new pages. It is a reference work which is a MUST in the Hi-Fi library.

No. 46.....\$7.95

**WORLD ENCYCLOPEDIA OF RECORDED MUSIC:** F. F. Clough and G. J. Cuming, 890 pages.

"Definitive" is an inadequate description of this compendium of recorded music. This is not light reading; it is the most all-inclusive reference work for libraries and serious record collectors ever published. Every recorded work—78, 45, or 33 ½, U. S. or foreign—is listed in all its versions. Truly encyclopedic.

No. 57.....\$17.50

**MAKE MUSIC LIVE:** Greene, Radcliffe and Scharff, 256 pages, illustrated, 6½ x 10¼, cloth.

A practical guide for planning, assembling and installing high-fidelity home music systems. This book includes detailed explanations on how to buy and select components, complete installation instructions for equipment, data on types of woods, woodworking joints, hardware specifications, finishes and methods of concealing elements in existing furniture.

No. 70.....\$4.50

**SAT. REV. HOME BOOK OF MUSIC, etc.:** Canby, Burke, and Kolodin. 308 pages, 25 illus., 6¼ x 9¼, cloth.

Three top experts tell the story of music, its recording and its reproduction in the home. One of the most authoritative, helpful, and widely discussed books yet published for the music lover and high fidelity enthusiasts. In addition to a detailed discussion of the theory and practice of sound recording and reproduction, specific suggestions are given for selection of high fidelity components.

No. 98.....\$4.50

**SELECTIVE RECORD GUIDE:** Moses Smith, 5½ x 8½, cloth.

This book is a truly selective and practical record guide, emphasizing economy and quality of performance and recording. The author supplies a running commentary on the music and on composers and their place in the historical scene.

No. 85.....\$4.50

**LISTENING TO MUSIC CREATIVELY:** Edwin J. Stringham, 479 pages, illustrated, cloth.

This book presents in an absorbing and ingenious way not only the history of music but a method by which the untrained listener can find pleasure and meaning in music. Dr. Stringham covers all the forms of music, analyzing simply and clearly a specific example of each type. In so doing, he furnishes an excellent guide for building a well-integrated record collection.

No. 89.....\$6.00

**ACOUSTICS OF MUSIC:** Wilmer T. Bartholomew, 242 pages, illustrated, cloth.

This book fills the need for clarifying the fundamentals of acoustics, and gives to music lovers, in readable form, the materials for understanding acoustical problems of composition, performance, teaching and appreciation. The various types of sound—percussive, vibratory, etc., and the technicalities of sound origination, are also discussed in detail.

No. 90.....\$5.00

**MUSICAL ENGINEERING:** Harry F. Olson, 357 pages, well illustrated with 303 figures and 28 tables, 6 x 9¼, cloth.

Musical Engineering will serve as an excellent reference book for those interested in every aspect of music, whether student, teacher, musician, engineer or layman. Acoustics, sound reproduction and musical instruments, with facts on their construction, range and characteristics, are some of the many phases of musical engineering now clearly explained and interrelated in this book.

No. 95.....\$6.50

**WHAT TO LISTEN FOR IN MUSIC:** Aaron Copland, 281 pages, 5½ x 8.

The art of listening to music discussed by one of our best known contemporary American composers. This work presents a fresh conception of what we hear, and should hear, when listening to any piece of music. It is an invaluable aid to a more complete enjoyment of music.

No. 76.....\$4.00

Book Department  
HIGH-FIDELITY Magazine  
Great Barrington, Mass.

I enclose \$\_\_\_\_\_ for which please send me, postpaid, the books indicated by the circled numbers below. (No C.O.D.'s, please.)

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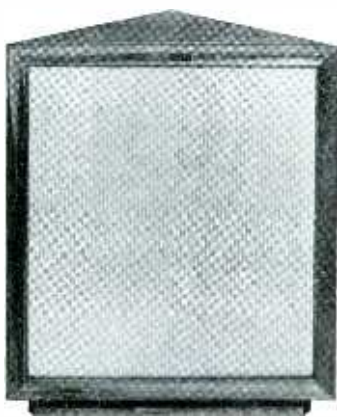
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*Super Horn*  
LOUDSPEAKER ENCLOSURES



**CLEANNES** . . . reproduction without resonant peaks or distortion . . . is the keynote of SUPER-HORN engineering. Full bass down to 40 cps. is accurately reproduced by an exponential horn. Clear highs are radiated directly from the front of the speaker with no tuned cavities or ports to produce false bass or "boom".

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**BLOND** . . . 12" . . . \$80—15" . . . \$85  
**MAHOGANY** 12" . . . \$75—15" . . . \$80  
All Prices Net

WRITE FOR TECHNICAL LITERATURE

**GATELY**  
DEVELOPMENT LABORATORY  
CLIFTON HEIGHTS, PA.

## READERS' FORUM

*Continued from page 102*

danger of short period erasures since this can only be accomplished unknowingly by "knob turners", an animal of which there are all too many of the species. I trust these people so much I am putting a key-operated AC switch on my recorder!

I have now fallen in the category of the type mentioned in one of your previous issues: one who wonders if he could have gotten a component that would do the job better. When I first played *Pictures at an Exhibition*, I was surprised at the low amount of distortion and the dynamic range on the disc. Now, however, after hearing it four times I am impressed no more. I want something better. The manufacturers have finally admitted they could do better. How much better remains to be seen.

*E. P. Malone*

Patrick Air Force Base, Florida

Reader Malone's method of checking record wear is interesting. Any others?

SIR:

You will be pleased to know that in our business of custom cabinets, we have noted a vast increase in the knowledge and desire of the customers to obtain cabinets with proper acoustical space and construction for their equipment. No doubt, the articles you have printed on this subject have been beneficial.

Whereas customers used to limit speaker space to the exterior appearance of the cabinet, they now appreciate the need for ample space and proper construction. This eliminates the educational headache we used to have on each cabinet. The customers also benefit by getting far superior results from their equipment. An interesting example happened when we built a cabinet for a musician who had his hi-fi components in use for several months without a cabinet. After installing the equipment, he heard a sustained bass violin note and drum roll on his favorite record although these notes were not audible without the cabinet.

*A. J. Crawford*

New York, N. Y.

SIR:

I have read several issues of HIGH-FIDELITY and am now ruefully trying to figure out if it wouldn't be more practical to move the rest of the family into a large closet, and to move the records and equipment into the master bedroom.

*Jay R. Berkeley*

New York N. Y.

SIR:

I would like to thank you very much for sending me the summer issue of HIGH-FIDELITY. Your magazine is excellent. I have enjoyed my subscription. Due to the fact we are presently in the process of purchasing a new home, we are temporarily cutting all luxury expenses. Therefore, I will not renew my subscription until some time

*Continued on page 119*

Resco announces, with great pride, the opening of their new, ultra-modern

HIGH  
FIDELITY  
SOUND  
STUDIO

Our new high fidelity sound studio marks a new era in the art of displaying and demonstrating high fidelity equipment. Here in RESCO's new studio are such innovations as . . . custom built switching console permitting demonstrations of thousands of combinations . . . room size acoustics . . . banks of identical baffles for speaker comparison . . . complete packaged sound systems . . . and many other advanced features. You're cordially invited to come in and inspect our new, ultra-modern facilities.

BUY WITH  
CONFIDENCE  
BY MAIL . . .

Your purchases of high fidelity equipment by mail must be a completely satisfactory experience to measure up to our high standards. Every item is checked — exactly as ordered by you. Our sound specialists welcome your inquiries and will immediately reply with the information you want. You can buy by mail with the full assurance that RESCO will do everything humanly possible to give you fast, efficient service.

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SOUND STUDIO

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Send for our latest high fidelity buying guide



## TESTED IN THE HOME

*Continued from page 82*

Fortunately, equipment manufacturers have become aware of the plight of the audiophile who wants attractiveness as well as utility, who wants a panel to match his furniture or cabinetry, and would like to affix thereto a neat escutcheon with close-fitting knobs. One answer has been to provide escutcheons which are attached to the main chassis with screws or bolts long enough to go through most any panel. But there may be a snag here: the equipment is attached to the main chassis, so that, to take care of thick panels, long shafts must be used. Which is fine, until we come to the installation for which 1/8-in. Masonite is used—and then the shafts stick too far out, the knobs don't fit snugly against the escutcheon. There are two answers here: use a false panel in back of the real panel, to hold the chassis away from the real panel, or get out the hack-saw and hack off the unneeded length of shaft.

The entire Newcomb line features one of the neatest solutions to this problem which we have seen. The remote control unit of the Classic 25 (the model we "Tested in the Home") has two chassis plus an escutcheon. One chassis is the working chassis, to which the controls are attached. This is encased in a beautiful brushed-bronze box, which might be called the decorative chassis. To the decorative chassis, in turn, is attached the escutcheon. The working chassis is attached to the decorative chassis or box by four bolts . . . a box-within-a-box arrangement. The working chassis can be slid back and forth inside the decorative chassis.

To attach the Newcomb control unit to a panel, the knobs are pulled off, the escutcheon removed, and the front of the decorative chassis attached to the back of the panel. The escutcheon is attached to the front of the new panel, the knobs are replaced, and then the working chassis—to which, remember, the shafts and whatnot are attached—is slid back until the knobs clear the escutcheon just the right amount. It's hard to describe, but it is simple to do, neat and effective.

The adjustable knob-and-panel arrangement was the second mechanical feature which caught our attention last May. It is used on all eight Newcomb amplifiers, on the ones without the remote control unit as well as those with.

### Tube Balance Control

Although it may seem that the only things we noted about the Newcomb line were mechanical, there are some original electrical ideas. We are not going into the technical details here of balancing output tubes, but be it said that all good amplifiers use a pair of tubes in the output, and to operate correctly, they must be, literally, paired. This is usually done with electronic testing equipment, seldom if ever found in the average home. These output tubes, be they 6L6's, 807's, KT-66's, or whatever, age and deteriorate and may well collapse completely after long use. They do not age

*Continued on page 106*

## from England - the only Authorized WILLIAMSON AMPLIFIER

The excellent performance of the many adaptations of the Williamson Amplifier attest to its basic qualities for high-fidelity reproduction.

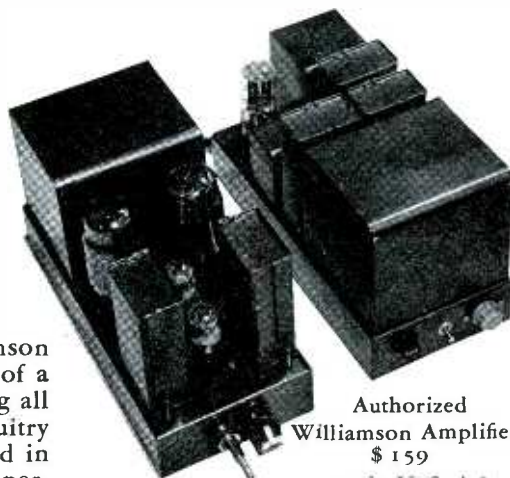
None, however, was authorized by the designer D. T. N. Williamson, nor approved as delivering the full performance of which his own design is capable.

Recently, however, Mr. Williamson arranged for the manufacture of a 15-watt amplifier incorporating all his latest refinements in circuitry and components, and produced in England under his personal supervision. Each of these amplifiers bears his signature. British Radio Electronics, Ltd., is importing these Authorized Williamson Amplifiers, and is now making deliveries to U. S. dealers. If you are planning to buy an amplifier, we suggest that you first write to the address below for literature on the Authorized Williamson design illustrated. A new companion control and preamplifier unit will be coming in soon.

*\*Prices for Canada and South & Central America on request.*

### British Radio Electronics, Ltd.

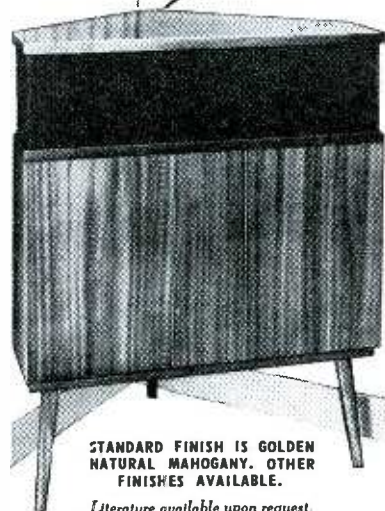
1 Thomas Circle, Washington 5, D. C. Phone, METropolitan 6564



Authorized  
Williamson Amplifier  
\$ 159  
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DEALER INQUIRIES INVITED

## A NEW CORNER SPEAKER

### The Brociner MODEL 4 HORN



STANDARD FINISH IS GOLDEN  
NATURAL MAHOGANY. OTHER  
FINISHES AVAILABLE.

Literature available upon request.

**BROCINER**  
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1546 SECOND AVENUE • NEW YORK 28, N. Y.

● Performance of unrivalled purity and smoothness over the entire audible range! Powered by a remarkable twin-cone driver unit designed expressly for horn loading, this dual horn achieves naturalness that simply cannot be put into words or expressed in terms of specifications. MODERATE IN SIZE AS WELL AS PRICE, it lends itself to graceful, attractive, decorative treatment that renders it a complement to the finest decor.

Hear the Brociner Model 4 Horn. You will agree that its unobtrusive naturalness places it in a class by itself

The middle range and high treble tones are dispersed uniformly by a reflector horn of unique design. In the bass range, the driver unit is efficiently coupled to the air by means of a folded horn utilizing the corner of the room as a prolongation of the horn structure.

### NEW Model A-100-CA-2

A complete front end for basic power amplifiers. Self-powered. Available separately or with Model UL-1 20-watt Ultra-Linear Power Amplifier.



MANUFACTURERS OF PHONOGRAPH PREAMPLIFIER-EQUALIZERS • ULTRA-LINEAR POWER AMPLIFIERS • THE TRANSCENDENT HORN-LOADED CORNER REPRODUCER • THE MODEL 4 CORNER REPRODUCER • COMPLETE CUSTOM INSTALLATIONS

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maintains its leadership  
through constant achievement



Model 1401 "just like being there"

Concertone's leadership in the field of high fidelity recording is maintained by constantly improving the quality of the Concertone magnetic tape recorder.

Concertone engineers continually incorporate advancements into the design — thereby keeping consistently ahead of the field. Concertone recorders never become "dated" or outmoded. Now, more than ever before, Concertone is truly the standard of high fidelity performance.

Professional users' net prices begin at \$345.00.

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*the standard of high  
fidelity performance*

Manufactured by  

**Berlant Associates**  
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**BUY A CLARKSTAN RV WIDE-RANGE, HIGH FIDELITY PICKUP AND ACQUIRE PERMANENT AND FAITHFUL REPRODUCTION GUARANTEED FOR LIFE**

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- FEATHERWEIGHT
- FLAT RESPONSE
- HIGH OUTPUT

At any time after the one-year unconditional guarantee you may replace your Clarkstan RV pickup from our revolving inventory stock for a fixed handling charge (present rate only \$4.50 net to you, stylus excluded).

Stylus Guarantee: Workmanship & Materials Only

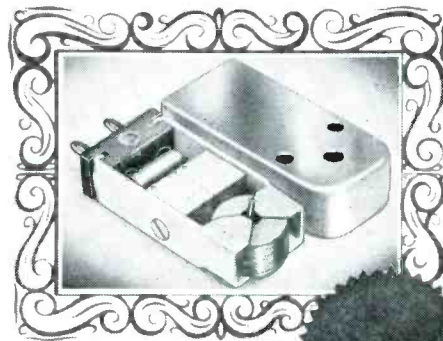
Please send me free literature on the performance characteristics and the lifetime guarantee on the Clarkstan RV Pickup.

**PACIFIC TRANSDUCER CORP.**  
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# CLARKSTAN

PRODUCTS

**PACIFIC TRANSDUCER CORP.**

(Formerly CLARKSTAN CORP.)  
11921 W. PICO BOULEVARD  
LOS ANGELES 64, CALIF., U. S. A.

## TESTED IN THE HOME

*Continued from page 105*

equally, if one gives out and is replaced, the new one is almost certain not to match the old one. But, for optimum results, the two tubes must, like two horses in a team, "pull" equally.

Only one or two amplifiers are constructed so that even the electronic test equipment can be attached, for balance measuring and adjustment, without completely removing the amplifier from its native habitat somewhere in the more inaccessible reaches of the cabinet. As far as we know, Newcomb is the first to make this adjustment so simple that anyone, technical or non-technical in ability, can do it. Simply push a button on the amplifier chassis, and a distinct hum is heard in the speakers. Turn a short shaft with a screwdriver, and the hum increases or decreases. Adjust the control until hum is at a minimum, and that's that.

It is now positively fun to drop a hammer on an output tube. It used to be a catastrophe, calling for a complete dismantlement of equipment and a visit to the local radio repair shop.

### The Rest of the Equipment

We have gone into a long, long discussion about what may be considered details — but sometimes these details are of utmost importance in achieving true satisfaction and enjoyment. Furthermore, among the group of top-quality amplifiers, details may be distinguishing features. Today, our knowledge of sound reproduction has advanced to such a point that, though it may be expensive, but is not difficult to design and manufacture a power amplifier which is "99 44/100%" pure in sound. Far more important is the front end — about which we have already said more than enough in this report.

Sound-wise, the Newcomb Classic 25 is certainly in the top bracket. It is pure, clean, and unadulterated. The frequency response of the power amplifier section is stated to be flat from 10 to 30,000 cycles, and, with the preamplifier and remote control unit attached, flat within  $\pm 1$  db over that range. Distortion is extremely low. Operation is, to all intents and purposes, hum-free. Design is clean, components more than adequate for long life. Nothing has been skimmed — as should be the case with a \$269.50 amplifier.

Let's take a quick look at the top of the amplifier chassis, Fig. 2. At the upper left, between the big transformer and the two tubes, is the button which one pushes to balance the two output tubes (6L6's). The balance control itself is between the tubes and the transformer at the upper right of the chassis.

In the extreme lower right hand corner are six RCA-type phono input jacks. Reading from left to right, we have: tape, TV, radio, crystal, magnetic (high input) and magnetic (low input). Tape, TV, and radio are identical and all feed to the same selector position on the control unit. The next two jacks to the right are for magnetic cartridges. The left hand one is for a high output level cartridge, such as Pick-

*Continued on page 107*



## TESTED IN THE HOME

*Continued from page 106*

ering and Clarkstan. The jack at the extreme right is for low output level cartridges, such as Audak and General Electric.

To the left of this row of six jacks is an octal socket to which is connected the cable from the remote control unit. And to the left of the octal socket is another standard phono jack which is the output to a tape recorder. This output is affected by the position of tone, volume and record equalization controls on the remote control unit.

Just above the six jacks, in the right hand corner of the chassis, are two tubes and between these tubes are, at the left, a level control operating on magnetic and crystal phonograph inputs which can be adjusted with a screw driver to balance the input to that from radio, TV, and tape. To the right of this is a small switch which is marked "magnetic" and "crystal". It controls the input to the phonograph position on the selector switch on the remote control unit.

We found that there was ample gain from the low level magnetic input to handle a Fairchild cartridge without a transformer.

Using a Weathers cartridge was something of a problem. If the AES terminals on the Weathers oscillator unit are connected to one of the three radio inputs (tape, TV or radio), sound and volume level are good. If, however, the Weathers oscillator is connected to the crystal jack on the amplifier chassis, there is much too much bass. This is, of course, also true if the Weathers unit is connected to either of the two magnetic inputs and, furthermore, volume becomes excessive even with the phonograph level control adjusted to almost completely off.

Some audiophiles may feel that the selector switch on the remote control unit should have more than two positions. The Newcomb people have limited the flexibility of this control for two reasons: In the first place, since it is a true remote control unit, the addition of selector positions would have complicated and increased the size of the remote control cable very considerably. In the second place, they believed — and rightly so — that there were very few audiophiles in the world like your Editor, who wants to have tape recorder, FM tuner, television tuner, and phonograph records all going simultaneously. However, on his behalf, it should be said that simultaneous operation of so many sources and quick switching back and forth from one to the other help to keep his mind ever alert. It should also be said that probably Newcomb has the right idea — and certainly the sensible one!

### Summary

The Newcomb Classic 25 is one of the nicest amplifiers that we have worked with in quite a while. As we have said, the sound is of the best. The mechanical features of the remote control unit, the adjustable-panel-and-knob arrangement, and the output tube balancing device, are really important and may indeed be the solu-

*Continued on page 111*

# STEPHENS

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INTRODUCES

*The Finest Amplifier Ever Built*

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- No output transformer
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See...Hear...Compare REK-O-KUT Turntables, Phonographs and Disc Recorders at leading Music Stores, Radio Parts Jobbers and Audio-Visual Dealers...or write for latest catalog.

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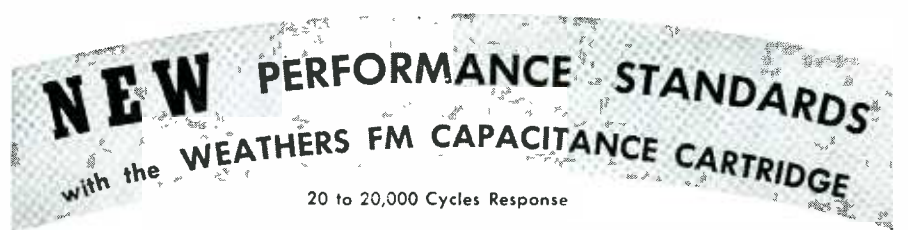
38-01A Queens Blvd., Long Island City, N. Y.

EXPERT DIVISION: 458 Broadway, New York City, U. S. A.  
CANADA: ATLAS RADIO CORP., LTD., 503 King St. W., Toronto 28, Ontario

## Exhibitors at The New York Audio Fair

Below is the list of exhibitors at the 1952 Audio Fair in New York City. Those who were unable to attend the Fair will find it worthwhile to write these companies for their latest catalogues. Also, for the convenience of our readers, we have listed the pages on which these companies advertise in this issue of HIGH-FIDELITY.

COMPANY	PAGE	COMPANY	PAGE
Arco Products Company		Frank L. Capps & Co.	
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R. T. Bozak & Company	118		
British Industries Corp.	2, 3		
Brociner Electronics Laboratory	105		
Brook Electronics, Inc.	126		
Browning Laboratories, Inc.	9		



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Revere Camera Company	12	Station.	

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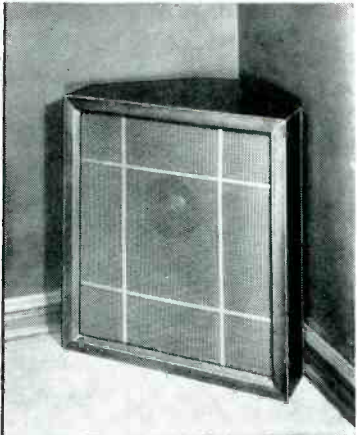


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## V-M tri-o-matic® Record Changers

QUALITY FEATURES INCLUDE:

4-Pole Motor



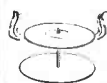
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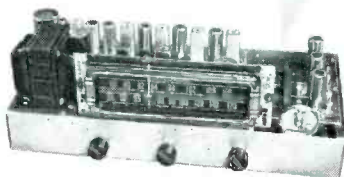
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All Pre-Fab units assembled, wired, tested and aligned at factory. Prices include tubes. Chassis Kit includes all necessary parts, nothing else to buy. Instruction Manual with detailed step-by-step procedure, pictures and schematic diagrams included. Chassis measures 8" x 17" x 2 1/2". Overall, tuner assembled measured 8" x 17" x 6". Expertly engineered for utmost satisfaction.

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Enclosed please find check  money order   
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Amount enclosed \$.....

Name.....

Address.....

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CLIP AND MAIL WITH YOUR ORDER



## TESTED IN THE HOME

*Continued from page 107*

tion to a knotty installation problem. True, prices are high, but one has to pay for really good solutions. As we pointed out in the beginning, the Newcomb line includes amplifiers to fit any pocketbook. The Classic 25 is the top; below is the Classic 15 at \$179.50. Below that is a 15-watt amplifier without remote control for \$99.50 and then come a pair of 12-watt units, with remote control at \$69.50 and without at \$59.50. Still further down the scale are three 10-watt models.

Like its much vaunted sunshine, the Newcomb line should make California well known throughout the Country — although, if a brash easterner may so, we expect a more consistently good performance from Newcomb! — C. F.

## TESTED . . . FAIRCHILD

*Continued from page 83*

design. The system of springs simply expedites the return of the arm from operation in the non-professional zone back into the professional zone. Thus, Fairchild now provides a professional arm for non-professionals.

Incidentally, two further points should be made: the viscous damping fluid is still used, with concomitant benefits to arm damping and arm resonances, and the very neat turret head arrangement for mounting up to three different cartridges has also been kept.

### The Cartridges

No changes have been made in the cartridges, but we thought readers would like to have a look at the interior design, Fig. 2. Note that the Fairchild is a moving coil type of pickup. At the end of the stylus shank is a very fine coil of wire, which wiggles between the magnet pole pieces. Ray Crews, of Fairchild, explained the ad-

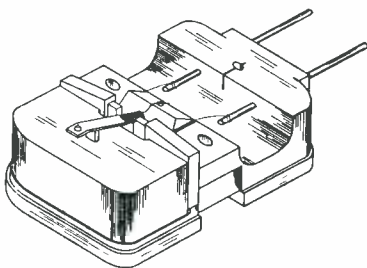


Fig. 2. Anatomy of a phonograph cartridge.

vantages of this design as follows: "In other cartridge types, the coil is fixed in position and does not move with the stylus. Movement of the stylus shifts the position of the magnetic armature. The magnetic flux of the magnet in the armature also shifts, as it is concentrated by the armature. This produces a change in the flux passing through the coil, thus inducing a

*Continued on page 113*

**EASY LOW-COST WAY to own a**

**PROFESSIONAL QUALITY**

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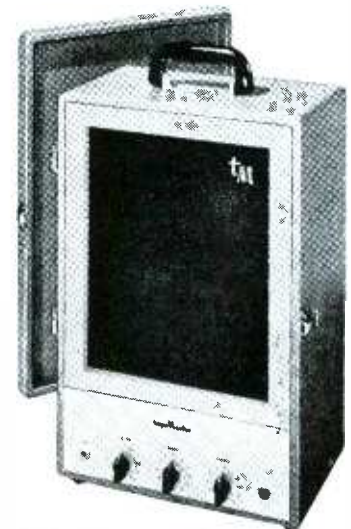
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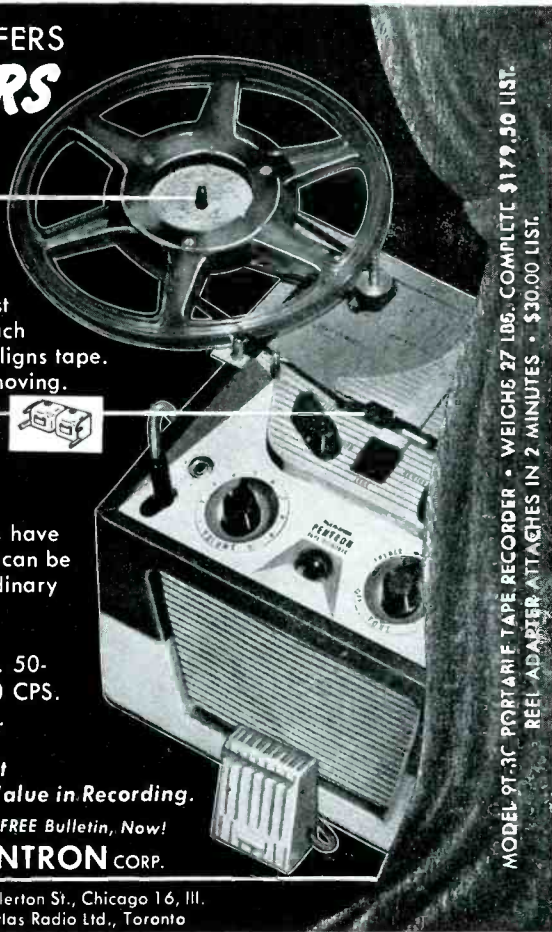
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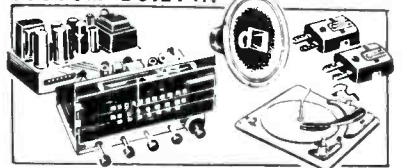
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  - G.E. RPJ-005 Sapphire .001" Needle 2.06
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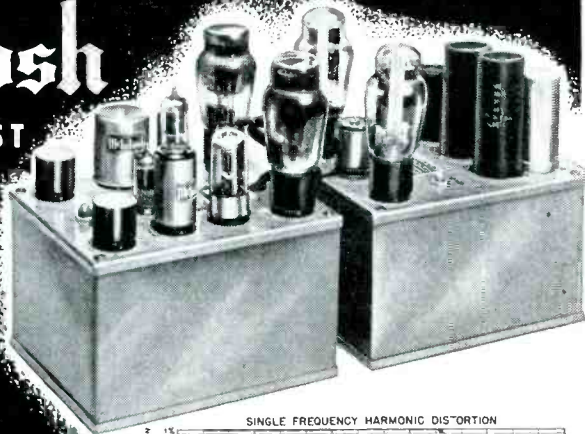
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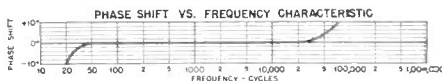
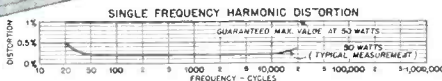
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## TESTED IN THE HOME

Continued from page 111

voltage in the coil. By proper design, the flux passing through the coil can be made nearly proportional to stylus displacement. It follows then, that the voltage induced in the coil will be proportional to stylus velocity.

"In the moving coil cartridge, the coil is mechanically linked to the stylus and moves with it. Unlike the cartridge types described above, the magnetic flux does not shift as the stylus moves. As the coil moves in a uniform magnetic field, a voltage is induced in the coil that is proportional to stylus velocity".

Fig. 3 is a block diagram of a typical installation — and by the "input transformer" hangs a tale! Though this point was discussed in detail in our previous report on these cartridges, it will not be amiss to repeat the essentials. The output of the Fairchild cartridge is extremely low: about 3 millivolts under normal average conditions. This compares with approximately

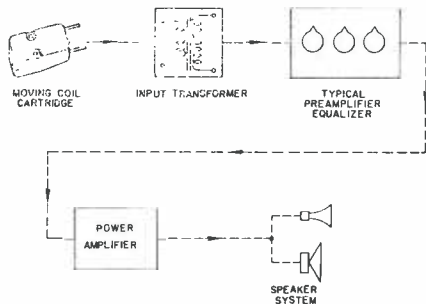


Fig. 3. Typical-sequence of components.

10 mv. for a G-E, 20 or 30 for an Audak, and about 70 for a Pickering. The primary purpose of the transformer is to increase the output 10 to 15 times.

Let's take a typical set-up: Brociner preamplifier-equalizer, Brociner tone control unit (which incorporates about 10 db gain), Musician's amplifier (American Williamson), and a highly efficient 12-in. speaker in a 15 by 15 ft. room. Maximum volume level is adequate for most people; inadequate for the let's-really-hear-it group. Recommendation for prospective Fairchild cartridge users: try the cartridge without the transformer first. If volume is insufficient, add the transformer. Hum will also be added; as asserted previously, everything in sight will have to be grounded and shielded.

Here's a point about the Fairchild cartridges which may be of interest under certain circumstances: the output impedance is very low — 80 ohms. This means that the wire between the cartridge and the transformer can be long, whereas with most cartridges, which have a high output impedance, the wire must be as short as possible. Normal professional hook-up for the Fairchild is from the cartridge to a passive equalizer (one which compensates for recording characteristics but does not incorporate amplification) and thence over as great a distance as required to the input of a flat preamplifier. This means, in a

Continued on page 115

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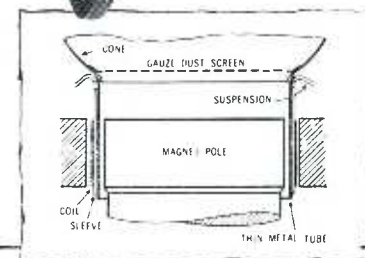
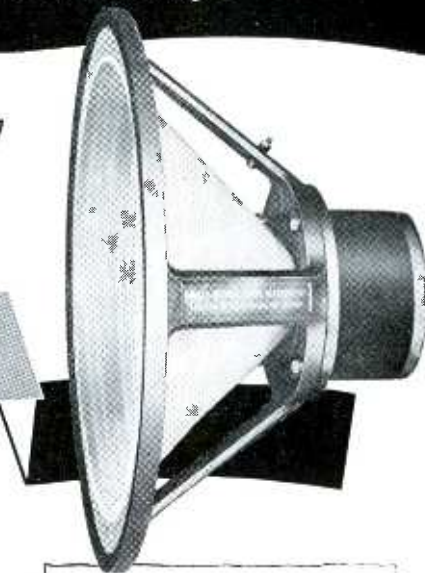
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## TESTED IN THE HOME

*Continued from page 113*

home installation, that the turntable, arm and cartridges, and equalizer for recording characteristics, could be located at a distance from the preamplifier and amplifier equipment. Normally, the preamplifier-equalizer unit is mounted near the turntable. Then, with cathode-follower preamps, a long wire can be used between preamp and amplifier.

A couple of final words: there are four Fairchild cartridges, all diamond-tipped, with radii of .001, .0025, and .003 ins.; the fourth cartridge is for vertical (hill and dale) recordings. All cartridges meet RMA standards for size and location of mounting holes, and so may be used in almost any arm. Prices are \$42.50 for all except the microgroove tip, which is \$47.50 — audiophile net. The arm is \$65.

## TESTED . . . WEATHERS

*Continued from page 82*

The spring action, which holds the stylus down on the record, makes for better tracking on those occasional, bumpy records which bounce the average arm out of the groove.

Special care should be given to wrapping the lead from the cartridge so that it does not exert rotational pressure on the arm. The arm turns so freely that a poorly placed lead wire will cause the arm to swing right around on its pivot and "unwrap" the lead. Weathers recommends one complete loop — and it should be a loose one.

This free-swinging business is a decided advantage when playing a record (reduces wear, among other things, although wear is not much of a factor with only one-gram pressure), but it has one disadvantage — or danger — when *not* playing a record. There's nothing easier than removing the



Fig. 2. Base and arm spring mechanism.

Weathers arm from the record: lift it up half an inch or so, and it snaps up about 2 more inches, to stay there until it is pressed down gently (and do it gently, until you get used to the "snap action"; otherwise, it will tend to slip from your fingers and bang down on the record). But — once

*Continued on page 117*

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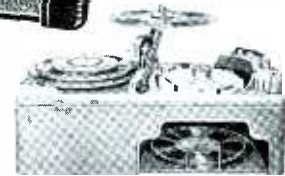
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The circuit is similar to the one published in Audio Engineering Magazine for November, 1949, and is considered by engineers throughout the audio field as one of the best ever developed. The Main Amplifier (which may be purchased separately) consists of a voltage amplifier and phase splitter using a 6SN7, a driver stage using a 6SN7, and a push-pull output stage using a pair of 6U7 tubes. The output transformer is manufactured by the Peerless Division of Altec Lansing and is built to their highest standards. Output impedances of 4, 8, and 16 ohms are available. The power supply uses a separate chassis with husky Chicago Transformer power transformer and choke, and 700V Mallory filters for long hum-free operation. A 5V4G rectifier is used.

The main amplifier and power supply are each on a chassis measuring 7" high by 5 1/2" wide by 11" long.

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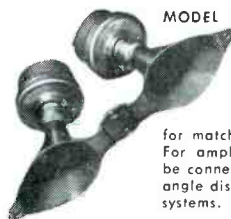


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## TESTED IN THE HOME

Continued from page 115

up, it swings in the breeze, so to speak. And a carelessly handled dust cloth, or a hastily moved hand, can snap it down on the turntable or record surface with what seems, for a delicate cartridge, like a dangerously hard bang. Since the Weathers arm arrived in the family, we have staked out the turntable area as strictly off-limits for the chief duster in our household . . . at least until we can figure out a simple method of catching the rear end of the arm under some sort of a snap holder arrangement, so it can't swing and can't be knocked down.

If you are a Weathers cartridge user, get the arm to go with it. It will solve several problems — and improve all-around results.

### Addenda

Paul Weathers has advised us that, to solve the problem of using his cartridge in record changers, he has brought out a special "record changer model" in which the compliance of the stylus shank has been reduced and the weight increased slightly.

Point is, the original unit tracked so lightly that it would not operate the trip mechanism on some changers. The new cartridges overcome this difficulty without, it is said, impairing their sound reproducing characteristics. A little of the light-weight feature is lost, but stylus pressure still remains well below average — and record life correspondingly above average.

### Dept. of Further Information

Since our original article appeared in HIGH-FIDELITY No. 5, in which we said that the output of the Weathers cartridge was too low to permit its satisfactory use with power amplifiers such as the MacIntosh, we have had several letters questioning this statement. We referred, specifically, to the MacIntosh used *without* its preamplifier-control unit. There is a somewhat unusual situation here. The MacIntosh power section (the two cases with the tubes sticking out on top) provides less gain than the average audio amplifier. It is a *power* producer (50 watts), not a *gain* producer. The gain is built into the control unit which, from the radio tap, provides an unusual amount of gain. The power section is stated to have a gain of 40 db; the control section, 34 db.

We admit, our statement was misleading unless qualified more completely. When the Weathers is plugged into the MacIntosh control unit, volume is more than ample, in fact, so much gain and resultant volume is available that the input level adjustment on the control unit has to be turned down to protect speaker cones.

Sometime soon, we are going to do a full article on this subject of amplifiers, pre-amplifiers, control amplifiers, and whatnot. Meantime, we hope that the foregoing brief explanation will clarify the situation.

It's nice to see a company outgrow its original quarters, and so we're glad to advise that Weathers has moved to a new factory at 66 East Gloucester Pike, Barrington, N. J. — C. F.

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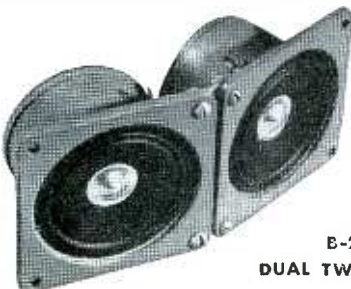
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## TESTED IN THE HOME

Continued from page 83

cabinet speaker in this writer's experience. (The test was made in August, 1952.)

The Tannoy crossover, accomplished through a conventional network, takes place at 1,000 cycles. The special ingenuity in the speaker's construction is concentrated in the mechanical design, and evokes the hackneyed comment: "Why didn't someone think of this before?" The treble horn is reamed out of the central pole piece, and begins the shape of an exponential horn. The low-frequency voice-coil hugs the outside of the pole piece, and the contour of the woofer continues the exponential horn-shape, so that the low-frequency cone loads the tones generated in the tweeter-throat. If the deep excursions of the woofer cause any breakup of the treble tones it loads, it was not apparent to these ears, except that it may add a slight, not unpleasant, effect of distance. The exponentially-shaped woofer is stiff in body but very softly suspended at the edges, so that it retains its shape during its activity as a piston. It is damped effectively by a very powerful magnet — entirely unshielded, which bodes ill to any small timepiece brought within two feet. Take warning. De-gaussing a watch costs money.

The company claims a frequency range of 40 to 20,000 cycles per second, which is something of a British understatement because an unassailable testing organization, paid by Beam to put the Tannoy through its paces, discovered usable response from 35 to 35,000 cycles, which would seem to be plenty. It is also irrelevant to most listening purposes. More to the point is the exemplary smoothness and listening comfort the speaker shows, together with what may be called its accuracy, since fidelity has become a deceptive word. Perhaps this is best illustrated by explaining that, after this writer, who is also a record reviewer and must depend on his loudspeaker for his livelihood, got through testing the Tannoy 15, he went and bought one.

— J. M. C.

## READERS' FORUM

Continued from page 104

in the future. I do intend to subscribe to your magazine as soon as I think it wise.

I would like to make a suggestion for whatever it is worth. I am sure you have many subscribers — like myself — who have spent considerable money (more than was probably wise) in assembling a fine music system. I have acquired a Brook 12A3 amplifier, a Meissner 9-1091C tuner, a Stephens 411 speaker system, a Webster 355 changer, a General Electric cartridge with diamond styli and a Pickering compensator. I have spent considerable time building a speaker enclosure and equipment and record housing facilities. Now, I enjoy hearing all the new products and enclosures. However, I am very well pleased with what I have and wouldn't want to spend the necessary time and money for what would probably

Continued on page 121

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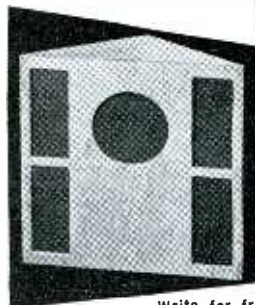
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READERS' FORUM

Continued from page 119

be very slight improvements. You already have an excellent record review section for my type of subscriber. However, I feel many of us — who are proud of our equipment — would like to know more about what we already possess. In a reasonably technical language, how does a tuner operate? How do various amplifier circuits accomplish their purpose? How does a radio tube work? How do tubes differ? True, everyone would not care for this type of article, but many who take your magazine, I am sure, would like to understand the operation of their own equipment.

Dr. Marvin McNeil

Los Angeles, Calif.

Such a series is a possibility, but not yet on our schedule. In the interim, we can only suggest consulting some such text as Oliver Read's *The Recording and Reproduction of Sound*, available through HIGH-FIDELITY'S Book Department and probably in your local public library.

S M E

Continued from page 27

Basic By-Laws for Chapters of the SOCIETY OF MUSIC ENTHUSIASTS

Article I: NAME

The name of this organization shall be: Chapter No. . . . . of the Society of Music Enthusiasts

Article II: AIMS

It is the purpose of this Chapter to carry out the aims and ideals of the Society of Music Enthusiasts.

Article III: LOYALTY

The officers and members of this Chapter shall abide by the By-Laws which have been and may be adopted or amended by the Society and will conform to such directives and resolutions which have and may be issued by the office of the Managing Director and the National Council and shall honor and abide by the terms of the Chapter Charter Agreement.

Article IV: OFFICERS

Section 1: There shall be, as officers of the Chapter, a Chairman, Vice-Chairman, Secretary and Treasurer.

Section 2: The office of Delegate to the National Council may be filled by one of the officers with the approval of a majority of the Chapter members, or by any other Chapter member either elected or appointed by the Chapter Chairman with the approval of a majority of the Chapter members.

Continued on page 123

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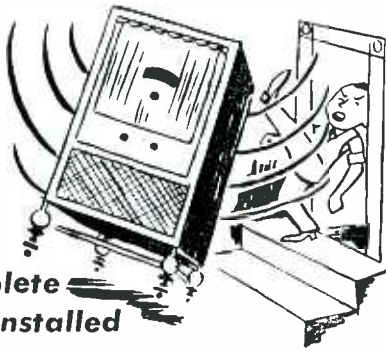
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Continued from page 121

Article V: ELECTIONS

Section 1: Elections of the officers of this Chapter shall take place annually at the end of the Chapter fiscal year.

Section 2: An officer of the Chapter may succeed himself for as many times as he may be re-elected to office.

Section 3: The nomination of officers and the administration of the election shall be accomplished by an Elections Committee appointed by the Delegate to the National Council from the members of the Chapter who are not at the time holding any office whatever.

Article VI: MEMBERSHIP

This Chapter shall accept for membership any person who is a member in good standing in the Society of Music Enthusiasts and who agrees to abide by the rules and regulations by which this Chapter is governed.

Article VII: DUES

Section 1: This Chapter may impose annual dues upon its members only as may be necessary to cover essential operating costs.

Section 2: This Chapter may impose an assessment upon its members to cover the cost of any extra-curricular activity germane to the purposes of the Society, but only providing such activity and assessment has been approved by the Chapter membership.

Article VIII: RESPONSIBILITY

The officers of this Chapter shall conduct their office in a manner commonly prescribed and recognized for their capacity and shall keep and maintain suitable and accurate records accounting for all activities and transactions and shall from time to time but at least once annually report on the general welfare, progress, and condition of the Chapter to its members, with copies to the Managing Director and the National Chairman.

Article IX: RESIGNATIONS

Section 1: A member of this Chapter may resign or transfer to another Chapter at will by submitting written notice to the Chapter Secretary with copy to the Office of the Managing Director. Such resignation shall constitute a release of all and any claims on this Chapter by the member.

Section 2. (A) A member of this Chapter may be refused renewal of membership in the Chapter if in the opinion of the Chapter Chairman such member has not conducted himself in accordance with the letter and spirit of the Society.

(B) A member refused membership in a Chapter may appeal for final decision to the National Chairman.

Section 3: In the event of dissolution of this Chapter, or revocation of this Chapter's Charter due to failure to comply with the terms of the Chapter Charter Agreement, the assets, if any, of this Chapter shall become the property of Society of Music Enthusiasts and the Managing Director shall liquidate such assets and shall disburse such proceeds as may be so acquired among the Chapter members of last record.

Continued on page 125

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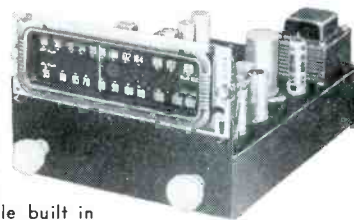


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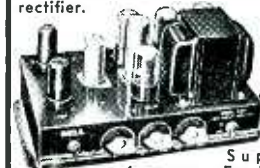
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Identical to equipment built to sell for twice the price. Complete provision for phono input. All controls on front panel. High selectivity and sensitivity. Full audio fidelity. Drift proof FM. Full tone control. Built-in phono switching. Power outlet for phono motor. Air wound FM coils. Automatic volume control circuit. Almost unbelievable high fidelity and tonal richness. 7 miniature tubes plus power amplifier and rectifier.



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Continued from page 123

CHAPTER CHARTER AGREEMENT

THIS AGREEMENT is made between:—  
SOCIETY OF MUSIC ENTHUSIASTS, with offices in the city of Great Barrington, hereinafter called the "Society", and the SME Chapter No. . . . . with headquarters in the city of . . . . ., hereinafter called the "Chapter",

WITNESSETH:—

THAT WHEREAS, The Society has been sponsored by Audiocom, Inc., a corporation under the laws of the State of Massachusetts, to protect its name and organization of the Society and to promote the Society's purpose;

AND WHEREAS, the Chapter has been authorized as a Chapter of the SOCIETY OF MUSIC ENTHUSIASTS with the consent of the sponsor, which consent was conditional upon the Chapter agreeing to observe for so long as the it or the Society shall exist and be bound by the name, organization, and purpose thereof:

NOW THEREFORE, in consideration of the foregoing and of the mutual covenants and agreements herein contained, it is hereby agreed, as follows:

1. The Chapter hereby specifically acknowledges and agrees that it is affiliated with the Society and intends to continue such affiliation and that it and its members will at all times recognize, abide by and observe as effectively binding upon itself and its members the By-Laws of the Society of Music Enthusiasts now in force or as hereafter amended, and that it will from time to time, upon request of the Society, amend its By-Laws or activities to conform to those of the Society of Music Enthusiasts, and that it herewith adopts the Basic By-Laws for Chapters appended hereto.

2. The Chapter further covenants and agrees that whenever required by the Society, it will dissolve or change its form of organization, and that no amendments to the articles of its By-Laws or change in the purposes of the Chapter will be made without the consent of the Society and it will not incur any financial or other obligations that will be binding on the Society.

3. The Society covenants and agrees that it will not at any time seek to enforce against the Chapter any obligations, duties or liabilities inconsistent with the By-Laws of the Society of Music Enthusiasts.

IN WITNESS WHEREOF, the parties hereto have caused these presents to be signed by their duly authorized officers, and their respective corporate seal, if any, to be hereunto affixed.

SOCIETY OF MUSIC ENTHUSIASTS  
By . . . . .  
Managing Director, S.M.E.  
Attest . . . . . Witness  
Date . . . . .  
S.M.E. Chapter No. . . . .  
By . . . . .  
Chairman  
Attest . . . . . Witness  
Date . . . . .



# FAS Air-Coupler for Bass Reinforcement

**Good News . . .** The Dual Air-Coupler for bass reinforcement is in stock, ready for delivery. This is the improved model described in *Radio Communication* last October, and in the Winter Edition of *High Fidelity*.

As more and more of the most critical audio experts install Air-Couplers in extended-range systems, reports of remarkable performance continue to pour in. One of the most enthusiastic owners is Paul deMars, former chief engineer of the Yankee Network, and a pioneer in high-quality reproduction. He said: "I have never heard such magnificent tone from records and live-talent FM as I am getting from my Air-Coupler in combination with a dual speaker for intermediate and treble frequencies."

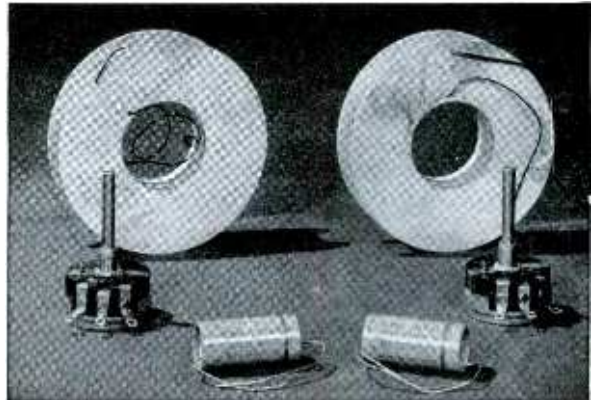
**For your convenience . . .** the Air-Coupler is available in both knock-down form, so that you can assemble it with a screwdriver, or completely assembled, ready to mount the speaker. Made entirely of first-quality 3/4-in. plywood, with each piece cut to precision fit.

**DUAL AIR-COUPLER, IN KNOCK-DOWN FORM** . . . . . now only **\$34.50**  
Every part is furnished, including the screws. Illustration shows assembled Air-Coupler, before front panel is mounted. Opening is cut for any 12-in. speaker, the recommended size.

**DUAL AIR-COUPLER, COMPLETELY ASSEMBLED** . . . . . now only **\$47.50**  
If you haven't the time or the inclination to put the parts together yourself, then here is the Air-Coupler completely assembled and finished in a truly professional manner. Supplied as illustrated, with front panel in place, ready for the speaker.

**MISCELLANY:** we carry in stock . . . . . **Altec 600-B** 12-in. speaker for the Air-Coupler, \$46.50; **Peerless S-230Q** output transformer, \$26.00; **Peerless R-560A** power transformer, \$16.00; **Peerless C-455A** power choke, \$10.00; **English KT-66** output tube, \$4.95; **Racon CHU2** tweeter, \$23.10.

## Crossover Networks for Any System of Two or More Loudspeakers



By a judicious selection of associated components, the three coil sizes on which G.A. has standardized enable our customers to secure low-cost crossover networks which will operate at 14 different crossover frequencies! For the experimenter, that means a wide range of choice without having to break the bank to buy dozens of coils. For the man who wants to install his system once and for all, it means money saved, because G.A. saves money by making only three coil sizes (10.2, 5.1, and 1.6 Mh) — and it passes on those savings direct to its customers.

If you want to use three speakers with crossover points at 350 and 1,100 cycles, for example, just order two of the networks listed above (for an 8-ohm system, with rapid crossover attenuation, it would be No. 6 and No. 8).

As most everyone has found out by now, G.A. is headquarters for crossover networks. As far as we know, we're the only organization stocking networks specifically designed for use with Air-Couplers.

If you are in doubt about the selection of a network for your particular speakers, send 10c for the G.A. Network Data Sheet, from which you can determine your requirements exactly.

### RAPID ATTENUATION NETWORKS

12 db droop per octave. These networks use two inductance coils.

Impedance of low frequency speaker	Crossover Frequency	Order Number	Price 2 Coils Only	Price Complete*
16 ohms	2,200	No. 1	\$7.00	\$11.50
	1,100	2	7.00	12.00
	700	3	12.00	16.00
	350	4	12.00	17.50
	175	5	20.00	24.00
8 ohms	1,100	6	7.00	12.00
	550	7	7.00	13.00
	350	8	12.00	17.50
	175	9	20.00	24.00
	85	10	20.00	26.50
4 ohms	550	11	7.00	13.00
	275	12	7.00	15.00
	175	13	12.00	19.00
	85	14	20.00	26.50

\* Complete networks include necessary capacitors and level controls. Be sure to indicate whether you want just the coils or the complete network.

SAVE C.O.D. Charges! Send remittance with your order.

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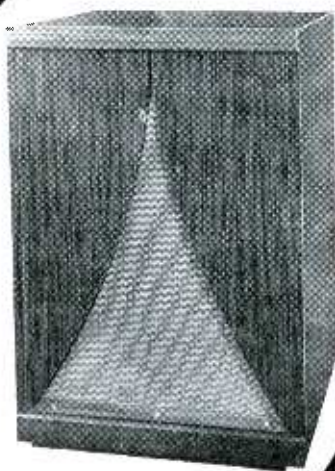
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This is the ONLY enclosure completely protected by formica thus eliminating the possibility of scratches, stains or burns, while adding an unusually rich luxurious finish.

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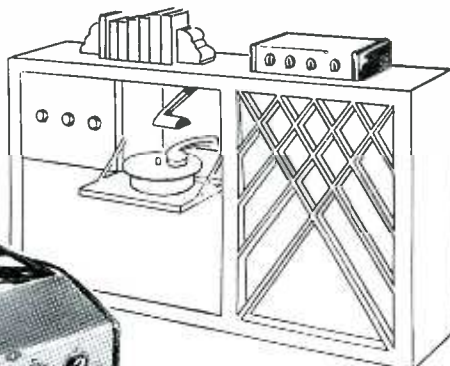
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- Harmonic distortion and intermodulation reduced to vanishing point.

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## DIAMOND NEEDLES

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PLUS  
POSTAGE

No doubt you have learned by now that the needle in your record player is not permanent. It is tipped with either sapphire or osmium metal which should be changed after about 20 hours of playing, in order to protect your valuable records.

This means that if you use your record player on an average of an hour a day these needles need replacing about every three weeks at a cost of between \$1.50 to \$3.50. Because of this frequent needle changing you have of course learned how to install a new one when required.

Why not, then, retip your present replaceable needle with a genuine diamond. One that will give you at least 1000 hours of high fidelity, distortion-free record playing pleasure with the comforting assurance that your costly records will remain undamaged — particularly those long-playing micro groove records, so finely grooved and sensitive to a worn stylus?

Send us your replacement needle assembly now—today. Let us retip it with the highest quality genuine diamond stylus—exactly the same kind that we make for leading radio stations the country over. Save the difference between \$10.50 for 1000 hours of playing and up to \$3.50 for 20 hours. And also save because you deal directly with a leading manufacturer of diamond styli for broadcast use who is in a position to offer the lowest price available for diamonds of this quality.

Our diamond tips are unconditionally guaranteed and are made for LP or standard records. Send check or money order for \$10.50 plus 25c for return postage with your needle assembly or complete cartridge if you cannot remove the replacement needle assembly (except Pickering non-replaceable type) to:

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*Diamond Styli Manufacturers*

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## DISTINCTIVE ACCESSORIES... *Dramatic Gifts*



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This magnificent magazine rack is generous enough to hold all your current magazines. Painstakingly constructed of heavy gauge COPPER or BRASS, lavishly trimmed with embossed bands of brass, it has solid brass handles, is regally mounted on heavy cast brass feet. 7½" wide, 15½" long, 12½" high.

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Matching Brass or Copper Footed Waste Basket—12¼" high.

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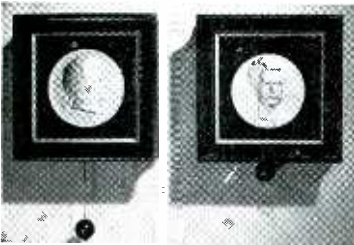
### *G-Claf* Jewelry

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Pin, **\$3.00**

Earrings, **\$4.75** the pair

federal tax and postage included



### Music Master Plaques

These handsome wall plaques conceal Swiss music boxes! Pull the knob to hear a selection by the composer pictured in bas relief. Mahogany finished frame, 5½" square, with gold toned medallion on recessed black background. Choose Chopin, Strauss, Schubert, Haydn, Wagner, Beethoven, Bach, Brahms or Mozart... superb singly or in groups!

**\$7.95** each, **\$15.95** the pair, plus 40c east, 75c west of Miss.

Write for Catalogue

*Jenifer House*

New Marlboro Stage

GREAT BARRINGTON, MASS.

## IMPORTANT BOOKS

*Continued from page 23*

to be. There is the one who takes chances, his theory being that nothing is so boring as a perfectly rehearsed performance, in which nothing new or unplanned can happen. There is the one who personalizes the music, so that it is partly his. (Sometimes, admits composer Copland, this improves a mediocre composition.) There is the man with the "classic" approach, who concentrates on structure and flow, always building expectation of the next measure to come. This is a mark of real mastery, as is also the air of relaxed and perfect control.

Copland is, quite properly, a proponent of modern music, particularly modern American (North and South) music. But he doesn't try to force it down his readers' throats. Instead, he carries them on a tour of the evolution of music, bringing in the importance of the growing instrumentation which, era by era, tempted composers into using it. His enthusiasm over what can be done, and has been done (partly by him), with today's superb instruments is contagious; the reader stops reading with the feeling that now he really would like to try listening to a little Webern. Or some Copland.

### STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACTS OF CONGRESS OF AUGUST 24, 1912, AND MARCH 3, 1933

Of High-Fidelity, published bi-monthly at Great Barrington, Massachusetts, for October 1, 1952

State of Massachusetts  
County of Berkshire, ss.

Before me, a Notary Public in and for the State and county aforesaid, personally appeared Milton B. Sleeper, who having been duly sworn according to law, deposes and says that he is the publisher of the High-Fidelity Magazine and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management, etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, as amended by the Act of March 3, 1933, embodied in section 537, Postal Laws and Regulations, to wit:

1. That the names and addresses of the publisher, editor, managing editor, and business manager are: Publisher, Milton B. Sleeper, Monterey, Massachusetts; Editor, Charles Fowler, So. Egremont, Massachusetts; Managing Editor, none; Business Manager, none.

2. That the owner is: Audiocom, Inc., Great Barrington, Massachusetts.

3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are: Ethel V. Sleeper, Milton B. Sleeper, and Charles Fowler.

4. That the two paragraphs next above giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company, but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock, bonds, or other securities than as so stated by him.

(Signed) Milton B. Sleeper  
Sworn to and subscribed before me this First day of October, 1952.

(Seal) Lillian Bendross, Notary Public  
Commission expires July 1, 1954.

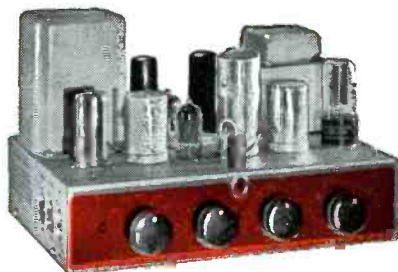
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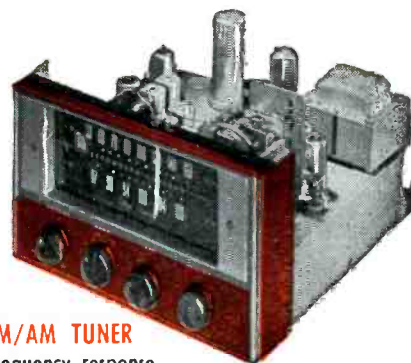
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MODEL AR-410. Frequency response is from 20 to 20,000 cps flat within  $\pm 1$  db, with a hum level 70 db below its full rated output. Less than 1% total harmonic distortion. 5-position selector switch for: Phono, Radio, Microphone and auxiliary input. Separate bass and treble tone controls.



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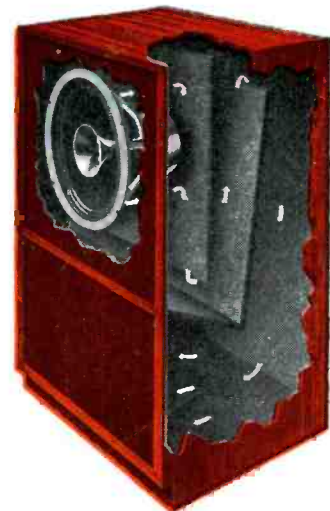
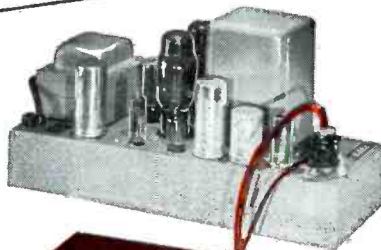
#### DeLuxe 15" COAXIAL SPEAKER

MODEL RF-475. The ultimate in quality loudspeakers with uniform response from 30 to 16,500 cps. 15" seamless cone with 3" voice coil for low frequencies, and 5" parametric horn with an acoustic corrective lens for high frequencies. Suitable for auditoriums, music halls, schools, and for the uncompromising music lover. Handles 40 watts.

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#### HIGH FIDELITY DeLuxe AMPLIFIER

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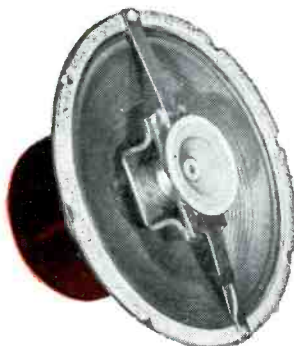


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MODEL RF-471. Employs the STROMBERG-CARLSON coaxial principle.  $3\frac{1}{2}$ " seamless tweeter suspended in Carpinchoe leather which smoothes response up to 15,000 cps. Tonal range down to 30 cps is reproduced through the 12" low frequency cone. Wide angle, correctly balanced sound dispersion. Power capacity 32 watts.



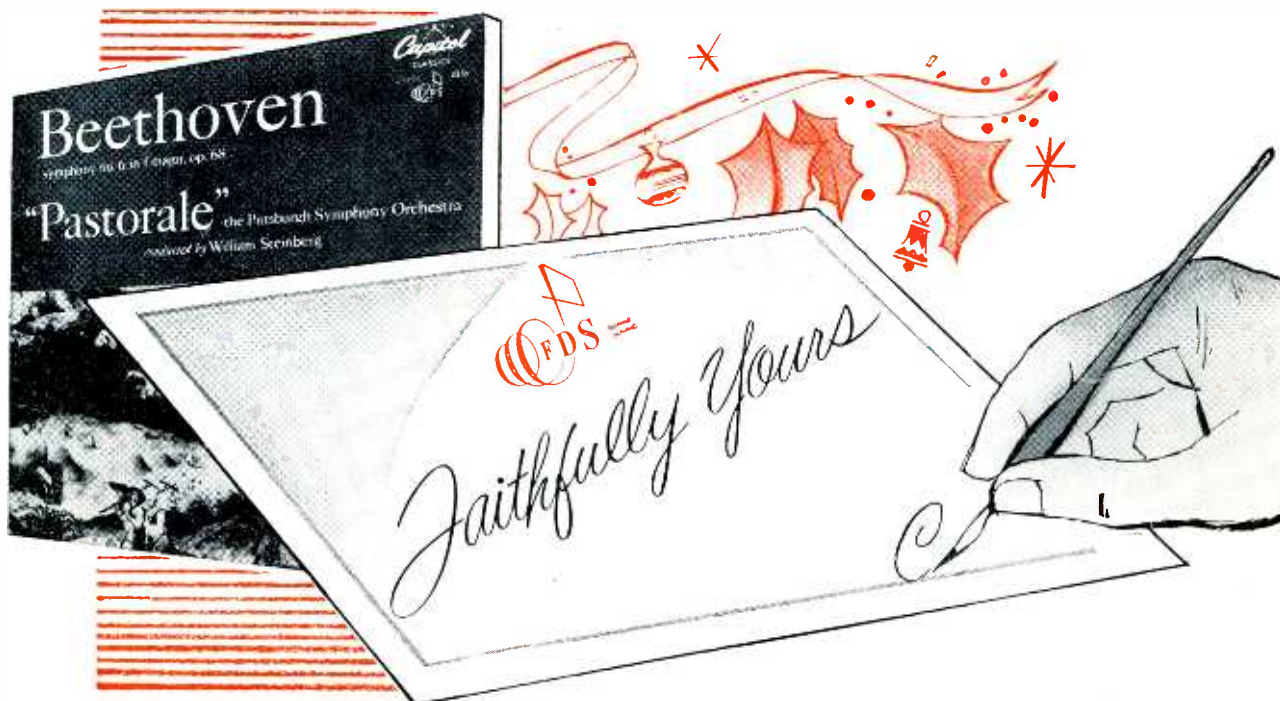
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