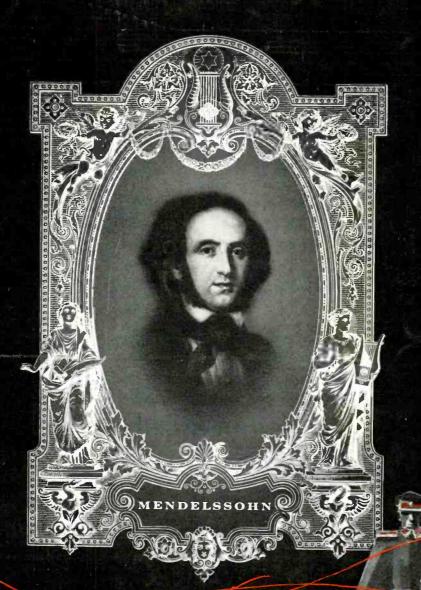
High Fidelity

MAY

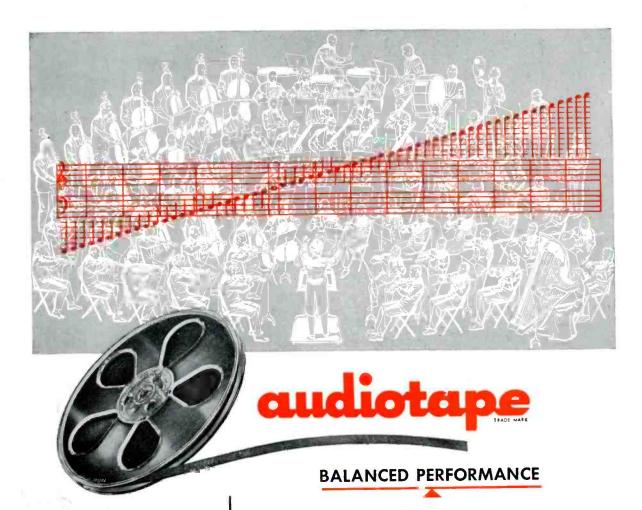
THE MAGAZINE FOR MUSIC LISTENERS

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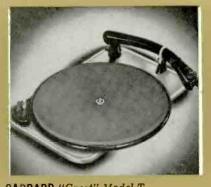


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High Fidelity

THE MAGAZINE FOR MUSIC LISTENERS

This Issue. Two changes will be noted by anyone who cares to glance a few points to starboard, into the table of contents. "Reader's Forum" has become simply "Letters" and - something new has been added. Namely, a department called Audio Forum. This is something readers have long demanded, none too patiently. In it, they can, when they wish, air their problems, their discoveries and their advice on homeaudio matters. Contributions will be welcomed warmly, so will photographs of nature too technical and/or aesthetically unsuitable for the Custom Installations pages. The editors will comment on problems posed, or prevail on manufacturers and other authorities to do so.

The handsome frame surrounding Felix Mendelssohn's physiognomy, on the cover, was reproduced from a print made available by C. F. Peters Corporation, one of the world's most illustrious music publishers.

Next Issue. C. G. Burke produced a discography of Schubert on microgroove in August 1951 — when HIGH FIDELITY had fewer than half its present readers and Schwann's LP catalog fewer than half its present Schubert entries. Accordingly, Mr. B. felt the time ripe to update his coverage of the Fourth Great Viennese, and so did we. There are now twenty long-playing versions of the "Unfinished" Symphony! You'll be reading about them in June.

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AUTHORitatively Speaking

At the age of nine, Orazio Frugoni decided he would be a pianist. His father, a manufacturer of electrical equipment, decided that he should not. This might have settled the question for the average nineyear-old, but there was nothing average about Orazio. Within the year, by means best known to himself, he had made the acquaintance of the leading piano teacher in his native Italian city, and had so impressed him that he was receiving lessons gratis. He was not opposed again on this score. However, his anti-authoritarian inclinations soon found new vent, when the Fascists came into power. Young Orazio took a dim view of them. At 16, he went underground. Owing to his father's business, he was in an excellent position to procure radio parts for the anti-Fascists, a duty he performed conscientiously until the police began arresting him whenever they saw him. Once he had to feign insanity to get out of jail in Milan. He remained in the Italian underground during the war, nearly coming to grief in the early 1940s, when the Germans put out a dragnet for all dissidents. Tabbed for deportation to the Vaterland, he escaped and reached the Swiss border, where he was seized and interned. He waited out the war there, helping to run an artist-entertainment group that performed around Switzerland earning sustenance for other Italian refugees. After the war he made his way to the United States. Now, at 33, he teaches in the Eastman School of Music, between concert tours and recording sessions. Asked to write about the rescue of the captive Mendelssohn concertos (page 26), he said he was afraid it would sound melodramatic. Nothing melodramatic ever happens to pianists.

As A. R. N. Wrathall understated it in his April Bayreuth article, medical men are trained to "avoid . . . pointless utterance." When we asked Dr. Richard W. Lawton, the author of "Ears — the Last Link" (page 65), for information about himself, to print in this column, he responded with: "Assistant professor of physiology, Cornell University Medical College, New York City. Activities include research in biophysics, teaching medical students and constructing my own audio system." If that isn't avoiding pointless utterance, we've never seen it done.

Beatrice Oppenheim and Ira Freeman, who profile this issue's Adventurer in Sound, New York 19's tireless Tony Schwartz, are really Mr. and Mrs. Ira Freeman. As a feature-writing team, they have traveled 100,000 miles for story-material. World War II could not break this practice: everywhere Ira went for the Army weekly, Yank, Beatrice showed up soon after, bearing credentials from the New York Herald Tribune. They covered most of Europe and the Middle East in this tandem fashion. In their post-war rambles, they often enjoy the company and professional assistance of Beatrice's sister Rosalind, the photographer who took the pictures on pages 31 and



ESQUIRE Mahogany-Model HF 800 M Complete with two-way, four speaker system. Audiophile Net \$89.95.



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Paging Dr. Kinsey

In a recent letter to John Conly, Mort Nasatir of Decca Records passed on the following story: "Time Magazine, it seems, asked one of its tight-lipped reporters to analyze the Kinsey reports, now that they have been released for some time. He presented his article with the following caption, 'Kinsey reveals too high frequency; too low fidelity'.'

Rising Hackles

It gets us pretty mad to see all this nonsense about "3-D" and "stereophonic" sound from a monaural system. Apparently no one has told certain advertising copy writers that just because some set or other has two speakers it is not necessarily binaural or stereophonic. Listen to this, for example (swiped from a recent publicity release): "An entirely new concept has been introduced by It's a new , a three-speaker hi-fi unit with true stereophonic sound.

Let it be said once again: true binaural or stereophonic requires at least two complete channels. Caveat emptor!

HIGH FIDELITY No. 4 (continued)

Dr. James Causey, University of Oregon Medical School, Portland I, Oregon, writes that he has a spare copy of HIGH FIDELITY No. 4 which he will be glad to loan to anyone who wishes it. Thanks, Dr. Causey!

Anyone else who'll help fellow readers with the loan or sale of a spare No. 4? Demand still seems to be in excess of supply, but the breach is gradually being filled.

Portable Speaker

Jensen has announced a portable "Duette." Same as regular one, except it's got a cover over the speaker openings and has a carrying handle. Cover holds 25-fr. extension cable and two 7-in. reels of tape or what have you. Weight, 21 lb.; cost, \$89.50.

Decorative Motif: Record Albums

Out California way, 35 miles east of Los Angeles, in Ontario, colorful record jackets form the principal decorative touch in Rudi Pock's record and hi-fi equipment store. It's a novel and exciting treatment . . . four eye-level racks totalling 79 feet in length hold over 300 LP jackets and combine mer-

Continued on page 9

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The GRAY viscous-damped 108 B

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NOTED WITH INTEREST

Continued from page 6

chandise display with a most attractive wall treatment.

The store was opened last summer, complete with major lines of records and of hi-fi equipment, plenty of space, three speciallybuilt listening booths — and has been attracting not only favorable comments but plenty of customers!

More Audio Shows

Audio shows are springing up all over the country. In addition to the "big three" in Chicago, New York and Los Angeles, there have been others in Philadelphia, Boston, New York, Washington, Albany... where else? It's hard ro keep track. Belatedly we learned that Olson Radio sponsored a show in Akron, Ohio, back at the end of January; pulled in some 3,000 people.

We do wish show managers and sponsors would advise us (in advance, if possible, but better late than never) of activities along these lines; it's surprising how far HIGH FIDELITY readers will travel in order to attend an audio show — but they're never going to get there unless they find out about it well in advance. How's for keeping us posted?

New Opening in Albany, N. Y.

Make note of Bell Tone Sound Corp., 11 North Pearl Street — you who live in that area. They've recently opened their new hi-fi studios.

New Catalogs

Magnecord has recently released two attractive catalogs, one on their "home" equipment and the second on their professional line. Plenty of specific details and specifications.

Cabinet Maker: Denver, Colo.

Thanks to reader Arnold Gassan of Denver, we can add another name to our file of cabinet-makers: Harry Jackson of Modern Cabinetry, "in the 900 block on 11th Avenue" who, according to Mr. Gassan, "does the finest work I have ever seen in this particular line. An example: I ordered a speaker enclosure of long-cut mahogany plywood and a small case for a preamplifier. When I had explained what I wanted, Mr Jackson made intelligent suggestions for structural improvements and finally delivered the strongest and least resonant enclosure I have ever seen." Much obliged, Mr. Gassan—and we continue to want names for our cabinet-makers file.

Tape Threading Made Easier

Catching the end of a piece of recording tape on the take-up spool has been a nuisance, one of those jobs which always

Continued on page 11



MAY, 1954



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Covers the theory, design and

characteristics of all standard mi-

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SPECIAL NOTE

AMPLIFIERS: Briggs and Garner, 216 pages, 174 illustrations, cloth. This book covers, in characteristic non-technical language, the myriad considerations involved in amplifier design and construction. Details are given for the construction of a recommended amplifier.

This book is now out of print, but HIGH FIDELITY Magazine can fill a limited number of orders from the remaining stock on hand.

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HIGH FIDELITY SIMPLIFIED: Harold Weiler, 209 pages, 104 illustrations. The latest and most understandable discussion of the fundamental theories of high-fidelity sound reproduction. Working designs for speaker enclosure.

No. 101.....\$2.50

NOTED WITH INTEREST

Continued from page of

has to be done in a hurry (for some reason) emphasizing the truth in the saying, "Haste makes waste".

Minnesota Mining and Manufacturing Co. has just announced a new 7-inch plastic tape reel which ought to end a lot of the difficulty . . . the new reels have a V-slot through which the tape can be passed so it sticks out above the reel, where you can hold onto it until you've made a revolution or two of the take-up reel.

Oh! My Aching Ear!

We were thumbing through an attractive folder mailed out by an audio supply house (whose name shall not be mentioned) and thinking that it should stir up a tidy bit of interest in hi-fi when we came upon the sentence, "With our master control switching panel, you just push a button and listen to any of 155,000 combinations of pickup . . ." etc.

We have considered, from time to time, the idea of writing an article, or maybe even two articles, about how to match various components. That idea is now deader'n the skunk the trailer truck just hit outside the office, and smells just as bad!

What stupid ideas we get . . . talking about 155,000 combinations!

Let us now be conservative, ultra-conservative. Let's say we can judge the sound from a piece of equipment in exactly 15 seconds. We're going to take this whole business seriously, give it plenty of time before we make a final decision. So we'll plan to listen two hours a night, five nights a week.

At the end of one year and three months, we will still have a few combinations to listen to ... and who knows? Maybe by that time there will be some new combo's, so we can start all over again.

If the idea of having to make a selection of just one out of 155,000 possible combinations isn't enough to scare off an incipient hi-fi enthusiast, we don't know what is.

Oh! My Aching Ear!!

Binaural Broadcasts

In the March issue of HIGH FIDELITY, we requested all possible information about binaural broadcasts...here's the schedule, just received, for WQXR in New York City:

Sunday 6:05 to 7:00 p.m. Tuesday 7:30 to 8:00 p.m. Thursday 7:30 to 8:00 p.m.

Saturday 9:30 to 10:00 p.m. In addition to this regular schedule, a series of binaural organ broadcasts started March 6th; Saturday afternoons from 4:30 to 5:00. Broadcasts are from Temple Emanu-El and require two lines from the remote point to the studios. As far as WQXR knows, this is the only "remote" binaural broadcast being done. WQXR also runs occasional binaural experiments on their "Adventures in Sound" program; Sundays 10:05 to 11:00 p.m.



The outstanding advantage of a permanent disc recording is that it can be played on any phonograph. Most tapes, in fact, ultimately end up on discs.

Naturally, the quality of the results greatly depends upon the quality of the equipment used. The Rek-O-Kut Challenger is the only portable disc recorder designed expressly for professional recordists, musicians, educators, and recording enthusiasts, who desire the kind of quality normally associated with costly professional installations. The Rek-O-Kut Challenger is, in fact, the only portable, 12-inch recorder capable of handling professional 13¼" masters.

Every feature has been embodied to assure the highest quality af recarded sound. It is the only portable, 12-inch recorder driven by a constant speed, hysteresis synchronous mator. This means recordings with virtually no noise, wow, or flutter. Moreover, it is the only portable recorder with a professional overhead recording lathe and with interchangeable leadscrews for standard as well as microgroove recordings, whether at 78 or 33 \(\frac{1}{3}\) rpm (an accessory idler is available for 45 rpm).

The Challenger amplifier was designed for the utmost fidelity. It has a frequency response ±1db from 30 to 20,000 cycles, with independent equalizer controls for bass and treble response. Recordings can be made from microphones, from radio tuners, tape recorders, and ather signal sources. Recarding level is visually indicated by means of a meter.

For playback, the Challenger is a complete high fidelity phonograph with dual-stylus magnetic pickup, and a wide range 10-inch PM loud-speaker.

For complete details, write to dept.

DE-2

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An unusually high quality instrument, designed to act as the central control for music systems of the highest calibre. Every possible, desireable function has been incorporated, and only the finest components have been employed in its construction. Power supply is built in, furnishing dc to all heaters.

Nine front-panel controls provide the Marantz with the utmost flexibility in performance: SELECTOR SWITCH with 7 input positions. VOLUME CONTROL. BASS CONTROL, cantinuously variable boast and attenuation, up to 20 db. Turnover frequency at 375 cycles. TREBLE CONTROL, continuously variable baost and attenuation. Turnover frequency at 3000 cycles. BASS EQUAL-IZER for magnetic record pickups, has 6 turnover positions plus 'flat'. TREBLE EQUALIZER for all recordings, has 6 roll-off positions plus 'flat'. LOUDNESS COMPENSATOR, a continuously variable control, designed to maintain frequency response constant at all listening levels. Compensates for Fletcher-Munson curve. LOW-PASS FILTER permits sharp cutoff of high frequencies above 5000, 7000, ar 10,000 cycles, to reduce noise and high frequency distortion. Employs high-Q toroidal choke. ON/OFF SWITCH also connects to extra line outlets for use with other equipment in the system.



magnetic pickups, and microphone, and 4 positions for tuner, tape, TV, and other high-level program sources. The OUTPUT SECTION feeds from a cathode follower which permits fairly long lines without frequency discrimination. A recorder output, completely isalated from the control circuit, permits feeding to tape, disc, or other recorders. FREQUENCY RESPONSE extends from below 17 cycles to 50,000 cycles, ±1 db. HUM is inaudible with gain set 'full', an all inputs.

The Audio Consolette has a soft, mat gold finish, and is set in an attractive metal cabinet with stained, hand-rubbed, wood end-blocks.

Complete with tubes and cabinet.

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50 Watt AUDIO AMPLIFIER

Model 50 W-2

A navel and unique circuit design is employed to provide 50 watts of continuous power (100 watts peak) with amazingly clean, distortion-free reproduction. Fre-

tartion-free reproduction. Fre-quency response extends from 20 to 20,000 cycles, ±.1 db. and fram 10 to 100,000 cycles, ±3 db. Distortion is less than 1% over the entire audible spectrum at full 50-watt autput. Phase shift is negligible. High domping factor and other features contribute much to the autstanding damping factor and other featulistening quality of the 50 W-2.

Complete with tubes.

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\$325.00 Chassis only (for custom installations)...... 335.00 Relay Rack Model Cabinet Model (Mahogany, Walnut or Blande). 360.00

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the HARVEY AUDIOtorium. It will thrill you. NOTE: Prices Net, F.O.B., N.Y.C. Subject to change without notice.

GENERAL ELECTRIC High Fidelity BATON TONE ARMS

Designed for broadcast and professional use, as well as for fine music systems in the home, General Electric has developed two high quality lone arms: Model A1-500 for records up to 12 inches diameter, and Model A1-501 for records and transcriptions up to 16 inches.

mode: A1-DUI for records and transcriptions up to 16 inches. Both arms are constructed of strong, lightweight aluminum. Counterbalanced, cartridge pressure is quickly and accurately adjusted by means of a sliding weight. Stylus pressure is shown in grams on a calibrated scale. Maximum lateral and vertical compliance is attained through the use of virtually friction-free ball bearings. This provides outstanding tracking ability, and a minimum of tone arm drag.

Baton arms are easily installed, and are adjustable for turntable heights, up to 2 inches.

Model A1-500 with 1 G.E. cartridge slide...... Model A1-501 with 2 G.E. cartridge slides...... Model RKP-012 — extra cartridge slides...... 35.50 each 1.95

The New

ELECTRO-VOICE

Model 15TRX TRIAXIAL 3-WAY REPRODUCER

The 15TRX is EV's latest contribution to the advancement of high fidelity sound. It is an effective 3-way speaker system with the added advantage that each of the reproducers are concentrically mounted and provide the smoothness of response associated with a single source. Frequency response extends from 30 cycles to 15,000 cycles. Two crossover points are employed: one is mechanical of 2000 cycles, and the other of 3500 cycles utilizing an electrical network. The free-air resonance point is 38 cycles. The entire unit weighs 44 pounds and its rated impedance is 16 ohms.

Model 15TRX complete with 'Brilliance Control'.



103 W. 43rd Street, New York 36, N. Y. JUdson 2-1500

LETTERS



SIR:

I am very disappointed in your March issue. The only article I could understand in this issue, or any of your past issues for that matter, was written by Mr. Thomas I. Lucci.

It would appear as negligence on the part of you and your staff that such a misleading article on a technical subject would be published and I hold you and your organization, as well as Mr. Lucci, partly responsible for my hardships.

After reading Mr. Lucci's article I went to considerable trouble and expense to build a Yogi Enclosure. I built my enclosure to specification using the best quality ¼-inch matine plywood, carefully fitting and gluing all corners together. Where necessary I used the finest non-magnetic sapphire tipped wood screws. The entire enclosure was lined with Fiberglas.

To make it a deluxe job I even purchased from a wrecking yard a used Nash weathereye. Running the weather-eye off my amplifier was, in itself, a major achievement.

It was not until my Yogi Enclosure was ready for trial that my troubles commenced. I invited the girl friend over for the big event but she refused to get in my Yogi Enclosure with me. She even managed to bend a couple of my favorite LPs down around my ears before storming out of my apartment. As I had more money tied up in hi-fi than in said girl friend I had to let her go.

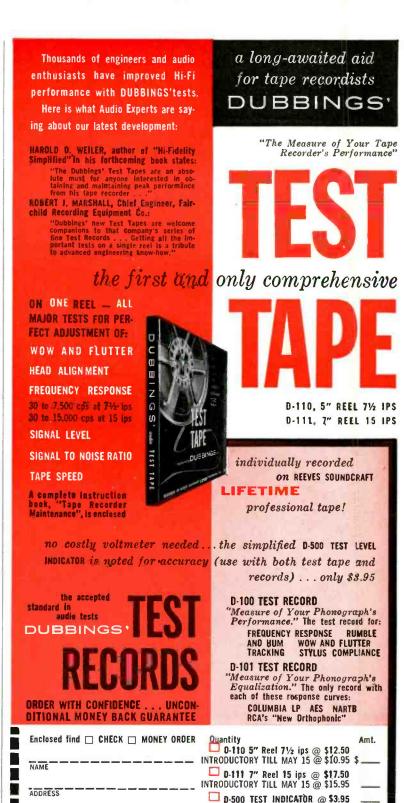
I then turned on my FM tuner, adjusted volume and loudness control, set the weather eye for a comfortable 70 degrees, jumped in my Yogi Enclosure and slammed shut the hatch. That was the fatal mistake. I had neglected to put a handle on the inside of my hatch and all my controls were on the outside.

There is no use in attempting to describe the hardships I endured while trapped inside my Yogi Enclosure. It was on the second day or night (I had begun to lose track of time) in my high fidelity tomb that my amplifier went haywire. I then commenced getting freezing air from my coaxial speaker and a picture of Liberace in 3D from the weather-eye. This was more than any human could take, and I passed out.

It is due to Smiling Zack of the Friendly Loan Company that I am alive roday. On the fourth day of my imprisonment Smiling Zack, the ace collector, was looking for me as the final installment on my hi-fi equipment was two hours past due. While repossessing my equipment he discovered me inside the Yogi Enclosure. (The big jerk thought I was hiding again.)

I could go on and on but to sum it up briefly I put the finger of blame on you, your staff and Mr. Lucci for the following. I have no hi-fi set, I am frostbitten, I have developed a twitch from absorbing Fiberglas,

Continued on page 14



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ZONE



LETTERS

Continued from page 13

I have gone tone deaf, I have lost my job and I have no girl friend.

In closing let me say that if you wish you may publish this letter in your "Tested in the Home" column as a public service. Walter H. Slusser, Jr.

Portland, Ore.

SIR:

A certain criticism in your this months record review struck my attention as being somewhat unsound, so I am begging to differ with J. S. Wilson. I, who am a long time lover of Billie Holiday's voice, find that her latest effort on Clef label is grossly over-rated by Mr. Wilson; actually, I think, misrepresented. The article lauds Billie's performance on its so called "nuances," which are in my estimation poor substitutes (or poor excuses) for her lost vocal range, flexibility and command. I can say, I think without exaggeration, that during this particular recording session Billie was in relatively bad voice. Part of the greatness of Billie's technique is her sustained emotional quality through a somewhat restrained delivery. In this recording her delivery reveals an overemphasis on a few remaining characteristic Holiday effects and a pathetic inconsistency The Norman of emotional intention. Granz team has put a great but tired and worn out artist through the traces she triumphed in during her peak years and which were recorded by Commodore, Decca and Columbia who continue to release them to this day. I will admit that the recording of Billie previous to this one on Mercury was a true gem, as they admit; everything was "right;" Billie was in unusually good voice and in my opinion the accompaniment was even more sympathetic than in the recording we are discussing. As far as the average state of Billie's current vocal qualifications are concerned, just listen to her latest Decca recordings such as "God Bless The Child" or to "Muddy Road" on Derby label; mature, worldly, yes, but not the voice or the vitality and control of her "Gloomy Sunday" on Columbia or "Yesterdays" on Com-modore period. We (I take the liberty of speaking for Billie Holiday fans) are dismayed and indignant about this appalling testimony of Billie's decline.

> J. C. Jacob Detroit, Mich

SIR:

The way that Mr. Farkas dissipates the Lo-Fi fog with his Hi-Fi March breeze, one would think bis records were made of longer-wearing, less noisy, easier and more accurately pressed nylon or polyethylene with a frequency response à la Weather's "Spectrumax." Beware the Ides of "Lifetime" tape, Mr. Farkas.

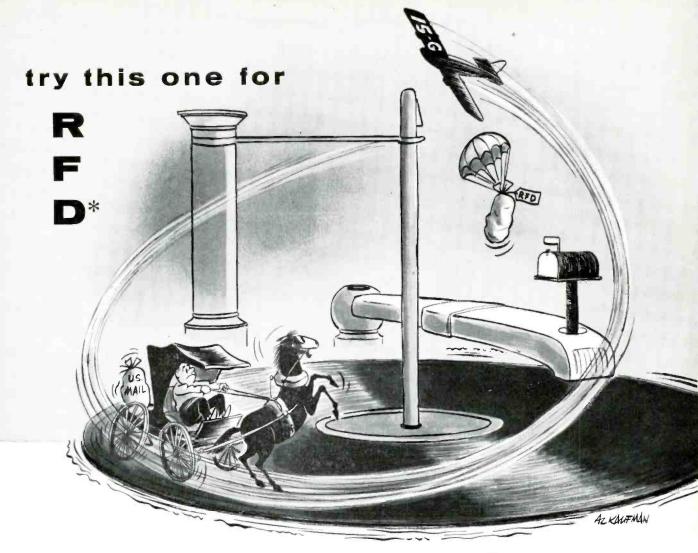
C. W. Alexander Chicago, Ill.

SIR:

Would you be so kind as to put me in touch with the author of "How to Enjoy Hi-Fi Music," by John W. Campbell, Jr., whose condensation of said article 1 have just read in Science Digest for October 1953?

I wish to learn from either Mt. Campbell,

Continued on page 16



Nothing can be more aggravating in High Fidelity than an inwanted accompaniment of wows and humps...groans and throbs. So if your record reproduction is being marred by subterranean noises, chances are the trouble lies in your turntable.

It's time you treated yourself to a new experience in quiet listening. Before you choose, make sure you see and hear the PRESTO 15-G High Fidelity turntable in action.

PRESTO builds professional equipment—for professionals only. And the 15-G is a solid, rumble-free, 3-speed, 12" turntable designed and constructed with the same care and precision characteristic of the most expensive PRESTO units. That's why you're sure of years of the same dependable service enjoyed by broadcast stations and recording studios.

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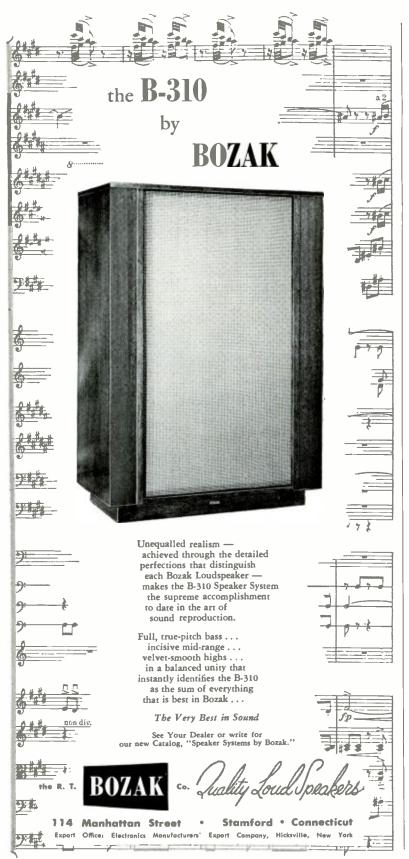
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Please send me illustrative data and specifications on the new Presto 15-G turntable.

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■WORLD'S LARGEST MANUFACTURER OF PRECISION RECORDING EQUIPMENT AND DISCS



LETTERS

Continued from page 14

or your files, his bibliography for this splendid article. Having an audio range myself of around 18,000 cps (so my husband tells me), Mr. Campbell has explained much to my layman understanding and I should like to have source material for a more intensive study of this.

Mrs. John R. Lynch Chula Vista, Calif.

Mr. Campbell's reply

I'm afraid that there is no bibliography for that article of mine; like many amateurs, most of the data we work on is data we've dug out for ourselves. Someone else may have worked ir out previously, elsewhere, but we're apt to derive it for ourselves. The amateur is essentially interested in doing, rather than studying about something, so that he spends relatively little time on library research.

(In many ways, that's a help. The result is, not infrequently, that the amateur accomplishes what the professional expert had learned was impossible by way of library research.)

The amateur researcher, then, tends to reduce things to a level of experiential data, with a broad, loose theoretical organization. In trying to figure out what was going on with my own high-fidelity system, I was forced to recognize that I myself, and my wife, were inherent parts of the total system—and recognize that I'm never going to successfully fool something God spent 3,000,000,000 years or so making foolproof.

That's the sort of data you don't ordinarily find in the bibliography — you find it by living it.

The only source material for that type of study is Life; there are some things that can't be communicated in any other way.

The only bibliography I could suggest would be some good texts on evolution, on camouflage in nature, and the means organisms have developed to break the camouflage efforts of other organisms, some texts on the physical mechanisms of the sensory organs, and the like. I'm afraid that the bibliography in this case would amount to "Read any good Public Library." It takes an integration of the whole effect of electronic technology, acoustic technology, otology, psychology, and a lot of things that haven't been written down anywhere yet—but are experienced by everyone!

JOHN W. CAMPBELL

SIR

We are outraged with the public exposure of our carefully-guarded secret, "the Listening Booth," which has just been described in your article After binaural—what?, (March, 1953) under the ridiculous title "the Yogi Enclosure."

Months of painstaking research by the public-opinion experts in our employ had demonstrated the need for such an addition to the music-lover's equipment, and the

Continued on page 19



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Features extreme sensitivity, low distortion and low hum. Armstrong system, adjustable FM-AFC and AM selectivity. Preamplifier-equalizer, 2 inputs, 2 cathode follower outputs. Six controls. Self-powered. \$184.50

FM-AM TUNER, Model 50-R

Same features as 70-RT above, but designed for use with external preamplifier-equalizer such as 50-C. Hum level better than 100 db below 2 volts output. Fully shielded and shock-mounted. Self-powered. \$164.50

MASTER AUDIO CONTROL, Series 50-C

16 choices of record equalization, plus separate bass and treble tone controls, loudness balance control. Five inputs and input level controls, two cathode follower outputs. Chassis only, \$89.50 · With cabinet, \$97.50

25-WATT AMPLIFIER, Model 70-A

50-watts peak! More *clean* watts per dollar. Less than ½% distortion at 25 watts (0.05% at 10 watts.) Response ±0.1 db, 20-20,000 cycles; 1 db, 10 to 50,000 cycles. Hum and noise virtually non-measurable! \$99.50

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100-watts peak! World's finest all-triode amplifier. Uniform within 1 db, 5 to 100,000 cycles. Hum and noise 96 db below full output. IM distortion below 2% at 50 watts. Highest quality components thruout. \$159.50

"50" HORN, SPEAKER ENCLOSURE

NEW! Regardless of the speaker or enclosure you are now using, the "50" Horn marks a revolution in performance. Can be used with any 12" or 15" single, coaxial, dual or triaxial speaker system. \$129.50

PREAMPLIFIER-EQUALIZER, Model 50-PR

Professional phono equalization facilities at low cost! Independent switches for LF turn-over and HF roll-off. Output lead up to 50 feet. Can accommodate any low-level, magnetic pickup. Self-powered. \$22.95

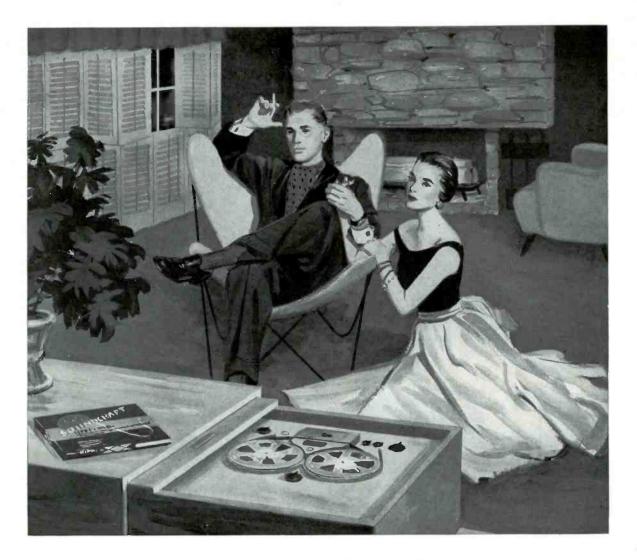
HI-LO FILTER SYSTEM, Model 50-F

Does what ordinary tone controls cannot do, for it suppresses all types of noise with an absolute minimum loss of tonal range. High impedance input; cathode follower output. Use with any equipment. \$29.95

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It is engineered from a newly developed oxide coating material that is anchored permanently to an almost steel-strong base of DuPont "Mylar" polyester plastic. LIFETIME tape will neither peel, flake, cup, curl, crack nor break. It will not dry out and become brittle as even the finest ordinary tapes do with time.

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been the choice of leading professionals and informed amateurs. Every inch is Micro-Polished[®] to remove minute surface defects that mar high-frequency response... electronically tested during manufacture for constant coating thickness and extremely wide frequency output.

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Dept. F5, 10 East 52nd Street,
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LETTERS

Continued from page 16

RAM Company engineers have only just now completed their final tests of this unique and essential part of any complete high-fidelity system.

In its original form, the booth was designed to be placed in record shops, to separate those customers who wished to be alone with their music, from those who were merely browsing. Many sellers of records have long desired an opportunity to improve their service to their customers, hence the development of this particular model, to be known in trade circles as "the Customer Confine."

For audiophiles who are often subjected to the prolonged visits of relatives, "the Mother-in-law Encompassment" has been prepared, with the necessary added features which would be required for such a tenant. Other models include "the Hermit," which has none of the luxurious upholstery of the others, and is therefore not suggested for use with the Bach B Minor Mass or other lengthy musical works. The "Tandem," as the name implies, is suitable for two, and because all expensive listening equipment has been omitted it is ideally suited to the budget of the newly-married couple, In placing a wide variety of musical closets before the public, we feel we have a singularly inspired solution to the problem discussed in your article.

The "High-fidelity Ear-horns" develop-ment is surprisingly out-of-date: back in 1951 our engineers experimented with, and eventually rejected, a comparable attachment for the individual listener. Present research is centering around the "directwire record reproduction," in which the listener's cochlea bone of the inner ear is attached directly to the pick-up arm cartridge. In this system, the "turn" table remains stationary, and the pick-up arm rotates around the record grooves. We have found that this represents a great saving of wear and tear on the recordings. . An attachment known as "the Listener Compensator" rotates the listener at 33 1/3 (for LP records) so that he will avoid getting his wires crossed. Amplifier and speaker system expense is completely eliminated. The slight inconveniences which may arise have been met with the year's supply of Dramamine which is included with each set purchased.

Marsh B. Giddings, Jr. Great Barrington, Mass.

SIR

Regarding Erich Leinsdorf's article in the January-February issue of HIGH FIDELITY, entitled "Will we run out of music to Record?":

Just for the record, and in the event that anyone might seriously consider that the repertory might be running out, here are just a few suggestions for new recordings:

1) A modern recording of Mozart's Concerto in B-Flat for Bassoon and Orchestra (K-191). At the moment, we have only RCA-Victor's reissue of an old 78 rpm version, which wasn't any too good even when new.

2) An LP recording of Mozart's Sonata for Bassoon and 'Cello (K-292). I know of

Continued on page 20



by L. H. Bogen Member, Audio Engineering Society Vice President, David Bogen Co., Inc.



VIVE LA DIFFERENCE!

Consider for a moment the different conditions that will affect the relationship between you and your amplifier:
The different equalization curves used by the various record manufacturers.

The difference in room acoustics.

The difference in taste and hearing sensitivity of the listeners in the room.

And expecially the difference in what you

And capecially, the difference in what you can hear at different volume levels. (The Fletcher-Munson curves show that, as you turn the volume down, your ear tends to lose the highs and lows more quickly than the middle registers.)

This explains why critical listeners soon begin to think in terms of an amplifier offering extreme flexibility of control, such as the Bogen DB20.



A different approach to the loudness-contour problem

The Bogen DB20 features a separate Loudness Contour Selector developed by our own engineers, which permits you to select the properly-compensated frequency response for each volume level. Five step-type positions are provided, corresponding to the Fletcher-Munson curves.

I would like to tell you why our engineering department decided to develop a separate Loudness Contour Selector instead of using the customary type of selector which is activated by the volume control.

We felt, for one thing, that the combined loudness compensator and volume control did not adequately take into consideration the problem of nonstandardization in the recording industry. Record manufacturers display the same rugged individuality in the matter of record output level as they do in equalization curves. There are readily apparent audible differences in output level not only in records of the different companies, but even between records bearing the same label.



This factor alone, we felt, called for the flexibility of a separate and accessible Loudness Contour Control.

In addition, the Bogen DB20 has a 7-position record compensator for LP, AES, NAB, AM78, EU78, FFRR and Poprecords. Of course, it also offers widerange treble and bass controls.

Performance is brilliant: 20 watts with a distortion of only 0.3%, and a response of 20 to 20,000 cps ±0.7 db.

When you discover that the price of the ps20 amplifier is only \$99, you will readily understand why it is a best seller in its class.



Companion FM-AM Tuner is the Bogen R604

This unit fills a real need in the market for an FM-AM tuner with solid circuitry and excellent performance to sell for under \$100. Sensitivity is 5 microvolts for 30 db quieting. FM frequency response is 50-15,000 cps ±1 db. Stability is exceptionally good, with Automatic Frequency Control and temperature-stabilized oscillator effectively preventing drift and eliminating warm-up period. Price: \$97.35.

Have you sent for a copy of "Understanding High Fidelity"?

Louis Biancolli and I have veritten this \$48-page book with the idea of providing, in about 2 hours' reading time, a theoretical and practical ground-work for the man who is serious about custom hi-fi. For a copy of "Understanding High Fidelity", mail the coupon and \$254. (If you aiready know your theory and application, send for the free Bogen catalog.)



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> > constantly in touch and, indeed, in sympathy with the requirements of the high-fidelity enthusiast. To a certain extent this demand

> > > can be related to the present-day restrictions on living space and the fact that enthusiasts are seeking a loudspeaker which, when suitably housed, will occupy the minimum of space,

and yet still faithfully reproduce their particular choice of music.

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Frequency Range Fundamental Resonance Voice Coil Diameter Voice Coil Impedance - Flux Density Total Flux Maximum Power Handling Overall Diameter Overall Depth Baffle Hole Diameter Mounting Holes 4 slots (in. (9.5 mms.) x 2 in.

1 in. (2.5 ems.) 15 ohme. 13,500 gauss 51,200 Maxwells 5 watts peak A.C. 8| in. (20.63 cms.) 3 ll in. (10 ems.)

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LETTERS

Continued from page 19

no version other than the now just-aboutunobtainable Anthologie Sonore recording.

3) Johann Kuhnau's Six Biblical Sonatas, to be recorded, if possible, on a clavichord or, as second choice, on a harpsichord.

4) J. S. Bach's Capriccio sopra la lontananza del suo fratello dilettisimo. This item would be a godsend to lecturers on Bach.

5) We have, as yet, no LP recordings of Clément Janequin's La Bataille de Marignan, Le Caquet des Femmes, ot Les Cris de Paris. As for his Le Chant des Oyseaux, it was badly mauled by The Nadia Boulanger Ensemble (Decca) and should be re-recorded.

6) Maurice Duruflé's Mass.

7) An LP recording of Hoere's arrangement of Francois Couperin's Third Tenebrae Service. The old and defective Voix de son Maitre recording has recently been deleted from their catalogue.

8) An anthology of XVIIth Century German composers, to include representative works by Michael Praetorius, Hans Leo Hassler, Johann Krieger, Ferdinand Fischer, Johann Rosenmüller, H. I. L. Biber, Melchior Franck, Johann Schein, Samuel Scheidt, Johann Pachebel, Philip Erlebach, J. N. Schmeltzer, etc., etc.

9) An anthology of early Spanish vocal and instrumental music to include works of Cristobal de Morales, Francisco Guerrero, Diego Ortiz, Antonio Cabezon, Tomas-Luis

de Vittoria, etc.

10) Any of a number of works by Georges Migot (Sermon on the Mount, Psalm XIX, Annunciation, etc.)

11) Any available music by Emilio de' Cavalieri.

12) Dafne and/or Euridice by Jacopo Peri.

13) Euridice by Giulio Caccini.

14) Something of the works of Antonio de Lotti, to include his Crucifixus for 6 and for 8 voices.

... and so forth and so on, far, far into the night. There are literally thousands of 17th and 18th Century operas, cantatas, oratorios, etc. which could be recorded, without mentioning the inexhaustible store of Medieval and Renaissance masterpieces.

I agree, in advance, that none of the suggestions set forth above are likely to enrich any record manufacturer but . . . before throwing in the sponge, some of these recordings should, I think, be attempted. Vox, the Haydn Society, REB, Lyrichord and Esoteric (these in particular) have made an excellent start; perhaps they, and others, will find it to their interest to continue.

Bernard Steele

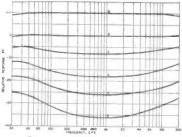
(co-founder of the Anthologie Sonote) Tangier, Morocco

SIR:

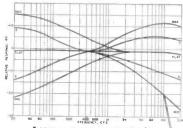
Now that records are being marked with the proper equalization, I think the record manufacturers could go a step further, and include the different instruments that are used on such records as symphonies, orchestras, concertos, etc.

The reason 1 am suggesting this is that I have just finished wiring up a Williamsontype amplifier, and have also recently added a Jensen Tweeter to my co-axial speaker.

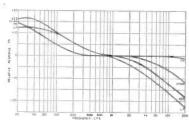
Continued on page 23



Frequency response curves showing action of loudness controls



Frequency response curves showing action of bass and treble controls



Frequency response curves showing record playback characteristics.

You're looking at performance records of the finest Hi-Fi Amplifier money can buy...

The price of the amplifier (including the de luxe pre-amplifier), whose frequency response curves are shown here, is \$189.95; and that probably represents the biggest bargain in the whole hi-fi market!

PERFORMANCE proves it. The charts will tell your practiced eye that Stromberg-Carlson's AR-425 Amplifier is built to satisfy the hypercritical. And your ear will recognize perfection, no matter how "tough" a test you ask this equipment to endure.

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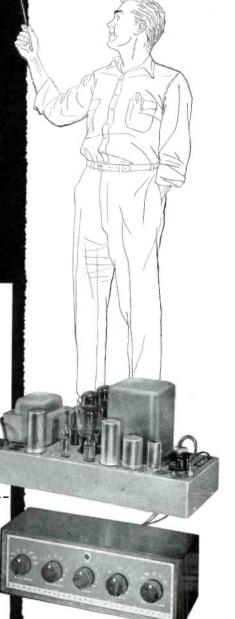
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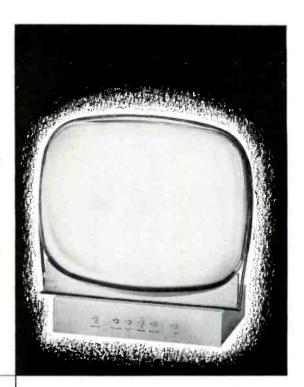


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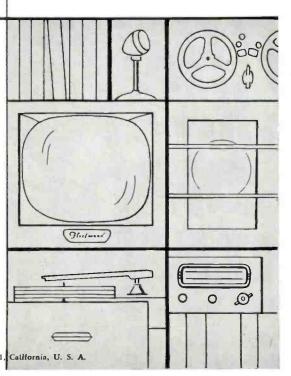
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LETTERS

Continued from page 20

Between the two of them, I have heard instruments I never knew existed on one record, namely "La Boutique Fantastique" on a London. On this one alone, I heard triangles, tambourines, and even castanets!
Another good one is "Capriccio Espagnol" on a Victor Boston Pops.

With records marked in this way, listeners can play a little game, and "see" if they can hear the instruments that are listed. If they can't, they will know that their equipment could stand a little modernizing! It gives me quite a thrill every time I hear the percussion like cymbals, triangle, and a good drum roll. On the other extreme, if you hear every note on the Paganini Concerto, and it doesn't make you squirm, believe me, you are doing all right! This one, in particular, is played by Franciscatti, on a Columbia.

The present method of giving the life history of the composers on the record jacket is perfectly all right, if they list the important things first, as I have suggested. What do other readers think?

Herman Loewenthal Rochester, New York

Jordan College of Music helps to maintain a low watt station, WAJC-FM, here in Indianapolis (98.9 meg.) which a limited number of people enjoy. They feature a Concert Hall program every evening.

The other night the station appealed for listeners to help obtain replacement parts for various equipment, which was old equipment originally, including the turntable.

Since I am not a technical person, but am a constant reader of your magazine, I am inclined to call this situation to the attention of readers who may be able to afford suggestions and help to WAJC-FM. Their address is 1204 N. Delaware Street, Indianapolis, Ind.

Mort Goodman Indianapolis, Ind.

SIR:

On Page 70 of the March HIGH FIDELITY there is a mistake in the price of our Importance of Being Earnest - Album 3504B. You say that the Factory-Sealed album is \$12.50, and that the Thrift Package is \$11.50. The correct prices are:

Factory-Sealed: \$11.90 (\$5.95 a record) Thrift: \$9.90 (\$4.95 a record)

This is true of all albums containing two records. In other words, the Thrift Package price is \$1.00 less on each record.

Three-record albums, such as I Puritani. are priced at - Factory-Sealed: \$17.85; Thrift Package: \$14.85.

Dorle Soria Angel Records

SIR:

I am delighted over your decision to publish monthly, as I was when you stepped up from four to six issues a year. My one criticism is reviewer C. G. Burke's turgid prose. His search for striking tone-color in

Continued on page 74



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AS THE EDITORS SEE IT

THE LATE, illustrious Felix Weingartner made only two visits to the United States, both brief, both before World War I. Yet in the 1930s and '40s he was indisputably the favorite conductor of many American Brahmsians and Beethovenians—through the association of his name, in gold letters on a blue label, with impeccable musicianship. There is nothing new about the fact that recordings can establish a musical performer in the hearts of a public that never has seen him.

Less has been said, however, about composers who have succeeded through records, particularly through microgroove records in the days of high fidelity. Yet there have been gratifying success-stories here, too, some of them surprising.

Until a few years ago, the standard means of access to music were two: the infrequent "live" concert and low-fidelity radio-phonograph. Both were highly selective media. To succeed through either, a piece of music had to depend largely on thematic content. Either it had to have quickly captivating and memorable tunes, or it had to have simple strong themes, dramatically developed and with vivid nonmusical connotations, emotional or philosophical. In other words, it had to be Mozart or Tchai-kovsky, Beethoven or Brahms or Wagner.

The slightest deviation from this formula tempted neglect. Take the case of Haydn, probably the first composer to have achieved his rightful place through microgroove and high fidelity. (He is now No. 3 man in the Schwann LP Catalog.) Haydn's music lacks some of the "hit-tune" quality of much Mozart and the dynamic contrast and excitement of Beethoven. On the other hand, a Haydn symphony is a full-fledged symphony in all ways, with ample dramatic and emotional content if it is properly heard. But Haydn wrote for small concert-rooms, not for 3,200-seat halls. So, in the days of great auditoriums and low-fidelity home reproduction, Haydn symphonies became simply pre-intermission preludes to Sibelius and Tchaikovsky symphonies. Since they weren't particularly "pretty" (Mozart) nor sermonic (Beethoven), they became "quaint." Until, of course, high fidelity brought them back into the living room where they belong, and restored their stature.

This kind of rediscovery has happened to other composers of big music for small performing groups, too. London Records reports with some surprise that Vivaldi's *The Seasons* has outsold any of the Bach Brandenburg Concerti. Yet there was a day when Vivaldi's name was synonymous with "uncommercial," simply because big halls and low-fi obscured the subtly entrancing color of his music. Among men of our own time, there is Villa-Lobos, whose

ability to write primitive sonorities into the voices of eight cellos was almost wasted until the era of the LP and high fidelity. To a degree, *all* chamber-scale music has found new life; in the living room it can sound more lifelike and just as majestic as a Wagner overture.

The other group of composers neglected in the lowfidelity age were, of course, those who loved sound for its own sake. Often they wrote for very large orchestras, which made their works expensive to perform in concert and unlikely to be performed, unless there was great demand. And there wasn't great demand, in most cases, because people don't demand music they are not acquainted with. They weren't acquainted with Bruckner, Mahler and the Schönberg of the Gurrelieder because no one played their music. This is the kind of vicious circle the phonograph has broken time and again in the growth of American musical taste. But it couldn't do much for Bruckner until high fidelity techniques appeared. The records of yore could not encompass the huge dynamics of his sombrely majestic scores, and without it the music was, of course, characterless. Now Bruckner is being discovered; there are 10 Bruckner symphonies in the LP catalogs. Mahler is keeping pace, too. But the pioneer among audiophiliac composers, the No. 1 protagonist of the giant sound, the supplementary brass choirs, the tympani-battery, is doing even better. Hector Berlioz' popularity has assumed the proportions of an avalanche.

In 1952 Columbia Records' No. 1 and No. 3 classical bestsellers were Berlioz works — Harold in Italy and the Symphonie Fantastique. This year's concert-schedules are full of Berlioz. And there has come into an existence a Berlioz Society, to channel this demand to where it will do the most good. Its president is Charles Munch, conductor of the Boston Symphony. Its secretary-treasurer is W. E. Gillespie (who is available to receive \$2 membership fees at 10 Wheelwright Ave., Exeter, N. H.). Its vice-president, and the man who did most of the preliminary spadework of establishing it, is Duncan Robinson. Mr. Robinson is a New York businessman and, more to the point, is a deep-dyed high fidelity enthusiast. He has subscribed to HIGH FIDELITY and Audio Engineering since he first encountered them, and is an avid record-buyer and listener. Fittingly, the idea of starting a society was suggested to Mr. Robinson by the noted scholar and Berlioz-biographer Jacques Barzun, whom he had asked for advice as to which Fantastique recording he should buy.

This we like to see. It's about time the home-listener began to vote his weight in the nation's musical taste. By all odds, let it keep up. Anyone for a Boccherini Society?

J. M. C.

The case of the captive concertos

There is excitement in the idea of tracking down a pair of unpublished scores by a great master. But the plot may thicken uncomfortably if the trail leads to East Berlin, on the wrong side of the Iron Curtain.

THINK it was in the autumn of 1948 that I first heard of the "unknown" Mendelssohn two-piano concertos.

I was engaged in a series of strenuous recording sessions in Paris. I say "strenuous" partly because, at that time, tape recorders were not yet in common use. We still had to endure the old process of wax cuttings—now, fortunately, a memory. However, even that was a minor trouble. What really disturbed the recording sessions were non-musical factors. As usual—it seemed to happen every week—the French government was in the grip of a crisis which was provoking strikes and violence. The union electricians of Paris, as their contribution to the confusion, had been instructed to cut off all the city's electric power at certain intervals, obliging us to cease recording.

During these enforced rest-periods, there was little else to do but break into a few old bottles of French wine, and relax. At one such convivial occasion, George Mendelssohn, president of Vox Productions, talking of the works of his dead and distant kinsman, the great Felix, mentioned the existence of two unpublished Mendelssohn concertos which no one ever had taken the trouble to investigate.

At first I thought (perhaps the fatigue and the wine helped) that he was joking with me. I had recently played some part in tracing down an unpublished concerto of Beethoven, and people were forever asking me when I would come upon another — with the ostensibly humorous implication that I was writing these "unknown" works myself. However, Mendelssohn assured me that he was perfectly serious, and from that moment the thought of the two concertos remained with me.

Apparently it stayed with George Mendelssohn, too, for he brought the subject up at a dinner party, soon after we returned to America. Several other musicians were present, and all were inclined to scoff. I was drawn into the argument. I emerged from it self-elected, so to speak, to find the missing concertos and to bring them before the public.

The only difficulty was that I didn't know where to begin looking. It was easy to find evidence (in Grove's Dictionary, for instance) that the concertos had been written, when Mendelssohn was in his fifteenth and sixteenth years. But, if they had survived, where were they? My wife and I wrote letters to cultural institutions, conservatories, score-collectors and assorted experts in all parts of the world, with negative results. Even Alfred Einstein, the musicologist who had discovered so many unknown Haydn scores, could not help us. Finally Willy Hess, the Swiss who had discovered the clue to the whereabouts of the Beethoven E-flat concerto, uncovered indications that the Mendelssohn scores were in the Berlin State (formerly Royal) Library — or at least that they had once been there, together with a substantial collection of other Mendelssohn documents.

They might still be there, or they might not. There had been no mention of them since the beginning of the Nazi era. It was possible, of course, that the manuscripts had disappeared forever, stolen or perhaps destroyed in vengeance against a race considered unworthy of honor — even musical honor — by later generations. It was more likely that no German nor Austrian had dared express interest in the works, during the 1930s, for fear of being suspected of subversive motives. It was encouraging (in one sense) to remember that upper-rank Nazis unofficially violated their own taboos, sometimes using them as a device to cover their thefts of non-Aryan art treasures. I recalled having heard that Hitler, in his private residence, had concealed records and a score of the Italian Symphony. Lastly, it was known that many historical documents had been evacuated from the Berlin State Library, and not all had found their way back again.

As if all these misgivings were not enough, I knew that the State Library was in the Russian zone of Berlin, and that Soviet officials were reputed to be secretive, suspicious and hard to deal with. However, I hoped that this attitude was met mostly in connection with military and political matters. Mendelssohn piano-concerto scores I considered unmilitary and non-political. (At any rate, I wanted only to copy them. I could understand that the Russians might feel a little possessive about the originals!) Certainly I did not expect to find such obstacles in my way that I would have to work out a veritable strategic campaign to obtain what I wanted.

To begin with, I simply wrote to the music curator at the Library. To my relief, I received promptly a pleasant letter, assuring me that the Mendelssohn scores were safe and sound in the library, and asking which concerto I wanted microfilmed.

All misgivings were now set at rest. I wrote back and asked for copies of both concertos.

No answer came. I wrote again. Still there was no response. Then I received information by a roundabout route from Berlin. My cooperative curator had been dismissed by the Communist overseers. A new one had been appointed.

I wrote to the new one, Herr Doktor Joachim Kruger-Riebow. (This Herr Doktor Kruger-Riebow remained a mystery to us throughout our dealings with him, though I finally formed a surprisingly distinct impression of him, even at second hand. It seems that he spoke German with a slight accent, but knew a variety of other languages, including Romanian. He always was referred to as "Herr Doktor," though no one ever knew where he had acquired his degree, nor in what field - musicology, literature or even political science. In short, he was one of those nebulous figures appointed by the satellite governments to perform shady tasks in official positions. In typical fashion, the Herr Doktor suddenly and unaccountably disappeared in 1951, accompanied by the Library's invaluable collection of Beethoven "conversation books.") The Herr Doktor didn't answer my letter. Apparently this was his policy. I found that Carleton Sprague Smith, head of the New York Public Library's music division, also had been trying to evoke a response from him, equally vainly.

Other tactics were indicated. I was not inexperienced in unofficial approaches to totalitarian officials. In West Berlin there lived a friend of mine, a man I knew to be resourceful. I withhold his name for obvious reasons. I wrote and asked him to join the Mendelssohn concerto project. He became interested immediately, and worked long, devotedly and ingeniously on the problem.

First he went and visited the recalcitrant curator. Then he wrote to me suggesting, not to my surprise, that a little coffee and sugar might come in useful. I responded with the appropriate offerings, and he tried again, and again. He reported at intervals.

This alimentary attack continued through the rest of Herr Doktor Kruger-Riebow's tenure. My tireless friend went back and forth through the zone-barriers, bearing coffee, sugar, butter, cigarettes, chocolate and contraband Westmark cash. Once, when the subtlest psychological pressure seemed necessary, he even made his way to the Library on Unter den Linden carrying a bunch of flowers.

At times the opposition seemed to be softening. Then it would harden again; we would be told that changes in security rules, or money regulations, made it impossible to furnish film-copies of the scores. But we kept paying for coffee and other goodies, and my friend continued his trips into the Eastern City. During the latter part of the campaign, my wife and I spent several months in Europe. We were tempted to go to Berlin ourselves, but decided not to, for fear of upsetting a situation already delicate. The curator seemed precisely balanced

between greed and fear. What was needed was something to swing him finally in our direction. But we were at a loss as to what this might be. According to popular legend, the only bribe really desirable to Iron Curtain officials consists of American atomic secrets, and at the moment I happened to have none in my files.

At last the curator let slip his secret desire. It was anticlimactic. What he wanted were copies of *The International Cyclopedia of Music and Musicians*, edited by Oscar Thompson, and Curt Sachs' *Our Musical Heritage*. Why he could not simply have ordered these from the publishers, I do not know. Perhaps such straightforward behavior is bad form behind the Iron Curtain. I sent the books off quickly, and in high hopes.

There was a delay of a month, two months, more. I gave up hope, suspecting that by now a performance of one of the concertos, or both, was in preparation in Moscow. Hence my surprise was all the greater when, after a long silence, the director wrote to tell me he was having the microfilms made. There was another three-month delay and then — the films arrived!

The suspense was over, but all my troubles were not. The manuscripts were extremely difficult to decipher; no copyist was willing to undertake the job. I did most of it myself, poring over the fine, delicate script and copying out the full score and parts.

It was delightful to discover that the concertos were worth all the trouble we had gone to. It is difficult to understand why no one, from 1850 to almost 1950, took the trouble to track them down and examine them. Perhaps one reason for the neglect was simply the willingness to assume that if there were two such works of Mendelssohn buried in the bottom of a Continued on page 90



The youthful Mendelssohn: musical maturity came in his teens.

MAY, 1954



the talking machine that TALKED TALK

by ROLAND GELATT

A Chapter in Phonographic History, wherein Entertainment on Disks achieves a Whirling Start, aided by a Potent but Shaky Alliance among an Inventor, a Mechanic, and a Businessman...

■ WENTY-FIVE years ago this month, the Radio Corporation of America - a young industrial colossus, hellbent on expansion — added to its empire an established American institution called the Victor Talking Machine Company. For Victor this transaction effected a decisive and peremptory break with the past. The men who had piloted Victor's rise from an insignificant Camden machine shop to a vast \$40,000,000 enterprise retired quickly from the scene. Newcomers.took over, doubtless more forwardlooking than the veterans they had displaced, but with little interest in the early tumultuous struggles of the company whose destiny had been placed in their hands. Whatever assets they brought to the business, a sense of history was not among them. During the 1930s, that decade when the talking machine sank to its lowest ebb, an entire warehouse of old Victor documents, equipment, and other memorabilia was consigned to the junk heap by an economy-minded efficiency engineer. Even today, though there is a newly awakened interest in the past at Victor, the company's personnel possess only an imperfect notion of early gramophone history.

A recent RCA brochure entitled "The 50-Year Story of RCA Victor Records" (an inaccuracy in itself) is blemished with misinterpretations and half-truths in its account of the parentage, gestation and birth of the Victor company. Were the true history sordid or tedious, one could understand this cavalier attitude. Actually, the story of Victor's emergence does no discredit at all to the company or its founders, while the tale of intrigue and counterintrigue that threads its way through the early years of the gramophone industry provides an absorbing footnote to the history of an era when business in America was rough and ruthless—and sometimes very rewarding.

The story begins in 1895, when Emile Berliner's flat-disk talking machine, the gramophone, was first marketed on a nationwide scale. The newly formed Berliner Gramophone Company had established its headquarters in a red brick building at 1026 Filbert Street, Philadelphia, where the toy-like Berliner hand-driven gramophones were assembled and shipped. Nearby, on Chestnut Street, the company opened a retail store under the management of a young

man named Alfred Clark. But a world hungry for recorded entertainment did not beat a path to its door, nor did the postman seem unduly laden with replies to the advertisements for gramophones that began to appear in magazines and newspapers. There was every good reason why sales were sluggish. So long as the gramophone had to rely on manual power, its prospects could hardly be called promising. The hand-propelled instrument looked like a toy, and sounded like one too. Even the most practiced operator could not keep the turntable speed constant, and as the gramophone record joggled fitfully round and round the pitch would soar and tumble in diverting but hardly satisfying cacophony.

It was easy to prescribe a remedy: obviously, the gramophone would have to follow the wax-cylinder phonograph's example and adopt a spring motor. But to translate the prescription into practical terms was rather more difficult. The gramophone motor had to be efficient, noiseless and cheap -- especially cheap, for Berliner realized that he could edge into a field dominated by Columbia and Edison only by offering superior value at a lower price. Several spring motors had already been tried out experimentally on the gramophone, but all had been found wanting in one or more particulars. Among the unsuccessful attempts was a motor designed by a bearded old Philadelphian who used to advertise clockwork motors for sewing machines in the Philadelphia Ledger. A sample motor had been made to his specifications by Eldridge R. Johnson, a 29-year-old mechanic who operated a small machine shop in Camden, New Jersey, and built experimental models for inventors as a sideline, but the old man's motor proved to be quite impracticable, and the Berliner directors turned it down.

However, they had not seen the last of Eldridge Johnson, for in building the old man's model the Camden mechanic had become infected with a severe case of gramophonitis. Johnson was certainly not one to be gammoned by novelty; as a busy model-maker he was used to seeing new inventions pass through his shop. Yet there was something different about the gramophone. "It sounded," he later wrote, "like a partially educated parrot

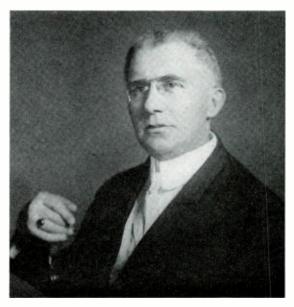
with a sore throat and a cold in the head, but the little wheezy instrument caught my attention and held it fast and hard. I became interested in it as I had never been interested in anything before." To Johnson, harried by the bitterly competitive and unrewarding wire-stitching machinery business, in which his workshop specialized, the gramophone seemed exactly what he was looking for. He began tinkering with a gramophone motor of his own design and found that if the motor handle was left to unwind itself as the machine played he could dispense with some expensive parts. Pruning costs here and improving performance there, he finally produced a motor that satisfied him. What is more, it satisfied the Berliner directors when it was demonstrated to them - so much that they gave Johnson a contract, in the summer of 1896, to manufacture 200 motors. It was not a very big order, to be sure, but the Berliner business was not very big either.

The gramophone, indeed, required considerably more than a cheap and workable spring motor if it was to offer serious competition to the wax-cylinder phonograph. Ir needed someone to promote and sell it. In the art of marketing, the men who ran the Berliner Gramophone Company were sorely inexperienced. Looking about for help, the Berliner directors discussed their problem with an aggressive New York promoter and advertising man named Frank Seaman, who had been recommended as a knowledgeable pilot in the stormy seas of merchandising. Seaman talked convincingly and took an optimistic view of the gramophone's future. Better still, he suggested a modus operandi that would cost the Berliner group nothing. Seaman proposed that he be made the exclusive United States selling agent for the gramophone, in return for which he would set up his own company to advertise and distribute gramophone merchandise. It sounded reasonable, and in 1896 the Berliner Gramophone Company signed a 15-year contract with Seaman along the lines he suggested. The gramophone's affairs were thence to be partitioned among three separately owned and managed enterprises. Seaman's National Gramophone Company, of New York City, would have charge of advertising and selling; the Berliner Gramophone Company, of Philadelphia, was to manufacture instruments and records; the United States Gramophone Company, Emile Berliner's own patentholding company located in Washington, would continue to control the gramophone patents. It was a complicated system of alliances, and it was due for entanglements and

Seaman opened up an office at 874 Broadway and proceeded to deluge newspapers and magazines with bold, full-page advertisements of the gramophone. A headline proclaimed it as the "Talking Machine That Talks Talk!" (which was catchy if not very meaningful), while the finer print explained that the instrument was not adapted for office work but was intended "simply and solely for the entertainment of the home circle or for public exhibition." For the first few months of its existence the Narional Gramophone Company was able to offer only the hand-propelled model, which it sold for \$15, including two records, express prepaid to any address east of the Rocky Mountains. By November 1896, however, enough

of Eldridge Johnson's spring-motor gramophones had been delivered for Seaman to take advantage of some last-minute Christmas gift business. At \$25 it outdistanced all competition (the cheapest spring-driven cylinder machines were then twice as expensive) and orders began to come in faster than Seaman could handle them.

Indeed, Eldridge Johnson's "partially educated parrot" was exceeding his fondest hopes, and the Berliner Gramophone Company, hardpressed by Seaman's demands for more and more merchandise, began ordering motors by the thousands instead of the hundreds. Meanwhile, Johnson came up with two new pieces of equipment. One was an improved soundbox, developed jointly by Alfred Clark and himself; the other was an improved motor mounted at the rear of the gramophone instead of underneath the turntable. It took no little persuasion for the Berliner group to relinquish their own soundbox in favor of Johnson's, but there was no gainsaying the superiority of Johnson's craftsmanship, and in mid-1897 his shop began manufacturing both the new soundbox and the new motor. The instrument embodying these two pieces of equipment was called the Improved Gramophone. It is certainly the most familiar single piece of talking machine equipment that the world has ever known (although it was already out of date in the early years of the twentieth century), for the Improved Gramophone achieved immortality in a picture, thanks to a chubby black-and-white fox terrier who peers wistfully into its horn and listens to "His Master's Voice." But in 1897 Frank Seaman could not possibly have guessed that the Improved Gramophone was to gain such notoriety. As yet there was no picture of dog and gramophone; words alone were employed to paint its virtues, and Seaman implored readers not to "make the mistake of thinking you have ever heard a real Talking or Singing Machine till you have heard the Im-



Emile Berliner: his megaphone finally shared fame with a dog.

proved Gramophone, with its new sound box, new motor, and new records; it is positively and pre-eminently without a rival."

As sales increased, Seaman's National Gramophone Company clamored for more and better recordings. Under the youthful stewardship of Fred Gaisberg, who was to have a long and productive career as chief impresarioengineer of the Gramophone Company in Europe, a re-

cording studio was set up in Philadelphia; soon after, a second studio was opened in New York with Calvin Child, a renegade from the Columbia Phonograph Company, in charge. Neither studio could have been called elaborate; in the early days, a recording machine, an upright piano, and four walls sufficed. Seven-inch master disks were recorded on zinc plates and etched by the chemical process in a nearby laboratory. These masters were then dis-

patched to Washington for the manufacture of negative matrix stampers. Matrix-making was the critical step in the production of flat disks, and it was the one aspect of gramophony which Emile Berliner continued to supervise personally. For years the inventor refused to let outsiders learn his intricate and long-developed metallurgical technique.

The disks themselves were pressed at first in vulcanized rubber, which had the great advantage of being "indestructible" (a persuasive selling point vis-à-vis the delicate wax cylinders). Unfortunately, the rubber would flatten out in spots, and this would send the needle skidding across the disk. In the latter half of 1897 Berliner switched to a shellac composition manufactured by the Durinoid Company of Newark, New Jersey. Though this material had its own complement of deficiencies, it at least held the impress of the stamper and was relatively cheap. Its hegemony was to prevail for almost half a

century; only with the perfection of vinyl plastic after World War II did the record industry desert the brittle, tough shellac composition which had done faithful duty since 1897.

But whether pressed in rubber or shellac, the early Berliner recordings were not very imposing. The philosophy of the coin-slot bonanza still ruled the industry. Familiar cylinder names abounded in the gramophone cata-Dan Quinn, Len Spencer, George J. Gaskin, Will F. Denny, Vess Ossman, Cal Stewart, Russell Hunting; one by one, the stalwart phonograph entertainers now visited the gramophone studios and did their old routines for the new medium. The gramophone was nothing if not imitative. Like the phonograph, it made a specialty of "Descriptive Records," such as the one entitled "Morning on the Farm," a realistic farmyard scene "so real and exact that it requires but a slight stretch of the imagination to place one's self in that delightful position, the result of which is the drinking in of copious drafts of fresh air and numerous other pleasures attainable only on the farm."

Musically, the gramophone repertoire kept a step ahead of Columbia and Edison, though it nowhere approached the level of the great Bettini. A tenor named Ferruccio

Giannini was responsible for most of the operatic arias in the gramophone catalog. Fred Gaisberg, who had heard Giannini sing in a small touring Italian opera company, persuaded the tenor to make some disks in the Philadelphia studio. Giannini recorded truncated versions of the big arias from Rigoletto, Traviata, Trovatore and Cavalleria, as well as a group of popular Neapolitan songs of the Santa Lucia variety — all with piano accompaniments. He was

not a musical artist of great distinction, especially in that day of virtuosic singing, and his records today have a curiosity value only. Giannini's most sought-after disk is the "Miserere" duet from Trovatore, No. 930 in the Berliner catalog, in which an anonymous cornetist intones the music that Verdi allotted to a soprano.

Such celebrities as the gramophone could boast of in the 1890s were drawn mainly from the stage and the orator's platform. By 1898 one could hear via gramophone records the voices of Dwight L. Moody, the tubthumping evangelist; Chauncey Depew, railway magnate and after-dinner speaker extraordinary; Joseph Jefferson, the American comedian famous for his playing of Rip Van Winkle; Robert Ingersoll, a militant freethinker with a gift for oratory; and Ada Rehan, a brilliant comedian who divided her time between the London and New York stage. Other eminent names attached to the gramophone roster were John Philip Sousa, whose band recorded ex-

clusively for Berliner, and Maurice Farkoa, a music-hall entertainer of international reputation.

In the fall of 1898 Seaman's advertisements reminded readers: long winter evenings are coming on. Now is the time to buy a gramophone." It was announced proudly that an instrument "was recently ordered for the Imperial Palace in Constantinople; even the Sultan apparently recognizing the fact that for Making Home Attractive, there's nothing like the Gramophone." To make it even more enticing, the National Gramophone Company began selling on the installment plan: five dollars down and three dollars per month for seven months. The combination of long winter evenings, the Sultan's taste in domestic furnishings, and five dollars down managed to Continued on page 88



Product: a "partially educated parrot."





ADVENTURERS IN Sound

Eavesdropping **P**

n New York 19

by Beatrice Oppenheim and Ira Freeman

AN ANXIOUS young man strode into New York's Polyclinic Hospital one night not long ago. A loiterer carrying a leatherette case, about the size of a woman's fitted vanity kit, ambled after him.

During the next tense hours — while the anxious young man waited to become a father — the loiterer with the "vanity" case became his shadow. As the expectant father paced to and fro, asking worried questions of attendants, exchanging nervous banter with other anxious young men, the shadow stayed with him. The shadow was there when the good news came at last. (A daughter.) And when the father reached the nursery for a first look at his child, he had at his heels a little band of in-laws — and the man with the "vaniry" case.

The shadow was Tony Schwartz, the "vanity case" his Magnemite tape recorder. Tony, who has been eavesdropping on his New York neighbors for two-and-a-half years, had just added to an already extraordinary collection a documentary drama of an expectant father's ordeal and joy.

"As usual in such cases," Tony explains, "my subject was so preoccupied he was unaware of what I was doing."

Listening in on real people living real experiences is the latest aspect of Tony's unique archive of sounds of our day which he calls *New York* 19.

Tony Schwartz is a tall, bulky 30-year-old with untidy black hair, a ready grin, and an ingratiating manner. He is a commercial layout artist by profession, but he spends an average of 20 hours a week of his spare time — and almost all his spare cash — on his recordings.

His recording activities are of two kinds: one, collecting the beautiful, raucous, piteous, amusing and otherwise characteristic sounds of his home neighborhood, the postal district known as New York 19; the other, collecting folksongs from all over the world.

New York 19 is the bustling, multilingual territory bounded by the huge department stores of Fifth Avenue on the east, the Hudson riverfront with its great ocean-liner docks on the west, blazing marquees of Times Square on the south, the Plaza and the swank apartment houses of Central Park South on the north.

Within this teeming center of the largest metropolis in the world are Broadway and the theater district, nightclub row on 52nd Street, Radio City, Madison Square Garden, Carnegie Hall, and the slums where Negro, Puerto Rican, Spanish, Italian, Irish, French families are piled in together.

"History up to now has been recorded in writing and pictures," Tony says. "Why shouldn't we have a public archive of the sounds of our times?"

And so, just as a documentary photographer tries to catch candid, unposed views of people's everyday lives, Tony Schwartz seeks an "unconscious" record of the people talking at work, singing at parties and in church, quarreling in the backyard, haggling in shops, of children playing in the street, young couples making love in the park.

He has records of traffic noises, street peddlers and musicians, of conversations in bars, of a nightclub barker "pulling in" customers from the sidewalk, of political orators during campaign time in Columbus Circle, of a gypsy telling fortunes, of a hiring-boss picking longshoremen out of an early morning "shape-up" on the West Street docks, of pentatonic wailing from a jukebox in a Greek restaurant, of an Italian street festival.

Here is the nostalgic lament of a Puerto Rican talkingblues to a hot guitar accompaniment: "In my country is always flowers; that is my paradise. I wouldn't change my Puerto Rico for sixty New York's."

Here are children's street games, the skip-rope chant: "Indian, Indian, lived in a tent, had no money to pay her rent."

Tony has caught the deeply-felt folk expression of a Negro congregation fervently singing, "Down by the Riverside," punctuated by clapping and hallelujahs, in a little church in a converted store. Across the street, he has recorded a Puerto Rican "store-front" church congregation singing the same tune, but with Spanish words.

A Times Square pitchman patters amusingly: "Tell you what I'm gonna do . . . sell you a ten-dollar fountain pen for only twenty-five cents . . . writes in any language . . . you can take this pen into any pawnshop, ask 'em for \$10 and see how quick they kick you out . . ."

A French girl in a Ninth Avenue bistro sings a folk song "my grandmère taught me in Normandy." A mother tenderly croons a lullaby in Yiddish to her baby. A rhythmband of boys rocks an apartment house basement with an interesting combo of bongo-drum, wooden chairs, metal waste baskets, an empty cola bottle, and the familiar



Tony in action, His subject: the blind musician-composer Moon Dog.

"kazoo" or comb covered with tissue paper.

Folkways will issue portions of *New York* 19 on LP soon. The company has already published a collection of children's street games and songs recorded by Tony, under the title of 1, 2, 3, and a Zing, Zing, Zing. Last year, Mars released a 45 rpm disk of Tony's recordings of Moon Dog, the blind street musician and composer, playing his own extraordinary compositions on the Oo, Utsu and Uni, stringed instruments of his own devising.

But Tony's endless effort to record the sounds in a congested urban area, one mile long by a half-mile wide, manages to use up only half the spare energy of this apparently tireless young man. At least as much of his time goes into his folksong collection, which Tony believes to be the largest in the entire world. Up to now, he has more than 10,000 songs in 30 languages, contributed by more than 600 recorders on tapes, wires and disks in 40 countries throughout the world. At present, Tony's personal annual expenditure on recording folksongs is actually greater than that of the Library of Congress.

Tony's private library — more than 1,000 rolls of tape and wire and hundreds of disks — is filed in neat cubicles, lining his small studio-apartment from floor to ceiling. From it, he has provided taped programs for many radio stations in this country and for some foreign networks. Producers of Hollywood movies and Broadway plays who need special, hard-to-fake sound effects (like the noises of the New York waterfront) often get them on order from Tony.

All this began casually eight years ago, when Tony invested in an inexpensive Webster wire recorder.

"I had always been interested in folk music," he explains, "so it was natural for me to begin recording folk programs from my radio."

One day Tony met Oscar Brandt, director of folk music for New York City's municipal broadcasting station, WNYC. Tony spoke of his enjoyment of Brandt's own guitar-accompanied broadcasts.

"I'd like to hear how they sound sometime myself," Brandt remarked wryly, "but air-checks are expensive." "Come on up to my place!" answered Tony. "You can hear them right now."

Brandt got such a kick from Tony's recordings that he picked up his guitar and made some more then and there.

This gave Tony an idea.

"It occurred to me that there might be many folksingers who couldn't afford air-checks. I could supply them, and in return the singers might be willing to make live recordings for me. I started calling them right away."

Soon the list of callers at Tony's one-and-a-half-room apartment looked like a Who's Who of folk singers. It ranged all the way from the Weavers, just beginning to make their reputation, to a newly arrived Peruvian girl singer named Yma Sumac. Tony now has more than 50 hours of recordings of the bird-voiced Yma and her family, including some made when the singer was only 14.

"Next," Tony recounts, "I had heard about a man in California who was collecting folk music, too. So I made a wire, telling him what I was doing, giving some examples and suggesting that we might swap recordings."

Months went by without an answer.

"I had given up, when along came a special delivery package from California. The fellow had been away, but he thought the idea of exchanging folk recordings was wonderful, and he had sent me a tape."

During the next months Tony plucked names and addresses from farm journals in order to make contacts in other parts of the country. He talked manufacturers into giving him lists of amateur equipment buyers. An army of friends passed on the word that Tony Schwartz was interested in folk recordings from everywhere. Eventually, even Voice of America and the U. N. radio carried his appeal.

And back came recordings, from virtually everywhere. Now, to numberless nooks and corners of the world, Tony sends greeting-tapes that go like this:

"Hello. My name is Tony Schwartz. I am interested in collecting and spreading folk music. I am a commercial artist by profession. I have been recording folk music for over seven years, and have music from all over the United States, Puerto Rico, Peru, Brazil, Canada, China, Czechoslovakia, Greece, Spain, the Soviet Union, Hungary, England, France and other places. The material is performed by people in all walks of life. Some are professionals. I would like to exchange music with you. I am interested in songs or music that people sing or play in their efforts to make the world a better place to live in—songs of work, dance, protest or pastime. Here are a few short sections of various songs to give you an idea of the type of material I have in mind."

And there follow a Peruvian mountain song, an American work blues, a New Jersey menhaden fisherman's song, a Negro spiritual, a Spanish song from Peru, a Spanish guitar-tune, a Chinese song, a Czechoslovak song, a song from a political rally, an example of group singing.

"I hope these have given you an idea of the type of material I have recorded," Tony winds up. "My equipment can play any 78 rpm, 33 1/3 rpm records, any wire recording and 7½ or 15 inch per second single track tape recordings. I can play double-track only if one track

is left clean. I am looking forward to hearing from you."
The exchange recordings arrive regularly:

"Hello, Tony, this is Max Nichols of Pietermaritzburg, Natal, South Africa. I'm sending you a recording of 'God Save the King,' in Zulu."

"Hello, Tony," says a combelt rural voice, "This is Ervin J. Walters of Bridgewater, South Dakota. I'm sending you a 15-minute tape, cowboy and hilly-billy stuff, with my own guitar. I farm 400 acres here, raise corn, barley, oats, all that stuff . . . But my hobby is singin' cowboy songs."

A very different accent speaks from another tape. "Hello, Tony. I got your tape and thanks. I'm Thomas Norton of Killarney. I'm going to play you some Irish folk songs from County Kerry on the fiddle, the accordian and the harmonica."

And so it goes. Tapes arrive from India, China, Greece. An American G. I. sends a tape of Korean children's singing games.

Virtually all the foreign contributors either speak to Tony in English on their tapes or have someone speak English for them. Tony, on the other hand, had to translate his request tapes into nineteen languages.

Of course, he could not speak tongues of many Asian and African countries. Accordingly, he appealed to students from those countries, whom he found in universities in New York and through consulates, to put his words into their native tongues. In some cases, he found Americans — ex-G. I.'s and the like — who could speak Indian dialects, Japanese, and so on.

"This was particularly successful," he explains, "because to the addressee it sounded realistically like an American talking in the foreign tongue. When a native records for me it is obvious that it is not Tony Schwartz talking Pahlevi, for example."

Tony's recording equipment now includes two Magnecorders and the Magnemite. For out-of-the-studio recording, he has fitted one of his Magnecorders with a portable generator (he was a shortwave ham in high-school days, and retains his touch with a soldering iron) and has added remote controls. He used to stow the bulky Magnecorder in an automobile and depend on the remote controls for mobility. Nowadays, he uses this rig only for 15-inch-persecond recording of concerts and festivals. For "candid" tapes, the tiny, streamlined Magnemite, recording at 7½ inches per second, is far more convenient.

The candid possibilities of the Magnemite have been improved by a few developments of Tony's.

"I've added a set of controls," says Tony, "so that the case doesn't have to be opened to put the machine to work."

Stalking candid sounds, Tony seems to be wearing a watch on each wrist. On one he wears a Brush lapel-microphone, neatly fitted to a snap-on leather watch-strap, and on the other a similar rig mounted with the plug-in jack. The connecting wire runs under his shirt.

For less candid, out-of-studio occasions, Tony uses an Electro-Voice 650 microphone, which he carries in an un-obtrusive leather case, originally designed to hold men's toilet articles.

In a restaurant booth, Tony recently demonstrated how

www americanra

well the wrist microphone works. By flinging his arm nonchalantly across the back of the bench on which he sat he was able to record all the give and take of a boy-meetsgirl session at the table behind him. (Boy picked up girl, Tony's tape revealed later.)

Tony is defeated in making candid recordings of only one group.

"You can fool everybody but children," he claims. "Kids are much too smart. It's better to tell them frankly what you want them to do."

Though Tony spends hours every week unobtrusively eavesdropping, he spends as many more making recordings by appointment. He outlines a typical half-week like this:

"On Sunday morning, I meet the superintendent of my apartment building as I go through the lobby. He invites me to his Spanish Club two blocks away to record a Spanish folk-chorus and guitar-orchestra.

"Monday, I run into a friend and one of his co-workers on the street. I make an appointment with my friend's friend to record Swedish songs. Before I leave him, he asks if I would mind if he brings a friend along who knows Norwegian songs.

"Tuesday, I make an appointment with a neighbor to record Yugoslav songs she learned from her mother. Later, I drop in at a restaurant where the cook promises to record Old Yiddish songs.

Wednesday, I chat with the porter at my bank, and he offers to bring over a friend from Jamaica who knows Calypso songs. And so it goes —"

Sometimes, Tony has to baby-sit, to help write a school composition, or tape a sermon, in order to arrange a recording he wants. But he always gets his song. His pass-key is his own warm and honest interest in people.

He has come to the conclusion that there is emotion and poetry worth preserving in the speech of ordinary people — and he has many tapes to prove it. For instance — his Italian plumber, telling of life in — Continued on page 87

Tony using a wrist-mike: "You can fool everybody but children."



7.

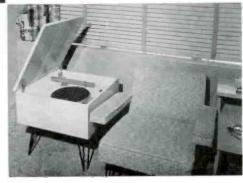


READY-MADE cabinets are getting hetter-looking all the time. The one pictured above (really three in one) is by Angle-Genesee, of Rochester. But the custom-installation man is not left behind—note the installation made for his own home by Theo. F. Detweiler, custom-sound man of Rockford, Illinois, pictured at right. He did all the woodwork himself, even the parquetry front of the Klipschorn.





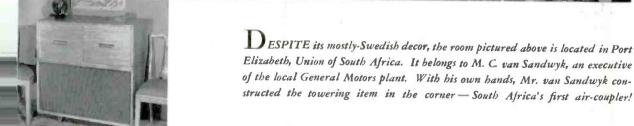
The modern manner is exemplified, at left and helow, by equipment cabinets designed by Weingarten Laboratories, of Los Angeles. These two are intended for the same room. Leftmost division of the large cabinet contains a record changer, for lazy listening.





HOME INSTALLATIONS



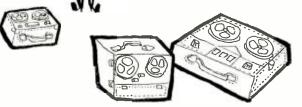




The unostentatious rig at the far left, surprisingly, is that of Harold Weiler, author of High Fidelity Simplified, made to his design by Gotham Sound Systems, Woodside, N. Y. The deluxe listening-corner, at bottom, is an installation made by Custom Television, of New York.

Perhaps you have thought about making your own "air-checks" of the Met, or immortalizing the hermit-thrush that visits your front yard. But what kind of recorder do you need for such exploits? How much should it cost?

What W to look for in a tape recorder



by CHARLES FOWLER

JUST how many million hours have been spent in the past three months by window-shoppers staring at high fidelity equipment is not known with any accuracy. Neither, naturally, can we be sure how much of that dreamy-eyed contemplation was devoted to tape recorders. But we do know that interest in tape equipment, as part of home sound systems, is growing rapidly. Indeed, it is probably safe to predict that if you are not already interested, you soon will be. Recorders now are available, and more will be before long, which make it well worth while to ask yourself: "What about a tape recorder for me?"

In this article, I want to try to outline the basic features of tape recording equipment relevant to that \$64 question — so that you may be able to select wisely from the many units now on the market and walk home with the one best adapted to your own personal requirements.

Suppose we start at the point where you have just seen a tape recorder, and that when that silent speculation flashed through your mind, it wound up with a question mark after it. The first step is to buy, immediately, a pack of one hundred three-by-five file cards. (I am being slightly facetious, but there's a serious point to be made.) Every time you get an idea about what you could do with that recorder, jot it down on a card. (If ideas come fast and furiously, don't be surprised. Two yeats ago the Brush Development Company published a book which listed 1,001 uses for a tape recorder!)

The objective of this whimsical exercise would be to discover some of the myriad uses to which a recorder can be put, and which of them appeal to you. The latter consideration makes a big difference in the equipment you buy.

In sorting your cards, real or figmentary, you'll find it convenient to drop them in two major piles: uses which do, and uses which do not, involve a hi-fi system as "accessory." If the majority of your cards fall into the pile requiring hi-fi reproduction, you can categorically exclude a large number of recordets now on the market. That is a rather flat statement to make; let me explain it.

There are two essential elements in every tape recorder: the tape transport mechanism and the electronic equalization-preamplification circuits. The transport mechanism is the mechanical side, the motor and its accessories, which move the tape forward and back. The essential electrical side—the equalization circuits and the recording-and-playback amplifiers—perform two functions: they boost the bass and treble in such fashion that the combination of recording and playing back results in substantially flat output, and they amplify the electrical energy sufficiently to power the recording head or, in playback, to drive a power amplifier and hence a speaker.

Now, a good many tape recorders are what I call "package" units. That is, they include a power-amplifier stage and a loudspeaker. They are complete in themselves. They are very convenient to use and, generally, light enough to carry about. To record, you need merely to plug in a microphone and push a button or twist a lever. To play back the recording, you need only rewind the tape and push another button. You do not need to attach these units to a hi-fi system or an external speaker.

Remember, however — and this is very important — that such units must include a power amplifier stage to drive the built-in loudspeaker. And, because tape recorders are inescapably expensive to build, manufacturers put their money into the essential parts and skimp on the output stage. Perhaps, considering the sonic limitations of an inexpensive speaker housed in an inadequate, tiny box (the tape-recorder case), the manufacturers are not really skimping on the output stage. But when they provide a connection marked "External Speaker" they do not expect it to be connected to your fout-way Super-Glorioso Corner Special.

I found this out the hard way, not long ago. The recorder I used had sounded like one of the better tabletop radios in its unassisted state. Then I hooked up a big coaxial as an "External Speaker." The poor little output stage (it used one tube and a small transformer) grunted, groaned, screeched and screamed. A distortion-

check showed that about 70% of the distortion delivered to the big speaker was being generated in the output stage; the sound coming off the tape was relatively clean.

So... decide first whether or not the recorder you plan to buy will be used, to an important extent, with a hift system. If so, stay away from any package units which do not provide some means of getting the sound out ahead of the power-amplifier stage. If the uses to which you will put your recorder do not require sound better than that obtainable from good table-top phonographs, then you have the whole field of home-type recorders to choose from. The sound available from these package units is all the way from mediocre to surprisingly good.

I have discussed this one point at great length because it is a major distinguishing feature among recorders today, and it is of considerable importance to you if you intend to use your recorder in conjunction with a hi-fi system. It is of further importance because the situation is changing rapidly these days. Tape recorder manufacturers have discovered the hi-fi market. There is already one homeuse model in which the power-amplifier and speaker come in a separate case (and need not be bought at all). There will, no doubt, be others of this design on the market very soon.

Once you have made the basic decision as to which fundamental type of equipment will best suit your requirements, then you will have to study the many features of the different units and decide which features are important to you. As a relatively trivial example, I can think of one recorder on which the push-button controls are excellent but the revolutions-counter is hard to reset; on another make, the controls are harder to operate but the counter resets easily. So which do you want? All I can do is to list as many as possible of the different features you are likely to encounter and mention briefly their importance and function:

wow and flutter concern the steadiness with which the tape passes the record and/or playback head; the lower the figures (expressed by manufacturers in percent) rhe better. Wow and flutter are hard to measure exactly without elaborate laboratory equipment. However, the ear is boss, and listening tests should disqualify any machine on which pitch-changes of musical instruments are perceptible. (To test, try a steady flute or violin tone.) At this juncture, it may be pointed out that part of what you pay for in a costly professional recorder is stringent quality-control. They really live up to their specifications.

FREQUENCY RESPONSE refers to tonal range, and the flatter and wider it is, the better. The standard rule of thumb has been that tape-speed multiplied by 1,000 gave top high-frequency response. Thus, a recorder operating at 7½ inches per second (ips) could be expected to go to

7,500 cycles. Engineering advances during the past year or so have stretched this upper limit drastically. Care in design plus even more care in production has put 12,000 cycles within the reach of some \$150 to \$250 machines.

TAPE SPEED is important in two respects - fidelity and operating cost. The following speeds occur: 178, 334, 71/2, 15 and (on super-professional units) 30 ips. Some units operate at only one speed; some at two. Common among the home-use units are 314 and 71/2 ips; among professional equipment, 71/2 and 15 appear regularly. Because of the improvements mentioned above, 71/2 can be considered entirely adequate for home hi-fi use, the extended frequency response made possible by speeding up to 15 ips being hardly necessary except when perfection is the goal and accessory equipment (such as microphones) are of comparable quality. (It also facilitates editing considerably.) The 3¼ speed is good enough for some music and most voice, where the fidelity requirements are not very great. Also, 31/4 is a fair match, in general response, for the small power amplifier stage and speaker found on many packaged units. Speeds of 17/8 are seldom found nowadays and are good only for such things as stenographic dictation.

Tape speed has, of course, a direct relationship to operating cost. At 7½ ips a 1,200-foot reel of tape will record about 33 minutes on one track. At 3¾, the duration is doubled; at 15, it is cut in half. Cost of tape will not be a significant factor for you unless you intend to build up a library of tapes. Otherwise, a few reels of tape—recorded, erased and re-recorded—will last almost forever. Tape does not wear out—at least, not within 500 to 1,000 plays!

SINGLE VS. DUAL TRACK is another cost factor. Most units today record two tracks on one strip of tape. That is, you run all the way through and then, on most machines, reverse the positions of the reels and play through again. (Some machines record, or play, forward and then backward.) Thus you ger two complete sound tracks on the single 14-inch width of tape. This cuts costs in half, as compared with single-track recording. The 1,200-foot reel mentioned above records for 33 minutes on one track and an additional 33 minutes on the second track. The major disadvantage is that once the second track has been recorded, editing becomes almost impossible; you cannot snip out a piece from one track without snipping the second track as well. (However, there's nothing to prevent you from recording only one track with a dual-track machine; then editing is, as usual, simple.)

NUMBER OF HEADS varies from one to three or more. Three things must be done to tape: it must be 1) recorded, 2) played back and 3) erased. In nearly all packaged units and in some professional equipment, record and playback



MAY, 1954

functions are combined into one head. In tape terminology, a "head" is a detachable cartridge containing an electromagnet that picks up or records a signal on the tape as it passes by in close contact. When separate heads are used, you have the advantage of being able to monitor (i.e., listen while recording, with headphones or loudspeaker) directly from the tape, and a fraction of a second after the recording is made. With a combined head, you monitor the sound as it is being fed to the tape and must wait until recording is finished and playback is possible before hearing how the tape itself sounds.

The third thing "done to tape," as I put it, is erasure. Recording magnetizes the tape; erasing demagnetizes it and prepares it for a new recording. Erasure is accomplished either by the alternating current erase method, or by the permanent magnet erase system. AC erase is, technically, superior to PM erase in that it does a more thorough job and therefore leaves the tape with less background noise. However, PM erase is less expensive to manufacture and it may be said that good PM erase is better than poor AC erase. All professional recorders use AC erase; so do most packaged units.

IT IS not always easy to tell, from the appearance of the recorder, which type of erase is being used, since some manufacturers combine the AC erase "head" and the record-playback "head" into a single shell or case which looks for all the world like a single record-playback head. The final criterion is, how completely does the machine erase? Here's a simple test which may help you find out: record some music or sound at fairly high level on a piece of new (be sure it's never been used) tape, for one minute. Then, leaving the record-switch on, turn the recording-level control as far down as it will go. After 20 seconds, stop the recorder and rewind the tape. Then play it back as loudly as is tolerable. Thus you'll be able to compare three stretches of tape - music, erased, unused. Listen to the "erased" section as it passes. How much hiss is there? And how much quieter, if any, is the unused section?

Now rewind, once again. This time, let half of the music play. Then stop the machine, set it to record, and set the recording level as low as it will go. Let it run long enough to erase the latter half of your musical selection. Rewind again, set playback volume high, and listen through once more. When the full-volume music suddenly stops, and the erased stretch begins, see if you can still hear a small ghostly continuation of the music. If you can, try another machine — not necessarily another make, because faulty erase components crop up once in a while.

POST AND PRE-EMPHASIS are some technicalia which you probably won't run into but ought to know about. If no electronic equalization were used, the frequency response of tape would look like the profile of a mountain set in the middle of a plain: a slow, gradual rise from the low frequency end, up to a peak, and rather abruptly down at the high end. By equalization through electronic circuits, the bass is boosted prior to recording (pre-emphasis) and the treble boosted after recording, on playback (post-

emphasis). Professional equipment and the better packaged units follow standards of equalization established by the National Association of Radio and Television Broadcasters. However, some manufacturers have their own ideas about the when and how-much of equalization. These can make things tough for you, if you have occasion to play on your machine tape recorded on another - and that includes pre-recorded tape, of which there is an increasing supply. Then deviations from standard equalization become obvious and can ruin sound reproduction. Furthermore, some makers of low-cost package units save on the cost of equalization components by using microphones and speakers of known deviation from flat to compensate for lack of electronic equalization. For instance, boosting the highs can best be accomplished by proper electronic circuitry, but it can also be accomplished, after a fashion, by the use of a loudspeaker known to exaggerate the highs. This is all right so long as you don't try using a better speaker; then the electronic deficiencies become apparent.

AZIMUTH ADJUSTMENT of the record-playback head is another subtle matter which you need to know about if you intend to use different machines. The gap between the magnet pole-pieces in the record — and/or playbackhead is supposed to be precisely at right angles to the length of the tape. If the head jars askew so that it is a little off-vertical, it won't matter with tapes recorded while the head was off-angle, but if you play back tapes recorded when the head was perpendicular, you'll lose some of your highs. Hence, azimuth adjustment, as it is called, becomes important. There are alignment-tapes, not very costly, which can assist you or your serviceman to adjust heads until the gaps are properly vertical.

INPUT CONNECTIONS come in all sizes and styles. There are physical differences in the styles of the plugs used as well as many different input circuit arrangements. All tape recorders provide for microphone input. Most, in addition, permit connection to some part of a radio or high fidelity system. Some examples will show the variety of input systems and circuits: package unit A has a single input connection, designed for high impedance mike. Connections to "radio" are possible by use of a special cord; one end attaches to the voice coil terminals of the radio speaker, the other plugs into the microphone input jack. Resistors, to drop the volume level, are wired into the cord. Package unit B has a single input jack but uses two types of plugs, one making proper connections for a microphone, the other for a radio (again utilizing the voice coil connection). Package unit C has separate input jacks, one for microphone and one for radio. Unit D has three jacks, one for microphone, one for radio, and one equalized for magnetic phonograph cartridge.

WHAT you need depends, again, on how you plan to use your recorder. If it is to be used in conjunction with a hi-fi system, much depends on the flexibility of that system. Some of the better "front ends" used in high fidelity systems incorporate

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Elia the Earless

Charles Lamb — Elia of the essays familiar, or at least assigned, to all good boys and girls in high-school English literature classes — was an affectionate man. He loved his native London. He loved his friends. He loved the nostalgia called up by memories of his childhood and youth. He loved his books. Above all, he loved his sister Mary, who in a fit of temporary insanity had killed their mother and whose returning periods of mental instability made it necessary to put her away from time to time, caring for her and nursing her and collaborating with her on their *Tales from Shakespeare*. He even (perhaps because he never married) loved all of his other relatives. But he hated music.

This was a pity. Not that there was any reason why he should have been fond of music. But he moved in circles that were musical as well as literary, and it is axiomatic that when music cannot be escaped life is easier for all if everyone present can at least tolerate it. Lamb apparently could tolerate music, but hardly, and since he was a considerate man as well as an affectionate one he must have suffered torments not inconsiderable.

One of the homes he and his sister visited regularly was that of Vincent Novello. He, too, was a remarkably sociable man whose friends included musicians as well as literary people. The difference was that he himself was a musician, and a remarkable one. Born in London of an English mother and an Italian father, Novello was an organist, pianist, choir conductor, teacher, violist and publisher of music; the publishing house he founded is still active and distinguished. To his home came Keats and Shelley, Leigh Hunt, William Hazlitt, Coleridge and Charles Cowden-Clarke; Felix Mendelssohn, Maria Malibran, the double-bass virtuoso Dragonetti, Thomas Attwood (who studied with Mozart and ended by weaving the tune of Rule, Brittania! into an anthem), and Charles Auguste de Bériot (who, in addition to being the husband of Malibran, was the ranking violinist of his day and, on the side, a painter, sculptor and inventor).

As a record of his evenings at home, Novello kept an album — a combination scrapbook, guest log, autograph

collection, and commonplace book. In it one evening Charles Lamb wrote a poem. The evening must have been both long and fraught with music and musical talk; Lamb was not characteristically a rapid writer, and the poem is not short enough to have been dashed off in a moment — save, perhaps, under the stimulus of great aural anguish. Unmusical members of audiophile-ridden households may find in it a bond of sympathy across the years with a little man known to them otherwise only as the author of A Dissertation upon Roast Pig:

Free Thoughts
On Some Eminent
Composers

Some Cry up Haydn, some Mozart, Just as the whim bites. For my bart. I do not care a farthing candle For either of them, nor for Handel. Cannot a man live free and easy. Without admiring Pergolesi? Or through the world with comfort go That never heard of Doctor Blow? So help me God, I hardly have; And yet I eat, and drink, and shave, Like other people, if you watch it, And know no more of stave or crochet, Than did the primitive Peruvians, Or those old anti-queer-Diluvians, That lived in the unwash'd world with Tubal, Before that dirty blacksmith, Jubal, By strokes of anvil, or by summat, Found out, to his great surprise, the gamut. I care no more for Cimarosa, Than he did for Salvatore Rosa, Being no painter; and bad luck Be mine if I can bear that Gluck. Old Tych Brahe, and modern Herschel, Had something in them: but who's Purcel? The Devil with his foot so cloven, For aught I care, may take Beethoven;

And if the bargain does not suit,
I'll throw him Weber in to boot.
There's not the splitting of a splinter
To chase between him last named, and Winter.
Of Doctor Pepusch old Queen Dido
Knows just as much, God knows, as I do.
I would not go six miles to visit
Sebastian Bach — or Batch — which is it?
No more would I for Bononcini. —
As for Novello and Rossini,
I shall not say a word to grieve 'em,
Because they're living. So I leave 'em.

C. LAMB.

When he had finished, Mary Lamb, who presumably had been looking over his shoulder all the while, found half a page left over at the end of her brother's diatribe and added an apologistic postscriptum to their host:

The reason why my Brother's so severe,
Vincentio, is — my Brother has no eat;
And Caradori her mellifluous throat
Might stretch in vain to make him learn a note.
Of common tunes he knows not anything,
Nor "Rule Brittania" from "God Save the King."
He rail at Handel; He the gamut quiz!
I'd lay my life he knows not what it is!
His spite at music is a pretty whim —
He loves not it, because it loves not him.

M. LAMB.

Moral:

Let those with ears by music horrified, Take solace in the homily implied: Music hath charms, though not for all; BUT nonexistent charms can never pall.

Pravda at the Bolshoi

The time is not quite now for a full-dress go at the current Commissar-versus-Composer debate that has been going on in the Soviet Union since the accession of Malenkov to the big desk in the Kremlin. In the first place, Russian repartee whips back and forth at about the speed of a medicine ball in the second quarter-hour of a game between fat-and-fiftyish business men earnestly reducing their corporate girths at the local athletic club. In the second place, the outcome cannot yet even be guessed, since no scores have been released. In the third place, it isn't even clear just who is on what side — if any.

Nevertheless, those distant thumps and plops of conflicting opinion — or conflicting doctrine — recorded in the pages of a recent issues of Sovyetska Musyka do bring to mind some memories of the past.

One point that ought to be made, but usually isn't, is that there is and always has been a good deal of actual critical disagreement among Soviet publications that deal with music. The mere appearance of articles protesting against bureaucratic restrictions on the creative artist is no guarantee whatever that the restrictions will be withdrawn or even eased. They may change, but that is all that can be said.

The characteristic pattern of musical life in Russia is this: The supreme Soviet promulgates policy directives prescribing the kind of music that is to be looked on with official favor, the general desideratum being that it must be accessible to the mass audience and must be constructive in its contribution to national development along political and socially desirable lines. Then composers read, discuss, and attempt to fulfill the official stipulations. Critics read, interpret, and, when a new piece is performed, criticize it according to the sense they make of the current directives.

The *Pravda*, which has been sitting back like a cat watching mice at play, sums up the official Party Line position and not only criticizes the work but criticizes the critics according to how prescient they have been in divining the proper thing to say about the work.

Thus the life of a Soviet music critic must be a tough one — quite as tough, in its way, as the life of a Soviet composer. If a critic writes an unfavorable review of a work that *Pravda*, at leisure and in its all-wisdom, decides should be praised, he gets a public spanking. And if he writes a favorable review of a work that *Pravda* decides should be damned, he gets spanked, too — only usually harder and longer.

Either way or both — too many misses, and out. It isn't quite clear what happens to out-of-work music critics in Russia. Maybe they just starve to death, like in a capitalistic society. Maybe they go to work on the nearest beet farm or salt mine. In any case, there must be more out-of-work music critics in Russia than in other countries. Mistakes are too easy to make, and *Pravda* is always watching.

In this country, say, all a music critic has to do is write decently and maintain a reasonable level of factual accuracy. Once hired, he is seldom called to book for his opinions, especially if they are neutral and roughly in accord with the majority. In his function as reviewer of performances, he can get by quite handily by speaking of the Beethoven *Ninth* as "majestic" or "heavenly," of the playing of Horowitz as "virtuosic" and so on. When he meets a new piece of music he can get by with simply describing it as "modern in idiom" — whatever that is — or "interesting." He doesn't really have to pass any judgement on its merit at all.

Not so in the Soviet Union. There the critic is under constant surveillance, and *Pravda* is just as constantly on the lookout for deviationist critics as it is for deviationist composers who have a tendency to slip into decadent formalistic practices. The trouble is that there is no way of telling in advance what standards are going to be applied.

You might think that to be a Soviet critic and last in the job all you would have to do would be assume the lowest possible level of musical sophistication and write reviews with the viewpoint of the musically least literate reader constantly in mind. Unfortunately for the critics, this is not so. It may be—is, in fact—relatively safe to write unfavorably of compositions that are definitely on the problematic side. But it certainly is not safe to write favorably of pieces simply because Continued on page 77



Reviewed by Paul Affelder • C. G. Burke • John M. Conly
RAY ERICSON • ALFRED FRANKENSTEIN • JAMES HINTON, JR.
ROY H. HOOPES, JR. • J. F. INDCOX • ROBERT KOTLOWITZ

DAVID RANDOLPH • JOHN S. WILSON

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CLASSICAL

French Suites
Suite No. 1 in D Minor; Suite No. 2 in
C Minor;
Suite No. 3 in B Minor; Suite No. 4 in
E Flat Major;
Suite No. 5 in G Major; Suite No. 6 in
E Major

Isolde Ahlgrimm, harpsichord.
COLUMBIA ML 4746. 12-in. \$5.45.

This record is a fitting companion to the same artist's fine recording of Book 1 of the Well-Tempered Clavichord (reviewed elsewhere). As in the case of the other set, the performances are excellent, the recording is live and "close-to," and the surfaces are very quiet.

A special interest attaches to this recording because of the use of the "Pedal Harpsichord," modeled after one owned by Bach. A pedal keyboard, similar to that found on the organ, and manipulated by the feet, adds a wonderfully full bass to the climaxes. With all six French Suites contained on a single disk, this record is certainly a bargain.

D. R.

BACH

BACH

Suite For Unaccompanied 'Cello No. 1 in G Major

Suite For Unaccompanied 'Cello No. 4 in E flat Major

Janos Starker, 'cello. PERIOD SPL 582. 12-in. \$5.95.

Starker gives serious treatment to the slower movements in these inventive solo suites, but is inclined to race through most of the faster movements. Therefore, his interpretations must be put down as somewhat uneven, though far from unsatisfactory. His tone is generally warm, but it has not been reproduced as brightly as it might have been. Janigro does eminently better with the Suite No. 1 on his recent Westminster disk; I have not heard Mainardi's recording of the Suite No. 4 for London. Incidentally, the labels on my review copy of the present disk were reversed.

P. A.

BACH

Complete Works for Solo Violin Sonata in G Minor; Partita in B Minor; Sonata in A Minor; Partita in D Minor; Sonata in C Major; Partita in E Major

Rolph Schroeder, violin, using the curved bow.

COLUMBIA SL 189. Three 12-in. \$17.85.

Here is a recording that should have been issued with more fanfare! If its implications are realized by our present-day violinists, this set should mark the beginning of a new era in violin playing as it relates to performances of the music of Bach and his contemporaries.

Your reviewer will make no pretense here of editorial detachment. For the next few lines, he is expressing his own very personal and very strong opinions.

All performances that he has heard of the Bach unaccompanied violin sonatas (and the unaccompanied 'cello works as well) have been something less than totally satisfying artistic experiences. The lack was due not necessarily to any deficiencies on the part of the performers, but rather to the manner of string playing that the public has come to accept. Think of the way in which all three and four-voiced chords are played. Because of the tightness of the modern bow, the violinist (or 'cellist) must arpeggiate or "break" the chords, playing the lower notes first and the upper notes a fraction of a second later. The results, to these ears at least, are often downright ugly. But for years, the public has continued to accept and to applaud the scratching and scraping that were so inevitably a part of even the most skilled performances of the Bach unaccompanied works. It was hard to believe that this could have been what Bach had in mind when he composed those works. And now we know it was not what he had in mind!

It has been known that the bow used in Bach's own day was not the tight one used nowadays, but one with a higher arch, so that the hairs were slack enough to play three and even four strings simultaneously. Naturally, such a bow lacked the brilliance of tone that one needs for the performance of a Paganini or Wieniawski concerto. But Bach never knew the concertos of those two gentlemen, nor did he intend his sonatas to be performed in tremendous halls seating several thousand people. Therefore, our hearing of his works as they were intended to sound had to wait until the appearance of a violinist who would be willing to sacrifice "brilliance," "power" and other similar adjectives that depend largely on quantitative factors, in favor of a truer realization of the values to be found in Bach's music.

At last, such a violinist has appeared. To the shame of all our highly-publicized, "big name" virtuosi, it was left to a man who was quite unknown in this country to lead the way. He is Rolph Schroeder, who, as early as 1930, played some of the Bach works on the Frankfurt-am-Main radio, using a reconstruction of the curved bow of Bach's time. Now, under the supervision of Albert Schwietzer, Mr. Schroeder has recorded the complete works for solo violin. The album contains notes about the curved bow by Dr. Schweitzer.

The ear, accustomed to the more brilliant sound of modern violin playing, may require a certain amount of time in which to adjust to these sounds. But at last, Bach's intentions become clear. What was meant to be a sustained chord emerges as a chord,



Isolde Ahlgrimm: only once did ill-temper invade the piano posing as clavichord.

and not as a strained arpeggio. In fact, it is amazing to hear a single violin taking on something of the quality of an organ!

It is not maintained that violinists should immediately discard their modern bows, and play everything with the old curved bows. Certainly, nineteenth and twentieth century music calls for the tighter bow, which was a natural and inevitable development. But now that the ground has been broken, perhaps our modern violinists will be impelled to re-examine their views on the music of Bach, and to realize that they have been giving us a falsification until now. As I mentioned, this recording could be the beginning of what later music history books will call "a new era in the conception of Bach."

BACH The Well-Tempered Clavichord: Book 1 Preludes and Fugues 1 to 24

Isolde Ahlgrimm, pedal harpsichord.
COLUMBIA SL-191. Three 12-in. \$17.85.

BACH The Well-Tempered Clavier: Book 1 Twenty-Four Preludes and Fugues

Rosalyn Tureck, piano. DECCA DX-127. Three 12-in. \$17.55.

BACH The Well-Tempered Clavier: Book 2 Twenty-Four Preludes and Fugues

Rosalyn Tureck, piano.
DECCA DX-128. Three 12-in. \$17.55.

If I may be forgiven for borrowing a phrase from W. S. Gilbert, "a reviewer's life is not an 'appy one." At least, that is, if he functions wirh any conscience at all. What, for example, shall he do when faced with the simultaneous appearance of these albums, each of which is quite a magnificent undertaking in its own way? The simplest thing would be to say that since one version uses the harpsichord while the other uses the modern piano, the listener may make his choice solely on that basis. Yet, simple as that is as a way out, it does not tell the whole story. However, to tell the whole story involves so many intangibles as to make the task a really staggering one.

The search for some objectively reportable fact leads us to a discussion of the quality

of the recordings as such. Miss Tureck's playing is more sensitive than is the quality of the recording she has been accorded by Decca. Prime among its deficiencies are the surfaces which, as is too often the case with Decca, are somewhat noisy. The surfaces of Book 1 are superior to those of Book 2 in my copies.

Columbia's recording, on the other hand, is superb, and the surfaces are outstandingly quiet.

Also in the "objective" realm is the comparison of the printed notes supplied with each set. Decca reprints a healthy excerpt from Philipp Spitta's famous book "Johann Sebastian Bach" — specifically, the portion dealing with the Well-Tempered Clavier. It contains some very scholarly analyses of various preludes and fugues, with printed musical excerpts. (The same printed material is supplied with both Decca albums.)

Columbia's set contains a rather concise history of the background and development of the tempered scale, especially as it applies to keyboard instruments. It is written by Miss Ahlgrimm and her husband, Dr. E. F. Fiala.

But then we come to the intangible aspects of the different versions. should be said that, contrary to what one might expect on first thought, the harpsichord version is by far the more powerful in sound, while the piano rendition gives a more restrained effect. This is probably the result of three factors: first, the greater incisiveness of the "plucked" harpsichord tone, as opposed to the "struck" piano tone, aided by the "doubling" of which the harpsichord is capable; second, the fact that the performer on the harpsichord can use all the resources of the earlier instrument, whereas the performer on the modern concert grand rightfully "holds back," in order not to bring to bear all the power of today's large instrument; third, the higher level of the harpsichord recording. There might also be mentioned the fact that Miss Ahlgrimm uses a pedal harpsichord, which supplies additional power when used in the lower octave.

In matters of interpretation, it is difficult to arrive at any characterization which will hold throughout. Miss Tureck tends toward slightly faster tempi. Yet, in the beautiful eighth prelude, the E Flat Minor, she rakes almost five-and-a-half minutes to traverse the same ground that Miss Ahlgrimm covers in just over three minutes! Here, this reviewer will express his personal preference for Miss Tureck's thoughtful interpretation, with the beautiful bell-like tones she draws from the piano. Miss Ahlgrimm takes a competely opposite view, playing it with a power and drive more suggestive of an illtempered clavichord. In justice to her, however, it must be said that this is the only example of its kind.

A special word should be said about Miss Tureck's playing of some of the faster figurations, as in the sixth prelude of Book 1. Using a semi-staccato touch, in order to suggest the detached quality of the harpsichord notes, she achieves an evenness of line that is quite remarkable.

Both recordings are tremendous undertakings. We can only be grateful that two such authoritative interpretations are available—each by a master of her respective instrument.

D. R.

BEETHOVEN
Concerto No. 1, in C, Op. 15
†Mendelssohn: Concerto No. 1, in G
Minor, Op. 25

Hugo Steurer; Radio Leipsic Orchestra, Gerhard Pflüger, cond. (Beethoven) and Helmut Roloff; Radio Berlin Orchestra, Karl Rucht, cond.

URANIA RS 7-23. 12-in. 40, 21 min. \$3.50.

The Beethoven is construed as a miniature by Mr. Steurer, emphasizing its Mozartean aspects. The conductor emphasizes his own contentment in floating in a sluggish stream. There is a surfeit of placidity upon which the excellent piano-sound given by Urania is wasted. The orchestra is big and boomy, occasionally imposing, even when shrill in the violins. — The pneumatic elfishness of the Mendelssohn is better realized, although the pianist drives it hard. The orchestra is responsive and adept, the sound substantial and not unimpressive, but hard on the surface. C. G. B.

BEETHOVEN Concerto for Piano No. 5, in E Flat "Emperor," Op. 73

Wilhelm Backhaus; Vienna Philharmonic Orchestra, Clemens Krauss, cond. LONDON LL 879. 12-in. 37 min. \$5.95.

LP soberly spawns about three "Emperors" a year, and this is the fifteenth. The manufacturers' attitude is not so debonair as the abundance suggests, for the earlier ones were mechanically faulty, and most of the newer ones exhibit technical improvements obvious to everyone. Then there is the wish to imprint some particular style for posterity's benefit, and finally, the Fifth Concerto is one of those titans of the repertory which the prestige of every manufacturer demands in his catalog in a version that he assumes the public will assume to be second to none. - London was not wrong to wish an imprint of the Backhaus-Krauss style. This is the big, hearty manner of a generation ago, foursquare and solid, a broadsword rather than a rapier, steady in a slightly deliberate timing, maintaining dignity at the expense of triumphant aspira-This sinewy way of playing, when backed by the masculine hammers of the Backhaus fingers and the phalanxed hands and lungs of the Vienna Philharmonic commanded by the general whom they obey with most alacrity, is so toughly honest



Rosalind Tureck: all Bach's famous 48 in sensitive, even-lined piano performances.

that it can resist the appeal of essays episodically more telling. It is hard to place in the hierarchy: it belongs near the top and may stay there longer than more fashionable performances. Appropriate values of recording, strong and straight, with a shorter echo than in most of the Vienna Philharmonic disks, and easy to reproduce with the values intact, through the dullest and the brightest reproducers. C. G. B.

BEETHOVEN

Concerto for Piano, Violin and Cello, in C, Op. 56
†Mozart: Concerto for Violin, No. 5, in A, KV 219

Lev Oborin, David Oistrakh, Thersites Knusevitsky; Moscow Radio Orchestra, Nicolai Golovanov, cond.

PERIOD 590. 12-in. 30, 30 min. \$5.95.

A beautiful re-creation of Mozart's "Turkish" Concerto, with several uncustomary features. The string body is larger than we usually hear it, the tempos are slower and the bowing has a reassuring ease which permits an emanation rather than a parade of brilliance. And the refinement of the variable Oistrakh tone is startling to those used to the quivering bravado of his work in other music (where bravado is appropriate). Good sound for the violin in this, adequate for the orchestra. The Triple Concerto, exuberant in pronounced, bouncing rhythm, presents Mr. Oistrakh in honest collaboration with excellent colleagues the cellist is to be noted - but the dry, cramped sound of the large orchestra hurts. C. G. B.

BEETHOVEN

Quartet No. 9, in C, Op. 59, No. 3 Quartet No. 10, in E Flat, "Harp," Op. 74

Vegh Quartet.

HAYDN SOCIETY HSQ 40. 12-in. 31, 30 min. \$5.95.

These are the first of a complete edition of the Beethoven Quartets by the Veghs. The feature is the presentation of them all on 20 sides, against the 24 now conventional, and the 33 to have been expected when LP was a new baby. Very commendable; and the Haydn Society has given us some of the best string quartet records ever made (Haydn Quartets by the Schneidet Quartet) - alas, this is not among them. The fierce edge of the violins cannot be blunted through any apparatus capable of reproducing true treble. This is no question of niceties of recording: it is a case of persuasive musicianship quite spoiled by a factitious and intolerable flaw. C. G. B.

(Another informant, who has heard the Vegh Quartet in the flesh, says that Mr. Burke is misplacing the blame. Much to his surprise, he reports, the Vegh violins really were as shrill as the recording makes them sound. — Ed.)

BEETHOVEN Symphony No. 7, in A, Op. 92

Berlin Philharmonic Orchestra, Paul van Kempen, cond.

EPIC LC 3026. 12-in. 37 min. \$5.95.

A new entrant into a crowded field needs special qualities to attract attention. This is

a fairly laudable Seventh Symphony whose most special quality is a deliberation second only to that of the Furtwängler version, although the Kempen slowness is more equitable and less fancy than the other. Strong sound, bright winds, occasionally glassy violins, imposing tuttis. As a whole it belongs in the upper half of the pile of 16 editions.

C. G. B.

BIZET

Jeux d'Enfants, Op. 22 (Suite for Orchestra)

Suite from La Jolie Fille de Perth. †Chabrier: Suite Pastorale

L'Orchestre de la Societe des Concerts du Conservatoire de Paris, Edouard Lindenberg, cond.

LONDON LL 871. 12-in. 42 min. \$5.95.

What a delightful little suite Bizet's Jeux d'Enfants is, with its pretty melodies and air of youthful insouciance. These five sections, part of a suite of 12 originally written for piano four hands, were later orchestrated by Bizet, and not, as the liner notes imply, by Karg-Elert. The Jolie Fille de Perth Suite omits the Aubade Beecham included in his well known arrangement of this music. There are moments of Offenbachian satire and frivolity in the Chabrier work, also excerpted from pianoforte pieces, and a striking amount of modern feeling in the score, but it lacks the sparkle of the Bizet works.

Lindenberg directs these scores with great taste and firm control, nowhere more noticeably than in the Danse Bobenienne, which is projected with extraordinary clarity, and never allowed to become the shambles it often has under less firm hands. The playing throughout is first rate, glowing, yet always clean and polished, with just the proper amount of French elegance. The recorded sound is beyond reproach. J. F. I.

BLOW

Venus and Adonis

Margaret Ritchie (s), Venus; Margaret Field-Hyde (s), Cupid; Elizabeth Cooper (ms), Shepherdess; Robert Ellis (t) and John Frost (b), Shepherds; Gordon Clinton (b), Adonis; Michael Cynfelin (b), Huntsman. Ensemble Orchestral de L'Oiseau-Lyre; Anthony Lewis, cond.

LONDON (Editions de L'Oiseau-Lyre) OL 50004. 12-in. \$5.95.

Composed about 1682 as an entertainment for the court of Charles II, John Blow's Venus and Adonis is described on the record jacket as an opera. To be very proper about it, the work is a masque. It doesn't really matter very much what you call it, but quibbling over the definition is one way of calling attention to the fact that there were such things as masques in England - musical-dramatic-dance entertainments that, like madrigal dramas in Italy and court ballets in France, bore an ancestral relationship to what we call opera. Venus and Adonis is one of these, but it comes so far along in the evolutionary chain that the listener might as well think of it as an opera kind of thing and, unless seriously concerned with the corkscrew history of dramatic music, not bother too much about semantic questions.

John Blow was born along about 1648;

during his approximately 60 years on earth he rose from choir boy of the Chapel Royal to organist of Westminster Abbey, and incidentally composed a good deal of sacred and secular music, teaching others (including, it is believed, Henry Purcell) to do the same. When Charles II came back to England, after sojourning at the court of Louis XIV, where he had been exposed to the music of Lully, he wanted to be entertained, and in the new style. Nothing was more natural than for Dr. Blow to attempt to fill the demand. Ergo, Venus and Adonis.

So much for its genesis. What does it sound like? Well, anybody who is fond of Purcell's Dido and Aeneas is likely to respond favorably to the musical style of Venus and Adonis. Although there is no single air whose beauty is so transcendent as that of When I am laid in earth, the general effect is not dissimilar, and the stately dance patterns, the long, declamatory vocal lines are very lovely in their own right. The story is that of the myth, told in terms that might be expected of an unidentified seventeenth-century librettist also concerned with giving the Restoration court amatory encouragement. After a prologue in which Cupid introduces himself in a pastoral setting and after certain rudimentary chit-chat calls on lovers to "to the close shades retire, do what your kindest thoughts inspire" (and, presumably after at least a brief intermission for execution of these instructions). Venus and Adonis are discovered embracing on a couch and discussing the eternal question: When next? They are interrupted by a party of hunters, who invite Adonis to come along and follow "the noblest game." With hardly any argument at all, even without disputing their definition of "noblest," he exits, allegro. During his absence, Venus and Cupid conduct a seminar on the second noblest game for a class of Little Cupids. Then, while the Little Cupids play hide-and-seek and hot cockles (rules not given in the published libretto), the Graces dance until the end of the act. Venus, tiring of Little Cupids and Graces, longs for the return of Adonis. Finally he returns — mortally wounded, on schedule, by the Aedalian boar. Falling action: a long duet. Catastrophe: death of Adonis. It seems no more than he deserves for leaving the arms of Venus to go hunting pigs, but omnes forbear saying so and mourn, mourn, mourn. It is very sad.

The recorded petformance, preserved by good, unsensational chamber-type engineering, is intelligently executed, although most of the singing is recommendable on grounds of dedication and seriousness of purpose rather than spontaneous rapport or absolute tonal beauty. Margaret Ritchie and Margatet Field-Hyde are both rather attractive singers in a mild sort of way, but Gordon Clinton sounds a little too stuffy and constrained to create much vocal Adonisillusion. The rest sound exactly like the sort of conscientious, competent, conductable people who are usually tapped for projects like this. Worth while. J. H., Jr.

BRAHMS Concerto for Violin, in D, Op. 77

Gerhard Manke; Orchestra of Radio Leipsic, Hermann Abendroth, cond. URANIA RS 7-24. 12-in. 42 min. \$3.50.

Twenty-eight years ago Hermann Abendroth was making the first electrical recordings of two Brahms symphonies, and this recording of the Violin Concerto reveals the style esteemed in the earlier period. Slow and hardly pliant, harmonically rich and broadly lyrical, it can seem ponderous to ears trained to more nervous traits, but the deep, dark colors sturdily resist wear, and if the determined maestoso evokes smiles, there's is more affection than contempt in them. - The violinist chafes perhaps at the restraint imposed on his livelier impulses in the first movement, for we hear a chastening of his exuberance after each of his entrances. The slow movement is the most successful, the two principals in accord, and the soloist evolving a luster from his strings previously and later not very apparent. Large sound, undifficult and undistinguished, a little dull in overall effect, but well-balanced and often, with volume up, even impressive. C. G. B.

RRAHMS

Hungarian Dances, Nos. 1, 3, 5, 6, 7, 11,

Tchaikovsky: Barcarolle; Divertissement Chocolat; Dance of the Sugar Plum Fairy; Snow Flakes Waltz from "The Nutcracker Ballet;" Melodie; Danse Russe; None But The Lonely Heart.

Westminster Light Orchestra. Leslie Bridgewater, cond.

WESTMINSTER WL 4009. 12-in. 44 min. \$4.95.

A combination of sharply etched sound and Bridgewarer's over-boisterous performances of the Brahms Hungarian Dances, tend to make them sound like Strauss polkas. Hifinatics may admire them; personally I'd prefer a little less shine and more smouldering glow for these fiery Magyar dances. The sound is more appropriate for the Tchaikovsky works, particularly in the Dance of the Sugar Plum Fairy and the Danse Russe, though one cannot applaud the banality of the selections chosen.

Excellent close-to recording, intensely brilliant in all ranges, and of estimable J. F. I. clarity and balance.

BRAHMS Symphony No. 2, in D, Op. 73

Vienna Philharmonic Orchestra, Carl Schuricht, cond.

LONDON LL 867. 12-in. 36 min. \$5.95.

In our age of old conductors one of the oldest has whipped out a Brahms Second bold in vehemence and strength, with delicare chiseling in the two central movements. Obviously Dr. Schuricht is not one of those who maintain that this Symphony is in essence chamber music: it is probable that he was intentionally contributing to lay the allegation. He makes a lusty performance rich in contrasts of dynamics but steady in tempos, forthright and certainly appealing. The sound fits this, robust and imposing in the brass and clear in the wood, the mass massive, while the only point of disappointment in the strings is the occasional light extrinsic shimmer from the violins that still troubles too many disks. But excellent as C. G. B. a whole.

CAVALLI

Il Giudizio Universale ("Universal Justice")

Nicoletta Panni (s); Liliana Rossi (s); Giuseppina Salvi (ms); Piero Besma (t); Albino Gaggi (b). Bruno Nicolai, organ, Renato Josi, piano. Chorus and Orchestra Romana Da Camera della "Società Del Quartetto," Gino Nucci, dir. COLOSSEUM CLPS 1032, 12-in. 48 min. \$5.95.

Pietro Francesco Cavalli's original name was Caletri-Bruni. However, history knows him as Cavalli, a name that he took in honor of his parron, a Venetian nobleman. Although the jacker notes of this recording make him two years older, Grove's dictionary gives the year of his birth as 1602. Either dare, though, gives his relationship in time to Monteverdi, who was born in 1567, and from whom he is generally agreed to have inherited the task of developing the opera as a musical form. As a young man Cavalli was a singer in the choir of St. Mark's, under Monteverdi's direction.

If this oratorio is typical of Cavalli's output, then Colosseum Records has placed us in their debt with the issuance of this first LP disk of his music. The work is a beautiful one throughout its 48 minutes' duration. Besides demonstrating the heights to which the monodic style had been brought, it exemplifies a kind of music whose main objective was an expressive one. From the massive, dramaric choruses, through the touching arias, and even into the recitatives, one is always aware of the dramatic impulse behind this music. The choruses, incidentally, are treated in an entirely homophonic fashion. The polyphony that characterized so many of Monteverdi's madrigals had been abandoned with the development of the homophonic school.

In view of the obvious drama inherent in the music, it is to be regrerred that neither a text nor a translation is included with the record. The disk was made from an actual "live performance." However, the only evidences of this fact are a momentary throat-clearing on the part of one of the singers (between musical numbers), one "fluff" in the second trumper, two momentary departures from perfect ensemble, and one noticeable change in level during the renor solo near the beginning of side two, perhaps the result of a faulty tape splice. Otherwise, one can only marvel at the fact that a live performance can maintain such a consistently high level of excellence, considering the length of the work.

With the exception of the bass, who sings in a forced, overblown manner, all the soloisrs are quite adequate to the task at hand, and sing with obvious conviction. A special word should be said for the affecting manner in which Miss Salvi sings one of her arias; and a special word of regret must also be said for the fact that a modern piano was used to accompany the recitatives.

The over-all feeling of the performance is a very fine one. Ir encompasses the entire emotional range of the music, from the most dramatic to the most tender, and always with great skill. The recording, moreover, is exceptionally good, conveying the open acoustics suggestive of a church, without ever obscuring the clarity of the individual lines. The surfaces, roo, are gratify-D. R. ingly quiet.

CHABRIER

Espana; Suite Pastorale; Fête Polonaise; Marche Joyeuse; Gwendoline Overture

The Orchestre des Concerts Lamoureux, Jean Fournet, cond.

EPIC LC 3028, 12-in. 50 min. \$5.95.

The improvement in Epic's Radial Sound appears to have been only temporary, to judge from this recording. We are back again to that inordinate stressing of the bass at the expense of the higher frequencies that made previous issues sound so lopsided.

The performances of these compositions, while quire acceptable, are hardly outstanding, and do not supersede those already available. The Espana does not equal Beecham's exciting performance by any means, and the Suite Pastorale, rather shabbily played, falls far short of the exquisite Lindenberg reading, mentioned above. The Overture to Gwendoline is the most impressive performance, but it would be interesting to hear some other version of this operatic score, since there appears to be more in it than Fournet extracrs. The deficiencies of the recording have been mentioned, but it should also be added that there seems to be a certain muddiness to the sound, giving it a heavy, confused texture. J. F. I.

CHABRIER Suite Pastorale - See Bizet.

CHOPIN Barcarolle - See Liszt.

DEBUSSY Ibéria; La Mer

Prussian State Orchestra, Johannes Schüler, cond., in Ibéria; Symphony Orchestra of Radio Leipzig, Ernest Borsamsky, cond., in La Mer.

URANIA UR-RS 7-26. 12-in. \$3.50.

It takes more than Teutonic meticulousness to present these two masterpieces in their proper light. Meticulousness there is aplenty here, but very little of the requisite subtlety, variation of orchestral color or, in the case of La Mer, roaring cascades of tone. Monteux still does the best job with Ibéria (in his recording of the complete third set of Images), while Toscanini's La Mer is just about unbeatable on LP (though I still have a soft spot for the old Koussevitzky reading on 78 rpm, and wish Victor would reissue ir on microgroove). As to the reproduction on the present disk, Ibéria soun Is as if it had been recorded in a large, reverberant, empty studio, while La Mer has a disturbingly faraway sound, necessitating a vigorous clockwise twist of the volume P. A. control.

DEBUSSY

Rhapsody for Orchestra and Saxophone -See Ibert.

DITTERSDORF Concerto for Harp, in A

tHoffmann: Concerto for Mandolin, in D

Irmgard Helmis; Chamber Orchestra of Radio Berlin, Herbert Haarth, cond. (Dittersdorf). Gerd Lindner-Bonelli; Radio Leipsic Orchestra, Gerhard Pflüger, cond. URANIA 7110. 12-in. 19, 16 min. \$5.95.

The charm is authentic if fragile. Of all men who composed voluminously. Ditters von Dittersdorf was the least disturbed by problems, and his less famous contemporary Giovanni Hoffmann — to judge by this breezy specimen of his production - was equally disinclined to vex hearers with cogitations that could not be whistled. Both Concertos are music of lace and ruffles, not of the most elegant design, but fit to wear on occasions when the finer fabrics of Mozart, Grétry and Cimarosa could seem inappropriate. Easy-going, confident and seemly virtuosity in both, and both with crisp, vivid sound. C. G. B.

DVORAK

Slavonic Dances, Op. 46

†Malat: Slavonic Girls - Orchestral Suite

Czech Philharmonic Orchestra, Vaclav Talich, cond., in the Dvorak; F. O. K. Symphony Orchestra, Vaclav Smetacek, cond., in the Malat.

COLOSSEUM CRLPX 007. 12-in. \$5.45.

Slavonic Dances, Op. 72 †Schneider-Trnavsky: Dumka and Dance Weiss: Bohemian Dance No. 3 tSebor: Goldhead - Polka

Czech Philharmonic Orchestra, Vaclav Talich, cond., in the Dvorak; Bratislava Symphony Orchestra, Franz Babusek, cond., in the Schneider-Trnavsky; F. O. K. Symphony Orchestra, Vaclav Smetacek, cond., in the Weiss and Sebor.

COLOSSBUM CRLPX 008. 12-in. \$5.45.

As far as I can ascertain, these performances of the Slavonic Dances are identical with those issued about a year ago by Urania. Once again, Colosseum comes off second best, the reproduction being better than usual, but nowhere near the clarity and brilliance achieved by Urania. The other material, largely derivative of Dvorak and Smetana, is relatively unimportant, though often tuneful. For the definitive Slavonic Dance disks, the choice is still Urania. P. A.

DVORAK

Violin Concerto in A Minor, Op. 53 †Glière: Romance for Violin and Orchestra

David Oistrakh, violin. State Orchestra of the USSR; Kiril Kondrashin, cond. VANGUARD VRS 6016. 12-in. \$5.95.

DVORAK

Violin Concerto in A Minor, Op. 53 †Glazunoff: Violin Concerto in A Minor, Op. 82

David Oistrakh, violin. National Philharmonic Orchestra; Kiril Kondrashin, cond. COLOSSEUM CRLP 137. 12-in. \$5.45.

A good deal of repeated listening has failed to show up definitely whether or not these two recordings of the Dvorak Violin Concerto are of the same performance. What made me suspect that they are is that, despite the dissimilarity in names of orchestras, Colosseum's version of the Glazunoff Concerto is identical with that issued last year on a Vanguard disk, the only difference being that Vanguard's microphones were considerably closer than Colosseum's, making the reproduction in the

former much better than the overly reverberant sound in the latter. This same contrast may be noted in the Dvorak, only here Colosseum gets the work on one side, while Vanguard puts the last movement on the second side, which is rounded out by the tuneful, if unimportant, Glière piece.

In any event, Oistrakh does an impressive, vigorous job with the Dvorak, but pokes along the way too much for my taste in the Glazunoff.



David Oistrakh: a dead heat in a pair of Dvoraks; a dull race on the oversides.

Roumanian Rhapsodies Nos. 1 and 2, Op. 11 Leopold Stokowski and his Symphony Orchestra.

RCA VICTOR LRM 7043. 10-in. \$2.99.

Georges Enesco's richly flavored Roumanian Rhapsodies in A Major and D Major here receive some lush and sometimes exaggerated treatment from Stokowski, who also takes the liberty of making a small cut or two towards the end of the first rhapsody. Fortunately, the music is strong enough to stand up under the Stokowski strain, the second rhapsody coming off somewhat better than its companion. The orchestral playing is top-notch, the reproduction fairly close-to but faithful. P. A.

FRANCAIX Serenade Bea

Pasquier Sextet.

†Poulenc: Le Bal Masque

Warren Galijour, baritone; chamber orchestra, Edward Fendler, cond. ESOTERIC ES 518. 12-in. 19, 17 min. \$5.95.

Jean Françaix was commissioned by a gentleman to compose a serenade for a girl named Beatrice with whom the gentleman was in love; hence the use of the notes BEA in the thematic material. Later Françaix discovered that the recipient of his commissioned serenade was a well known dancer, Beatrice Goll. What happened afterward, the note on the record sleeve does not say; in the best tradition of these things, the dancer should have turned out to be one whom the composer himself adored under a stage name (like, maybe, Nana Gollner) and the movie should end with composer and ballerina on the terrace of a honeymoon hotel. Be that as it may, the work is an extremely charming one, full of winsome tunes delicately and subtly handled. Poulenc's Bal Masqué, on the other side, is described as a cantata profane. It is a song cycle on extremely amusing, unrelated texts by Max Jacob, set in the best Poulenc style of obvious melody with distinctly unobviously wrong notes. Fine recording. A. F.

GLAZUNOFF

Violin Concerto in A Minor, Op. 82 -See Dvorak.

Romance for Violin and Orchestra, Op. 3 - See Dvorak.

GOUNOD

Faust

Victoria de los Angeles (s), Marguerite; Martha Angelici (s), Siébel; Solange Michel (ms), Marthe; Nicolai Gedda (t), Faust; Jean Borthayre (b), Valentin; Robert Jeantet (b), Wagner; Boris Christoff (bs), Mephistopheles. Orchestra and Chorus of the Paris Opéra; André Cluytens, cond. RCA VICTOR LM-6400. Three 12-in. \$17.85.

No one but the dampest newcomer to operalistening could possibly work up at this stage of the game much interest in an extensive background-descriptive essay on Gounod's Faust. Everyone knows at least some of the music, and pretty nearly everything that is germane, along with a good deal that isn't, has already been said many more times than once.

Faust had its premiere in 1859. It was a success or a nonsuccess, depending on how you tell the story. In any case, it has lasted. The music is sentimental (whatever "sentimental" music is) and pretty. The dialog was originally spoken but has been sung for over 90 years. The big baritone aria known variously as Avant de quitter ces bossente, or Ev'n bravest beart may swell, depending on who knows it - wasn't in the original score but was written specially for some old baritone named Santley who was English and great and demanded one. The opera isn't as deep as Goethe's play, but neither are many parts of Goethe's play. Wagner didn't like the opera, but Wagner fulminated against almost everybody but Wagnet at some time or other. The duel trio sounds like Meyerbeer; since nobody hears Meyerbeer any more, that has to be taken on faith. Faust was the first opera given at the Metropolitan, in 1883. The Paris Opéra has given it over 2,000 times since it stopped having spoken lines. Ever so many sopranos have sung Marguerite. Shall we not go on?

Yet, oddly, this opera, whose continuing public success, in spite of both critical sniping and deluges of titbits like those in the paragraph you just skipped, has been something of a running gag for at least half a century, has not been especially well served on records in complete or near-complete form. The newest recording is preferable to any other, for a number of reasons, but it is not by any means an unqualified

success.

Once again the basic flaw is polyglot, unhomogeneous casting. Faust, for all its repertoire status, is a work that needs finished, unified style and very good singing if a recorded performance of it is not to wear very thin very fast. The music is no only too well known for grammatical fault

MAY, 1954 45 in performance to be bearable, it is so nearly free of intrinsic musical interest that it needs real re-creative effort.

The RCA Victor performance, unfortunately, lacks almost entirely this sense of stylistic re-creation. Neither André Cluytens nor the current members of the Paris Opéra chorus and orchestra have been around for all of those 2,000-odd performances, but the weight of years can be felt. There is certainly no want of competence; everything is in place as good workmen go about a familiar task that they could probably accomplish quite comfortably in their sleep. But - distasteful thought the term is - there is no magic. Just as there is no substitute for experience, there is no cure for essential boredom. This reading is no doubt more proper and traditional than that by Sir Thomas Beecham in the earlier Victor set. But it does not bring the music alive, and the Beecham performance does.

If the conducting-orchestral-choral wants seem to come from inescapable routine, the soloistic shortcomings are rather opposite—a Spanish Marguerite, a Swedish Faust, a Bulgarian Mephistopheles, and a French Valentin. All have individual merits sufficient to justify their assignments, but the performance as a whole suffers—particularly on repeated hearings, particularly in ensembles—from the variety of accents and the lack of a common approach.

However that may be, in the course of the opera Victoria de los Angeles does enough beautiful singing to almost justify the purchase of the set on those grounds alone. She may not be the most French of Marguerites, but when her voice is lovely there are few more beautiful human sounds to be heard. If this seems over-praise, try either her single, brief appearance in the Kermesse scene or the King of Thule ballad. Both are typical of the singer at her best - meltingly lovely tone conveying a personality unique in its candor, warmth, and uncontrived charm. Her voice, however, tends to take on an unattractive edge at the top. This is a disadvantage that I, for one, am perfectly willing to accept in the opera house, where it is ameliorated by space and perspective; but in this recording it is emphasized with sadistic fidelity, almost as if the microphone had been used as a laryngoscope. This may be hi-fi engineering, but it seems an artistic miscalculation and a personal injustice to both singer and listeners.

The most satisfying of the other principals is the Valentin, Jean Borthayre, who was used as a bass in the London Lakmé but seems better suited to the baritone role he sings here with excellent style. He may not be the best Valentin ever, but he is completely authentic and always more than competent. Nicolai Gedda's Faust seems to have been recorded prematurely. His free lyric voice is often quite lovely in texture. His singing is mechanically clean. But it is also featureless and lacking in the positive virtues that make performances interesting. Even more disappointing, if for dissimilar reasons, is Boris Christoff's Mephistopheles. Voice and vocal personality are certainly imposing, and he certainly does not lack vigor, technique, or dramatic sense. He does lack intelligent selectivity, though, and his performance is a constant, restless search for ways in which to make himself super-effective. He finds some of what he wants within the limits of legitimate vocalism, but the

impression is far too frequently one of arbitrary exaggeration, dubious taste, and surprisingly rough, uncultivated singing, not to mention diction that is sometimes truly barbarous. It is difficult to understand why basses do this kind of thing to one of the



Boris Christoff, Victoria de los Angeles and Nicolai Gedda in the newest Faust.

juiciest roles in their repertoire — particularly when they have the opportunity of studying Marcel Journet's aristocratic performance on the old, pre-Beecham Victor 78s. The minor singers are quite good, and Solange Michel's Marthe is pure lagniappe; she plays the part straight, sings with exquisite style, and on one phrase in the garden scene sounds almost as lovely as Miss de los Angeles herself.

All told, this newest of RCA Victor Faust recordings is probably the best available. In spite of exceptions, the beauties of Miss de los Angeles' singing are defining, and the reproduction (again, even with the exception noted) is on the best-current Victor level, far superior to the Beecham set, in which the vocal style is proper but the singing itself no bargain at all. As for the official Metropolitan Opera recording issued by Columbia, it has virtues that have to do with opera in general but precious few that have anything specific to do with Gounod. Maybe somebody yet will do a really good Faust. There still is room. J. H., Jr.

GRIEG Lyric Suite, Op. 54 †Reesen: Himmerland (A Danish Rhapsody)

Danish State Radio Symphony Orchestra, Erik Tuxen, cond., in the Grieg; Emil Reesen, cond., in the Reesen. LONDON LS 849. 10-in. \$4.95.

Two delightful Scandinavian works receive exceptionally fine, well-proportioned performances on this attractive little disk. The Grieg suite is, of course, quite familiar. As is always the case with Tuxen, the music is treated in a dignified but spirited fashion. The Danish Rhapsody, Himmerland, by the Danish composer and conductor, Emil Reesen (1887-), takes its name from a northern province in Denmark. Its charming themes are drawn from traditional nineteenth century rustic dances of the province. In style, the work resembles the popular Swedish Midsommarvaka (Midsummer Vigil) by Hugo Alfven. Reesen, of course, understands his own music, and presents it authoritatively. The recording has a fairly spacious studio sound, is well defined and admirably balanced.

GUILMANT

Sonata No. 1 for Organ, in D Minor — See Reubke.

HANDEL

Concerto Grosso No. 11, in A Concerto Grosso No. 12, in B Minor

Boyd Neel String Orchestra, Boyd Neel, cond.

LONDON LS 870. 10-in. 16, 14 min. \$4.95.

After nearly five years in the making, London finally completes this set, the only edition of the Concerti Grossi edited for the convenience of those who wish to hear them on records. Each Concerto occupies one side of a 10-inch disk, a rational if not a thrifty arrangement, while the Columbia and Decca editions put the twelve works upon eight 12-inch sides to the benefit of economy and the triumph of inconvenience. In this final pair of Concertos the advantage is Decca's, since the stalwart sobriety there is more durable than the rather coy confidence here, and the Decca sound is fuller and easier in reproduction. C. G. B.

HAYDN

Symphony No. 44, in E Minor, "Mourning" Symphony No. 48, in C, "Maria Theresa"

Danish National Radio Orchestra, Mogens Wöldike, cond.

LONDON LL 844. 12-in. 20, 20 min. \$5.95.

There are no better registrations of the small classical orchestra, and the sharp delineation of this sound may obscure Mr. Wöldike's hesitancy to hit out with the "Mourning" Symphony in all its passion. (This deft conductor has no romanticism in him.) The trumpets have been put forward in the celebrational "Maria Theresa" Symphony, not a bit to its disadvantage; and this disk cruelly displaces the old pioneer from the Haydn Society, a bad episode in an honorable career. Definitely worth having for No. 48 and for the clean brilliant sound; and for all the conductor's reticences No. 44 has its implications implied. C. G. B.

HAYDN Symphony No. 96, in D Symphony No. 97, in C

Concertgebouw Orchestra, Amsterdam, Eduard van Beinum, cond. LONDON LL 854. 12-in. 22, 24 min. \$5.95.

There is a hearty, true orchestral sound in this pair, without neglect of detail and solid from bottom to top. Some shrillness of the high violins is not constant and can be forgiven for the columnar gloss of the whole. No. 97 is certainly richer than the Westminster registration for Dr. Scherchen (WL 5062) and No. 96 compares not unfavorably with the sonics of the Scherchen recording on Westminster WL 5111, having greater impact but less insinuation. In its muscularity with no-nonsense-about-it, the Beinum direction jibes with its sound, and the bluff force of his statements would no doubt be acceptable if we did not have the penetrating studies in mobile sensitivity engraved by Dr. Scherchen. The comparison is sad for the Netherlander, a competent conductor here measured against one of the very foremost analysts of Haydn.

HINDEMITH

Symphony from Mathis der Maler; Concert Music for Strings and Brass

Philadelphia Orchestra, Eugene Ormandy, cond.

COLUMBIA ML 4816. 12-in. 24, 22 min. \$5.95

Thanks to its picturesque, dramatic implications, the Bach-like texture of its first and second movements, and its glorification of sturdy folk songs and chorales, the symphony from Mathis der Maler is the most frequently performed work of Hindemith, and many recordings of it exist. Ormandy misses some of the sweep and bite of the composer's own interpretation on Capitol-Telefunken, but his recording is much superior. If Mathis recalls Bach, the Concert Music for Strings and Brass recalls Beethoven.

This work was written in 1930 for the fiftieth anniversary of the Boston Symphony Orchestra; it is a grand, big, eminently symphonic piece. extremely ingenious and individual in its structure, and superb in its brilliant, tense, and sonorous handling of its unusual medium. Here Ormandy's interpretation is superior to any previously available on records.

A. F.

HOFFMANN

Concerto for Mandolin, in D — See Dittersdorf.

IBERT

Concertino de Camera, for Saxophone and Orchestra

†Debussy: Rhapsody for Orchestra and Saxophone

Marcel Mule, saxophone. The Paris Phil-

harmonic Orchestra, Manuel Rosenthal, cond.

CAPITOL L 8231. 10-in. 21 min. \$3.98.

Two short compositions, while exposing two entirely different facets of French orchestral writing, compliment each other admirably in a little disk that is sheer delight. Note the titling of these works . . . Ibert's witty, pert, jazzy Concertino for Saxophone and Orchestra is decidedly a show piece for that instrument. In fact the middle movement is practically an instrumental solo, in blues form. The work just bubbles with esprit, and sounds as modern as a Kenton original. In the Debussy Rhapsody, where the title is Rhapsody for Orchestra and Saxophone, the instrument becomes a far more integral part of the orchestra, being used with more discretion, and more for purposes of colora-

The Dublin Messiah --- Inspiration Makes a Difference

Those bent to deplore a new edition of Messiah augmenting the four already available will forgive Westminster's apparent conservatism on learning that this conservatism is in truth an intrepidity of radicalism. For this is a new Messiah, or a Messiah under new examination, unlike any on records or any to be heard in public performance. An effort of careful scholarship has been made to restore for the recording the conditions prevalent at the first performance in 1742. The Westminster newness is thus an antiquity of 212 years, but its novelty is nevertheless breath-taking.

Mozart, on commission, endowed Messiah with an orchestration more luxuriant than Handel had provided 40 years before, and for nearly two centuries the oratorio has been heard with the flutes, clarinets, horns and trombones prescribed by the later but not the earlier composer. This is what we generally hear in the concert hall today. We hear also traditional mannerisms of delivery, tempo and accent accumulated through the 20 decades of maintaining Messiah as a prop to British faith.

The Mozart orchestration, and the file of traditions, are in no sense unadmirable. But scholars have felt that they distort the Handelian intention and modify the Handelian drama. Performances have been given periodically wherein the original forces have been employed, according to the style of 1742, as far as that can now be determined. Dr. Scherchen has tried to do this for records.

Naturally it is impossible to succeed perfectly in such an undertaking. We have no way of knowing exactly what Handel meant by certain devices, and neither our singers nor our instruments sound as Handel's did. Neither is a reconstruction necessarily better or more desirable than a skillful emendation. A "correct" performance does not beget the hostile criticism invited by bold innovation, even when the latter is superior. The innovation hurts as often our sense of propriety as our sense of music. We are inclined to applaud the rejuvenation of the archaic even when it is inept, because of our hope that "this is the way the composer meant it."

In limiting his performers to four score, in dispensing with most of the wind instruments, in relying heavily on a pair of violins to accompany the soloists and in retaining the continuo during the recitatives, Dr. Scherchen may or may nor have provided the framework for standard Messiahs superior to the Handel-Mozart version we have been enjoying for so many years. This point must remain disputable until a more standard conductor tries his hand at the new old presentment.

For Dr. Scherchen has lavished on this wonderful Messiah talents of illuminated leadership quite independent of questions of archaicism or correctness. It is not likely that these talents would have failed to produce a superb Messiah of the customary huge proportions. It is true that the electrifying fervor of the small chorus would have been much harder to obtain from three or four hundred people, and that a lovely wistfulness is occasionally possible to the stripped accompaniments of the Westminster version that is not part of Messiah as we usually hear it, but the marvel of Dr. Scherchen's realization proceeds



Constance Shacklock and Hermann Scherchen: "fury, awe, pity."

from analytic scrutiny of every measure, every word, without deference to tradition, with nothing taken for granted.

There are tempos here that few will have heard before, and tempos pushed to their limit. By no means a violent performance, it is nevertheless alive with abrupt contrasts, in dynamics, speed and rhythm. Messiah mixes melodrama and devotion in a way that no one mastered like Handel, and Dr. Scherchen leaves no doubt which is which. There can be no doubt that he was able to fever his people to his own intensity. The fury, awe, abnegation and pity of the chorus are too telling, too personal, to have been extorted only by discipline; and the soloists, not one with a voice of great quality, contribute some great singing of their words, by force of understanding and conviction. So too with the orchestra, in a fanaticism of inspired energy the more remarkable in that all the players are habituated to playing this music another way. Surely a larger complement could not realize the frenzied invective of "Why do the Nations" more completely than the small group here.

With more space, one could properly detail the merits of a major achievement in recorded music, and indicate those few places where the "conventional" way seems more effective. The performance has been given a neat, carefully adjusted sound, spacious without exaggeration, which will be best at fairly high volume. The defects are not grave: violin shrillness which the amplifier can reduce, and some explosiveness in the women soloists' voices.

C. G. BURKE

HANDEL: Messiah

London Philharmonic Choir and London Symphony Orchestra, with Margaret Ritchie (s), Constance Shacklock (a), William Herbert (t) and Richard Standen (bs), Hermann Scherchen, cond.

WESTMINSTER WAL 308. Three 12-in. 2 hr., 53 min. \$18.50.

tion than for display. This is a score of pronounced Iberian rhythm and colour, occasionally festive and always rich in suggestion and flavour.

The recording is absolutely first rate, and the orchestral tone of the Paris players seems particularly right for both scores. Mule gives virtuoso performances, producing a tone of lustrous quality and depth, particularly in the Ibert, though he would seem to be closer to the mike than is really advisable.

TANACEK Slavonic Mass for Soli, Chorus, Organ and Orchestra

Frantisek Michalek, organ. Brno Radio Symphony Orchestra, Bretislav Bakala, cond.

Sonata in E Minor

Iosef Palenicek, piano.

SUPRAPHON LPM39 and LPM40. Two 10-in.

This is the same work which this reviewer had the pleasure of discussing in the May-June (1953) issue of HIGH FIDELITY, when it appeared on a single 12-inch Urania disk. Moreover, this appears to be the same performance.

The passage of time has caused no change in your reviewer's opinion of the music. He still feels that it is "one of the most fascinating choral works of our time," that it "contains the massive ruggedness of Mussorgsky's Boris Godounoff, combined with a touch of Stravinsky's Sacre du Printemps, and that it 'abounds in unbridled emotionalism, painted in broad strokes, and with a master hand.'

However, in spite of the fact that this version adds a piano sonata by the same composer, this reviewer cannot recommend it over the older disk. The sonata is a rather vapid, mildly "folksy" affair, apparently well played but not well recorded. The Mass itself is on three sides of two 10-inch disks, as opposed to the two sides of the earlier 12-inch record. The recording itself, while at a higher level on one of the sides, is otherwise not as clean as its predecessor. Therefore, don't throw away your Urania version of this work.

Dialing Your Disks

Long-play records are made with the treble range boosted to mask surface noise, and the bass range attenuated to conserve groovespace and reduce distortion. When records are played back, therefore, the treble must be reduced and the bass increased to restore the original balance. Unfortunately, until recently, the amount of treble emphasis and bass deemphasis employed varied widely on records of different manufacture; hence the need for individual and variable bass (turnover) and treble (rolloff) compensation controls.

During the past year there has been a gradual acceptance of the RIAA (Record Industry Association of America) standard characteristic, which is virtually identical to the RCA Orthophonic curve. New recordings from all companies, with the exception of Mercury, Wesrminster, Columbia, and the smaller companies Columbia presses for, now follow this curve, for which the turnover frequency is 500 cycles and the preemphasis is 13.5 db at 10,000 cycles. Columbia is changing gradually to the RIAA curve. (See page 50, March 1954 issue, for more detailed information.) It should be remembered that old releases will follow the old curves, no matter when the records are or were bought.

Some old records followed the NAB curve, for which bass turnover is 500 cycles and treble compensation is 16 db at 10,000 cycles. Others followed the old AES curve, wirh turnover at 400 cycles and only 12 db treble compensation. Some were almost combinations of the two, like RCA Victor, which was matched fairly well by NAB turnover and AES rolloff. Another important group was (and is yet) that following the LP (also called ORIG. LP or COL) curve, for which equalization is identical to NAB except in the extreme bass range.

One-knob equalizers should be set for AES, RCA, or ORTHO on new releases except those pressed by Columbia; they should be set for correct bass equalization according to the table below on other records. Then if the treble is not correct for the record, the treble tone control should be used to adjust further. Either boost or cut may be required, according to the equalizer curve available and the rolloff needed for the record; remember that COL, LP, ORIG. LP and NAB rolloff was 16 db, and LON, ORTHO (RCA), and AES rolloff about 12 or 13 db. Remember also that the

proper setting is that which sounds best to the ear, regardless of what it is supposed to be. It's perfectly legitimate to use bass and treble tone controls to make the music sound right - that's what they are intended for!

TURN-

	IUKN-	
LABEL	OVER	ROLLOFF
Angel	NAB	AES
Atlantic ¹	NAB	NAB
American Recording Soc.	NAB	Ortho4
Bartok	6292	16 db ⁸
Blue Note Jazz	AES	AES
Boston	COL	NAB
Caedmon	629 ²	11 db7
Canyon	AES	AES
Capitol	AES	AES
Capitol-Cetra	AES	AES
Cetra-Soria	COL	NAB
Colosseum	AES	AES
Columbia	COL	NAB
Concert Hall	AES	AES
Contemporary	AES	AES
Cook Laboratories ¹	NAB	AES
Decca	COL	NAB
EMS	AES	AES
Elektra	629 ²	16 qp8
Epic	COL	NAB
Esoteric	NAB	AES
Folkways (most)	629 ²	16 db8
Good-Time Jazz	AES	AES
Haydn Society	COL	NAB
London	COL	LON4
Lyrichord, new ⁵	629 ²	16 db8
Mercury	AES	AES
M-G-M	NAB	AES
Oceanic	COL	NAB
Philharmonia	AES	AES
Polymusic ¹	NAB	NAB
RCA Victor	Ortho ⁶	
Remington	NAB	NAB
Tempo	NAB	Ortho4
Urania, most	COL	NAB
Urania, some	AES	AES
Vanguard — Bach Guild	COL	NAB
Vox	COL	NAB
Westminster	NAB ⁸	NAB ⁸

Binaural records produced by this label are recorded to NAB standards, on the outside band. On the inside band, NAB is used for low frequencies, but the treble is recorded flat, without preemphasis. PNAB position on equalizer is close match. *3NAB position on equalizer is close match. *Use LON position on equalizer, or AES with slight treble cut.

*Use LON position of this laber were recorded to COL curve, others to AES.

Very close to NAB on lows.

Very close to AES on highs; boost treble slightly.

*Unless jacket indicates AES.

LEHAR The Land of Smiles

Elisabeth Schwartzkopf (s), Lisa; Emmy Loose (s), Mi; Nicolai Gedda (t), Prince Sou-Chong; Erich Kunz (b), Gustl; Otakar Kraus (b), Tschang; Felix Kent, Fu-Li (speaking role); André Mattoni, Servant (speaking role). Philharmonia Orchestra and Chorus; Otto Ackermann, cond. ANGEL 3507 B. Two 12-in. \$11.90 (factory sealed); \$9.90 (thrift pack).

It would give the wrong impression to simply recommend The Land of Smiles as being likely to please those who have enjoyed the Angel recording of The Merry Widow. It very likely will, but for different reasons. Many of the elements are duplicated - composer, principal singers, conductor - engineers, too, to judge by the very superior quality of craftsmanship but the flavor is not the same.

The story begins in Vienna. Count Gustav von Pottenstein, known as Gustland don't judge him too hastily just because of that - loves Lisa von Lichtenfels. But Lisa has fallen in love with the visiting Chinese Prince Sou-Chong, and he has fallen in love with her. They set out for Peking, with Gustl tagging along. Sou and Lisa still love each other, and Gustl still loves Lisa. And the prince's young sister, Mi, falls in love wirh Gustl. Sou's uncle, Tschang, says grave words about the impossibility of these East-West romances working out. Sure enough, Lisa, bewildered by the strange way of life, homesick for Vienna, and unable to understand why Sou must go through the legal formality of marrying four Chinese wives, finds her love for him turning to hate - or, rather, to love for the faithful Gustl. Magnanimously, Sou-Chong allows them to depart, and he and poor little Mi watch their loves go out of their lives forever. East is East, and they know it. But Mi cries, and even Sou's consoling words about the serenity of Buddha don't seem to help much.

Sentimental it certainly is. But the people have dignity and grace and human warmth, and so does the music. Lehar's very name is a touchstone of Viennese romanticism, and the vein was never richer than in the theme tune - Dein ist mein ganzes Herz. He was also by way of being a very good composer, in his chosen field, and when he turns to chinoiserie he does so with considerable harmonic sophistication and a sure knowledge of the orchestra. The result is popular music in the best sense of the term, for it is accessible without being cheap, obvious in its appeal but never banal, and ever so competently made.

The performance here might be bettered, but it is impossible to imagine how or through what agency. Singers like Elisabeth Schwartzkopf, Emmy Loose, Nicolai Gedda, and Erich Kunz are first-class artists whose presence in a Mozart casr would constitute a flat guarantee of superior quality; in a Lehar operetta they are just as expert, just as careful of details, just as responsive to the style of the music. The original cast, which has Richard Tauber as Sou-Chong and Vera Schwarz as Lisa, may have been as good; it makes no difference. The fact is that this is a really superb performance of an operetta that is witchingly individual, and the recording - to avoid technical cliché is perfect. I. H., Ir.

LISZT

Concerto No. 1 in E Flat Major for Piano and Orchestra — See Schumann.

LISZT

Fantasia and Fugue on BACH; Gloria and Credo from Mass for Organ — see Reubke.

LISZT
Liebestraum No. 3
La Campanella
†Nielsen: Chaconne, Op. 32
France Ellegaard, piano.

LONDON LD 9065. 10-in. \$2.95.

Principal interest here attaches to the Chaconne by the modern Danish master, Carl Nielsen. Written in a neo-classic style, it has a quiet contrapuntal texture that reminds one of late Beethoven. The two Liszt works are, of course, familiar encore pieces. All three compositions are played in a refined fashion by Ellegaard, while the moderately close-to reproduction allows for a wide-range, glittering piano tone. P. A.

LISZT

Sonata in B Minor; Valse Impromptu; Mephisto Waltz.

Edith Farnadi, piano. WESTMINSTER WL 5266. 12-in. 30, 7, 11 min. \$5.95.

Sonata in B Minor; Sonetto del Petrarca No. 104.

Alexander Uninsky, piano. EPIC LC 3027. 29, 6 min. \$5.95.

Mephisto Waltz.
†Chopin: Barcarolle.

Leonard Pennario, piano.
CAPITOL H 8246. 10-in. 10, 8 min. \$2.98.

In her fourth disk devoted to Liszt, Miss Farnadi continues as one of the best contemporary exponents of the composer's piano music. The only detail on which I might question her remarkable performance of the sonata is the seemingly incomplete preparation for the very slow tempo she adopts for the Grandioso section. Beyond that, there is so much to admire: the ethereal quality of all the slow passages, which makes them palatable; the long arches of elaborate technical developments; the elastic rhythms and the time spent in illuminating details, which increase the listen-

er's concentration even though it lengthens the work in time; the subtlety with which she guides the music into the fugue.

The over-all qualities of extreme delicacy, sweeping command, and flexibility function just as well for the charming Valse Impromptu and the abused Mephisto Waltz. Miss Farnadi's version of the latter is more slyly diabolic, less energetically demoniac, than other versions, and she makes the awkward main theme plausible by playing it slowly enough — slower than anyone else ever does. Westminster continues to bless Miss Farnadi with perfect acoustical recording of the intimate kind.

Epic has given Mr. Uninsky's performance brilliant resonant sound, with a shade too much bass — as usual, it seems. The presentation suffers a little from being interrupted — the sonata is not contained on one side as it is on Westminster — but the break comes at a logical point, the opening of the fugue. Mr. Uninsky plays with more sheer strength and a sharper technique than Miss Farnadi does, but he brings less finesse and interest to the lyric elements.

On Capitol's inexpensive disk, Mr. Pennario gives an efficient, very fast, technically striking account of the Mephisto Waltz. The piano tone is somewhat brittle in a close-up recording.

R. E.

MALAT
Slavonic Girls — Orchestral Suite — See
Dyorak.

MASSENET Werther

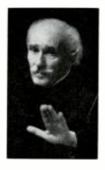
Pia Tassinari (s), Charlotte; Vittoria Neviani (s), Sophie; Ferruccio Tagliavini (t), Werther; Tommaso Soley (t), Schmidt; Marcello Cortis (b), Albert; Pier Luigi Latinucci (b), Johann; Giuliano Ferrein (bs), Bailiff. Orchestra of Radio Italiana (Turin) and chorus; Francesco Molinari Pradelli, cond.
CETRA C-1245. Three 12-in. \$17.85.

Massenet's Werther is most certainly not one of the great towering peaks in musical (or even operatic) history. It is a modest opera. Its harmonies are sweet, not pungent or exciting. Its melodies are soft-contoured. Its rhythms are close to those of ordinary middle-class conversation. people in it are all pleasant and attractive. There is no villain. No one hates anyone else. You could hardly think of a work with less appeal for those who like their operas loud, heroic and bloody, with a vengeance aria or duel trio at the end of each scene. But Werther has a charm of its own, a charm that has to do with the fact that Massenet was a gentleman as well as a competent composer. In setting this story - the story of a sensitive poet who loves the wife of his best friend so hopelessly that only in death is release possible - he wrote music that is gracious and charming and winningly candid in its communication of sentiment. Insofar as such things can be pigeonholed, you might say that Werther is a really first-class second-class opera.

If the Capitol recording had come out when no other was available, its substantial goods would have entitled it to recommendation without too much quibbling. Under present circumstances, though, with the Urania version competitive, the newer set comes off second best in a field of two. For

Massenet was nothing if not a French composer, and Ferruccio Tagliavini is nothing if not an Italian tenor.

This is not to say that Mr. Tagliavini behaves inartistically. Certainly Pia Tassinari does not. She never does; if only she were involved there would be no need to even mention the word. There is a tendency in this country to think of Miss Tassinari, if at all, as merely the wife of Ferruccio Tagliavini. For my part, granting fully that his voice at its plushest is one of the most beautiful of its kind to be heard. I tend to think of Mr. Tagliavini as the husband of Miss Tassinari. She was not in good voice when she sang at the Metropolitan, got bad press notices, and had a short career there. But she is by far the truer artist of the two. There is never a trick, never a cheap effect in her singing - just honest warmth, musicianliness, and womanly intelligence without guile, always at the devoted service of the role she is playing.



The evening of Sunday, April 4, was an easy one for the janitor-staff at Carnegie Hall. Usually there are several hundred programs on the floors and tucked among the seats after the 6:30 broadcast of the NBC Symphony. This evening there were almost none. They had been taken away, to be treasured.

A little earlier in the evening, at the end of an all-Wagner program, the members of the audience had stood and clapped and clapped, with a strange, almost grim persistence. There were no shouts, just tireless clapping. The object of the applause, a very small, slow-moving old man with a large head, had moved uncertainly down from the conductor's platform. For a moment he stood there. His face could not be seen by the audience. dropped his baton. A violinist picked it up and gave it back to him. He made his way through the seated orchestra, into the wings. The orchestra remained seated. The audience remained standing, and clapping. The small old man did not reappear. Finally the audience began to break up, and to move out the aisles and doors to 57th Street, some faces marked with tears. After nearly 68 years of making music, at the age of 87 years and 10 days, without fuss or farewell, Arturo Toscanini had retired.

In this recording she is vocally past her prime, but the quality of her artistic sensibility more than makes up that difference. Mr. Tagliavini is on his good behavior, and there is about his singing here little of the mannerism and narcissistic preening that can make him so exasperating when he is not. The other members of the cast, all competent, none particularly distinguished, do their reputable best, and Francesco Molinari Pradelli conducts with control and flowing line, although his rhythmic accentrations are at times heavier than seems entirely idiomatic.

Yet the fact is inescapable that this is an Italian performance in the French language, by singers who, no matter how honorably they try to do right by Massenet, are by experience and instinct in closer rapport with the values of Puccini, Mascagni, and Cilea. The voices are in some cases - most, even - better than those of the Paris Opéra-Comique singers in the Urania recording. Certainly Mr. Tagliavini's voice is a finer instrument than that of Charles Richard. A L'Amico Fritz with Suzanne Juyol and Mr. Richard would be utterly pointless; Werther with Miss Tassinari and Mr. Tagliavini is not quite so pointless, but the "not quite" is defining. If what you want is a recording of Werther that is stylistically right, a recording that does the spirit of the work complete justice, buy the Urania. If you want a recording in which two excellent and several good Italian singers make an honest, and sometimes successful, effort to capture the foreign and elusive mood of a theater piece that is both specifically French and dependent at least ninety percent of the time on style rather than virtuoso execution, then buy the Capitol; it isn't the real article, but it does sound nice.

There is little to choose between the rival versions on engineering grounds. Both are satisfactory, although audiophiles might be warned in advance that this music offers nextremes of pitch or dynamics to excite them. The Urania version is perhaps a trifle cleaner in definition of orchestral voices than the Cetra, which is recorded slightly closer-to and with a fuller resonance that neither detracts from the values described nor has much to do with the point of the score.

J. H., Jr.

MENDELSSOHN

Concerto No. 1, in G Minor, Op. 25 — See Beethoven.

MOZART Bastien und Bastienne

Ilse Hollweg (s), Waldemar Kmentt (t), Walter Berry (bs); Vienna Symphony Orchestra, John Pritchard, cond.
COLUMBIA ML 4853. 12-in. 41 min. \$5.95.

The second version of a gentle little pastoral has a rich gleam of high sophistication in all the features of its production. Miss Hollweg as Bastienne is sweetly appealing without being over-arch, and the paternal, antiseptic libertinage of Colas is neatly voiced by Mr. Berry, while Mr. Kmentt is efficient if not enticing. The manipulation of light and shade in the little orchestra, and the relevant little alterations of accent, mark Mr. Pritchard as no mean artificer of refined gaiety. The engineers have contrived a reproduction of tranquil naturalism.—An early edition of the work (Period 542) is by no means without merit although the in-

clusive finesse of the Columbia production is simply not approached, and the latter wisely utilizes a tenor as Bastien instead of the mezzo too readily confused with Bastienne in the Period version. Columbia has also edited the dialogue judiciously, retaining enough for intelligibility and omitting the rest. An English translation is printed without the German original. C. G. B.

MOZART Concerto No. 9, in E Flat, KV 271 Concerto No. 20, in D Minor, KV 466

Guiomar Novaes, piano; "Pro Musica Orchestra," Vienna, Hans Swarowsky, cond. VOX PL 8430. 12-in. 30, 29 min. \$5.95.

No. 9 all calculated, balanced and breezy energy: a brilliant performance; No. 20 correct, unenterprising, unmodified in its reiterations: disappointing. The presumption is that Mr. Swarowsky was the restraining influence, for he establishes a pattern of sameness at the beginning. Outstanding piano-sound in No. 20, good in No. 9; orchestra expansive and clear in No. 20, with piercing violins that can be corrected; smaller orchestra in No. 9, with violins less forward. The bass of the piano is remarkable in both works.

C. G. B.

MOZART

Concerto for Violin, No. 5, in A, KV 219
—See Beethoven.

MOZART

Quintet for Piano and Winds, in E Flat, KV 452 Cassation in E Flat.

Pierre Pierlot (ob), Jacques Lancelot (cl), Gilbert Coursier (hn), Paul Hogne (bn) in both works, with Robert Veyron-Lacroix, piano, in the Quintet.

OISEAU-LYRE 50016. 12-in. 19, 23 min.

All these players, especially Mr. Pierlot, are familiar to discophiles. The crisp Gallic style - biting staccato; vivid measure, short holds; tonal adjustment wary of bass prominence and tempos a little fast - esteeming clarity higher than warmth, is kind beyond cavil to the lambent detachment of these two diversions, of which the Quintet is more resourceful and expert and the Cassation probably not by Mozart - is occasionally more startling. The latter can be found also in Classic's "Mannheim School" album, played with more freedom and less elegance, and there are now four versions of the Quintet, of which the writer prefers the present, in spite of a slightly cramped acoustical environment which dampens the timbre of the instruments. Otherwise the sound is distinct and easy, serviceable. The horn sounds lighter than those in our usage, but that is a characteristic of the French French C. G. B. horn.

MOZART

Symphony No. 35, in D, "Haffner," KV 385

Symphony No. 41, in C, "Jupiter," KV 551 Pittsburgh Symphony Orchestra, William Steinberg, cond.

CAPITOL P 8242. 12-in. 19, 28 min. \$5.70.

Remarkably this coupling is not found on another disk, in spite of the plenitude of

recordings of both works. One face serves as propaganda for the other, people knowing Mozart as a lapidary of amethysts naturally being seduced by the "Haffner," but after the "Jupiter" being led to admire boulders cut by the same universal hand. The Jupiterian massiveness is particularly evident in the solid texture and deliberate pace of Mr. Steinberg's work, which will make impatient many used to a greater impetuosity. Others may find its rectilinear fortitude just right, especially appropriate in the full-bodied, very distinct reproduction of the orchestra, where obvious care has been taken to place each instrument so that nothing will be lost. - The "Haffner" is like a number of other bright performances on records, perhaps the best sounding of all; but this fine gem of classicism thrives best when played with more surrender: its classicism gains by some judicious deviation from classical severity, but modern conductors almost unanimously keep it hard. - Outstanding recording. C. G. B.

MOZART Trio No. 1, in G, KV 496 Trio No. 2, in B Flat, KV 502

Paul Badura-Skoda (pf), Jean Fournier (vn), Antonio Janigro (vo). WESTMINSTER WL 5242. 12-in. 24, 22 min.

What matters most in these is the quality of the pianist, who establishes the patterns for his companions to echo. The great and evident superiority of this record over preceding editions is the work of Mr. Badura-Skoda in an admirable accomplishment of imaginative and measured grace. The others are subsidiary, not in volume, which is carefully proportioned, but in imitation of the pianist's phrase, tempo and emphasis. Excellent sound; notable at low volume, in spite of a few measures of gratuitous wire in the violin. C. G. B.

MUSSORGSKY

Songs and Dances of Death (Song Cycle); Trepak; Lullaby; Serenade; The Field Marshall.

Heinz Rehfuss, baritone. Hans Willi Haeusslin, piano. LONDON LD 9070. 10-in. 19 min. \$2.95.

The only other version currently available of this most original song cycle, is Jennie Tourel's on Columbia ML 4289, not completely satisfying because the work is essentially too heavy for the female voice. Heinz Rehfuss, a baritone whom one assumes to be German sings this Russian work in French, a language far too soft, musically, to adequately convey all the stark grimness of the songs. In spite of this handicap, he manages to project much of their drama, without ever becoming overtheatrical or declamatory. The voice, quite dark in color, is used with admirable discretion and finesse, and at no time seems unable to overcome the difficulties of the vocal line.

Generally speaking, the disk has been carefully engineered as to proper balance, but, in my copy at least, a most unpleasant wavering of piano tone was evident, considerably lessening the over-all appeal of this disk.

J. F. I.

NIELSEN

Chaconne, Op. 32 — See Liszt.

HIGH FIDELITY MAGAZINE

building your record library

number eight

J. F. INDCOX SUGGESTS TEN BROADWAY MUSICALS



Musical comedy fans have special reason to remember 1943. In March of that year a musical opened on Broadway that was to run for five (or was ir ten?) years, chalk up more than 2,200 performances, and revolutionize the representation of musical comedy on records. It was, of course, Okkaboma!

With the release of an album of the complete score, as sung by the original artists of the cast, a new era was born for listeners. No longer were the old 12-inch disks of "Gems from Ob Sister" sung by the Colvic Light Opera Co., with their meager three or four hit tunes, playing for about five minutes, acceptable. The new idea, daring and not without some financial risk, caught on quickly, and soon record companies were bidding briskly for the recording rights to likely hits coming into the Broadway theaters. Inevitably a few fingers were burned, as in the case of one company, whose originalcast album reached the dealers' shelves the week their show closed, Then there was the dilemma one company found itself in, when, having underwiritten the production of a musical and thus acquired the rights to an original cast recording, it found itself unable to use the star, because she was under contract to a rival company. The introduction of LP naturally spurred companies to greater activities in this field, and today's catalog of "show-albums" numbers more than 200 LP's.

There are still wide gaps, however. We have nothing on LP from No No Nanette, Hit the Deck, The Connecticut Yankee. Many of the early Herbert operettas remain unrecorded; some of the early musicals of Luders, Kerker, Lionel Monckton and Ivan Caryll would be welcome; and there must be many who would appreciate a series devoted to such early Kern Princess Theatre musicals as Oh Boy, or Leave it to Jane.

Selecting a list of musical comedy records is a highly personal process, colored by a degree of nostalgia. Where more than one recording is available, I have chosen what I consider to be the best from the standpoints of interpretation, content and in some cases sound.

Annie Get Your Gun (Decca DL 8001). Considering her position as the first lady of American musical comedy, Ethel Merman has had to struggle with some pretty shoddy material since the palmy days of Girl Crazy and Anything Goes. Herbert and Dorothy Fields' amusing and believable book for Annie Get Your Gun, and a generally superior score by Irving Berlin provided her finally with a show worthy of her talents, and as Annie Oakley she gave a brassy and ebullient performance that fortunately may still be heard, in this recording. The earthiness of "Doin' What Comes Naturally" and "Anything You Can Do" suits her to a tee, and she belts these numbers out in inimitable manner. The supporting cast is more than adequate. The recording, which dates from 1947, is a little thin as to sound, but remains easily the best Merman on records. The Bandwagon (Columbia ML 2164). One of the smartest and most beautiful revues ever produced in New York, this smash hit of 1931 featured Fred and Adele Astaire in their last stage appearance together, and a superb Arthur Schwartz score. Its songs, including "Dancing in the Dark," the impish "Hoops," and "I Love Louisa," have been rearranged slightly to suit the personality of Mary Martin, in this ingratiating little ro-inch record, and she comes through splendidly. Good sound.

The King and I (Decca DL 9008). In my opinion, this is the finest of all Richard Rodgers' scores. It may lack the immediate appeal of South Pacific, or Oklahoma!, but it has a subtle, almost elusive charm, that only becomes apparent with repeated hearing. In addition, it has a poignant and utterly captivating performance

by that gracious artist, the late Gertrude Lawrence. It would be idle to pretend that her voice is anything but fragile, and occasionally faltering, yet it has — in much the same way as Yvonne Printemps has — something about it that is positively irresistible. The recording is first rate . . . and the star is ably supported by a cast of more than competent singers.

Kiss Me Kate (Columbia ML 4140). It is almost impossible to imagine any composer other than Porter producing Kate. Both musically and lyrically, it bears the Porter cachet, sophistication tinged with malicious wit. There isn't a weak number in the score; two of them, "So In Love" and "Too Darned Hot," are among Porter's very best. An almost perfect cast (Alfred Drake, Patricia Morison, Lisa Kirk) serves him well, and the whole has been beautifully recorded by Columbia.

The Merry Widow (Angel 3501-B). "Age cannot wither, nor custom stale, her infinite variety" might well be applied to this most melodious of all operetras. Complete, including nearly all of the dialog (though in German) this superb job is more than a recording—it's a revelation. If you believe you have heard this work before, buy this and be convinced that it was two other girls! Oklahoma! (Decca DL 8000). After discussing the importance of Oklahoma!, it would be churlish of me not to include it simply because it doesn't "send" me—despite Hammerstein's clever pseudofolk lyrics and the many felicities of Rodgers' music. Though the Nelson Eddy version on Columbia ML 4598 is superior as to sound, and Eddy very effective as Curly, the Decca original-cast recording is preferred. Alfred Drake, as always, is a tower of strength, and Celeste Holm is irreplaceable.

Pal Joey (Columbia ML 4364). There are two recordings of this devilishly amusing show. The Columbia version is chosen mainly because of Viviene Segal's marvelously adroit way with the Lorenz Hart lyrics. To hear her sing "Our Little Den of Iniquity" or "Bewitched, Bothered and Bewildered" is to receive a lesson in the almost forgotten art of putting over a song without offence. The cast used here is that of the 1950 revival, which was motivated by the success of this particular recording.

Showboat (Columbia ML 4058). It is certainly time we were given a complete and satisfactory recording of this most famous of all American musicals, but until that comes along, the original cast recording of its last revival must do. It is chosen with reservations, since I find none of the singers very good, and the recording is weak and thin in sound. Even so, other available versions are heavily cut and incomplete, and in most cases poorly done. Of the present singers, only Carol Brice strikes me as being good, without erasing the memory of Helen Morgan in the part of Julie.

The Student Prince (Columbia ML 4592). Excluding Blossom Time, which after all is 90% Schubert and 10% Romberg, this is about the most successful of the many romantic musicals Romberg wrote, melodic and appealing. The recording is a particularly vibrant one, both Kirsten and Rounseville are in excellent voice, and it would be difficult to imagine better performances of Kathie and her Prince.

Brigadoon (Victor LOC 1001). Two Americans, lost in the Scottish Highlands, stumble on a village not on the map, and thus furnish the plot of Brigadoon, a most successful excursion into the dangerous realm of fantasy. Though the score may not be as consistently tuneful as its Irish predecessor and next of kin, Finian's Rainbow, it maintains a stronger national flavor, and contains several haunting numbers. The Victor original cast recording is an excellent job, and the sound is still quite acceptable.

POULENC Le Bal Masque - See Françaix.

REESEN Himmerland (A Danish Rhapsody) -See Grieg.

REFICE Lilium Crucis

Luisa Vincenti and Maria Teresa Massa Ferrero, sopranos: Elena da Venezia, narrator; Scarlatti Chorus and Orchestra of Naples, composer conducting.

COLOSSEUM CLPS 1042-3. Two 12-in. 62 min. \$11.90.

Licinio Refice, Roman priest, composer, teacher, and choir director, makes his first appearance on records with this big work, which is a "mystery" for two sopranos, narrator, chorus and orchestra. The poem, by Emidio Mucci, is based upon on an old Mexican legend about a young girl who becomes the bride of Christ rather than the bride of the man chosen for her by her father. Its style is broad, rich and devotional, somewhat recalling that of Debussy's Blessed Damozel but in a dramatic, Italianate form; the agitated climaxes of the music are distinctly Puccinian. It is, on the whole, a moving, expressive score, but it is ruined in many spots by the bad musicianship of the two solo singers. The fourth side of the set is filled out with two fine orchestral works of Refice, the prelude to his oratorio, The Samaritan, and the very big, ear-filling movement called The Stigmata from his Franciscan Suite. Excellent recording.

RELIBKE

Sonata for Organ on the 94th Psalm. Liszt: Fantasia and Fugue on BACH; Gloria and Credo from Mass for Organ.

E. Power Biggs, organ. COLUMBIA ML 4820. 12-in. 22, 11, 8 min. \$5.95

Sonata for Organ on the 94th Psalm. †Guilmant: Sonata No. 1 for Organ, in

Richard Ellsasser, organ. MGM E 3078. 12-in. 23, 26 min. \$4.85.

Mr. Biggs's record is made on the organ at Methuen, Mass., which was described in the Jan.-Feb. issue of HIGH FIDELITY. As the organist points out in his program notes, it is fitting that the organ's disk debut should be in music of its own time. The instrument was begun in 1857, which could have been the year Julius Reubke composed

his sonata, and the Liszt works are certainly characteristic of the period. (Liszt, moreover, was consulted by the American importer of the organ, Dr. Jabez Upham, although the composer's recommendation was ultimately rejected.) The organ itself, overhauled recently by G. Donald Harrison, president of Aeolian-Skinner, has a rich, luxurious, well-blended array of stops. Although a large-scale instrument, it should not be confused with later tubby-sounding, pseudo-orchestral monstrosities of the Romantic school

Reubke, son of an organ builder and outstanding Liszt pupil, died in 1858 at the age of 24. Of the few works of his that were published posthumously, the organ sonata is remarkable enough to keep Reubke's fame alive as long as his teacher's. The sonata, a three-part fantasia based on a single theme, is strongly influenced by Liszt's Fantasia and Fugue on Ad nos, ad salutarum undam, but in its own right is effectively stormy and moody and maturely worked

The performance on Columbia Records is sonically extraordinary and musically satisfactory. The organ sounds almost too brilliant in the resonant reproduction, but it is all there, from the lowest to the highest tones. I am told that the stop-mechanism

Wide Range Jazz

Until recently, wide range jazz recordings seem to have occurred more by accident than by intent. And when the effort has been intentional, the fidelity quotient has all too often been higher than the jazz quotient. True, one of the favorite high fidelity test records is a selection from Ellington Uptown, obviously cut by one of the more eminent jazzmen, but since the number in question-Skin Deep - is essentially a drum solo, its jazz essence can be

The decision of Vanguard, Good Time Jazz and Contemporary to produce wide-range high fidelity jazz recordings - which has resulted in the disks listed below - is a step that cannot be applauded too highly, particularly in view of the taste and musical rationality that, for the most part, distinguishes their first efforts.

The recording work on all six disks is excellent and, in comparison with the run of jazz reproduction, sometimes astounding. There is depth and definition in the individual instruments and a proper balance between soloists and the insrrumental ensemble. It is evident, however, that before the perfect high fidelity jazz recording is made, additional experimentation will have to be made with microphone placement in the thythm sections, which, in most of these records, show a persistent tendency to come too far to the aural fore. The Vanguard series is recorded with a particularly sensirive bass and the bass fiddle, plucked variously by Walter Page and Gene Ramey, comes through with an intensity that occasionally sends the listener scurrying to the controls.

Perhaps the most remarkable recording achievement is the Kid Ory disk, which is produced with unusual clarity and fullness. The old Ellington mood piece, Creole Love Call, is given a superb performance which includes a skillfully balanced trio of clarinet, muted trombone and trumpet, caught with close-up reality, and a clarinet solo of startling presence. Even Ory's cracked and gasping - but feelingly phrased vocals (on The Girls Go Crazy, for example) - acquire stature and dimension that they never had in his less-thanhigh-fidelity recordings.

The two disks by Vic Dickenson, whose biting trombone will be familiar to anyone who has attended sessions at Boston's Storyville in the past three years, include some of the finest sustained jazz performances that have been put on record. Dickenson's group plays with easy relaxation and polish, working mostly at moderate tempi and with an insistently swinging beat.

The piano passages by the relatively unheralded Sir Charles Thompson—and there are many of them—are superb displays of his wide-ranging versatility and taste. Although he is a veteran of the big-time jazz scene, this is the first disk on which Sir Charles has been able to make his mark solidly in his own behalf. Previously he was best known as the composer of Robbins Nest, a number which did a great deal for disk jockey Fred Robbins and for Illinois Jacquet, who featured it, but for Sir Charles it provided little except the filthy lucre from royalties. In an earlier period, when he was known as Chase Thompson, he worked for Lionel Hampron, who honored him by recording a number titled Chasin' with Chase in 1940 but few followers took up the pursuit. Even his selection for jazz nobility by a phrase-making employee of Cafe Society, the night club, failed to gain him the recognition accorded other titled jazzmen - the Duke, the Count or the King. However, the varied resources he exhibits on this disk should leave few doubts that he now belongs among the elect of jazz pianists.

The solo work of Sir Charles and the other members of Dicken-



Orv



Kessel



Dickenson



Thompson



Powell

HIGH FIDELITY MAGAZINE

of the Methuen organ is annoyingly loud in the hall, but the Columbia engineers have effectively eliminated the clatter.

Mr. Biggs uses stops that have bite and produce an astringently clean line. The scale of dynamics, the over-all tonal balance, the phrasing are reasonable and, as such, admirable. The performing style wears well in repeated hearings of a fervid work.

Playing on the pipe organ of the John Hays Hammond, Jr., Museum in Gloucester, Mass., Mr. Ellsasser presents the sonata in more virtuoso fashion. The technique is astonishing and flashy; the dynamic range wide, with constant crescendos and decrescendos; the registration sometimes massively bright, sometimes soggy with awful tremolos. Basically, Mr. Ellsasser has the more proper approach stylistically, but he goes to excess in his eternal stretching and contracting of time values and dynamics. The recording captures the extreme pianissimos and fortissimos in clean, adequate reproduction of the organ tone.

The Liszt pieces on Mr. Biggs's disk have moderate interest. The well-known B-A-C-H Fantaiia and Fugue is not another Ad nas, however. The excerpts from the Mass for Organ are too full of single-voice passages, in the manner of plainsong, to be satisfactory instrumental works.

The Guilmant Symphony is to me singularly dull. The long drawn out Pastorale—the second movement—might be effective as background for meditation or for the home reader who needs music to help him concentrate on the printed word; in neither case would Mr. Ellsasser's registration, à la movie palace organs, be welcome. R. E.

SCHNEIDER-TRNAVSKY

Dumka and Dance — See Dyorak.

SCHUBERT

Quartets No. 6, in D; No. 9, in G Minor

Vienna Konzerthaus Quartet.

WESTMINSTER WL 5224. 12-in. 27, 23 min. \$5.95.

Unpretentious works but definitely not to be despised, as they used to be when no one played them. The Schubert-Haydn of No. 6 is a particularly pleasant blend. The Konzerthaus Quartet's nice feeling for Schubert this time forebears intensity for a restraint proportioned to the emotional ease of the music. Good reproduction is exceptionally difficult to achieve with consistency, except at low volume and with twenty-odd db cut from the treble. Even then there are hints of metal in the otherwise gravely defined precision. C. G. B.

SCHUBERT

Quartet No. 10, in E Flat, Op. 125, No. 1 Quartet No. 11, in E. Op. 125, No. 2

Vienna Konzerthaus Quartet.

WESTMINSTER WL 5222. 12-in. 25, 23 min. \$5.95.

Remarkably, these are the only versions of the first of Schubert's Quartets to receive acknowledgment for stylistic maturity. Despite the opus-numbers they are early works, and the history of music fails to disclose any Quartets of so poised an individuality composed by so young a composer.

The Vienna Konzerthaus Quartet have now entrusted to Westminster all the Quartets of Schubert, and discophiles aware of the composer must be aware of the so-Viennese style of the players. Quartets 10 and II have the familiar extra deliberation in the slow movements, the long, caressing phrase and the full harmonic expression, and the abrupt accents in the scherzos and finales, that have characterized the whole series. Thus disparaging elegance, unafrald of the romantic epithet, a little beery, the VKQ are able to establish an intimacy of communication with the most confiding of composers pretty rare in a concert tradition nowadays inimical (often properly) to un-

son's group is unfailingly distinguished, yet it is the ensemble feeling of the team that gives these recordings much of their quality. This same quality appears on the Mel Powell disk with a feeling of briskness replacing the purposeful languorousness of the Dickenson sides.

Powell is a unique figure in American jazz — the prodigy who quit while he was ahead. Widely hailed as a new jazz star in his middle 'teens when he rose precociously and rapidly from Nick's in Greenwich Village to the piano stool in Benny Goodman's band, Powell served in the war with Glenn Miller's band and later worked for the Hollywood studios. Then, suddenly turning his back on everything he had done, he enrolled at Yale to study composition, a move which brought him into association with Paul Hindemith. Today, just entering his 30s, Powell teaches theory at Queens College and devotes himself to serious composition.

This disk marks his first recorded appearance as a jazz pianist in four or five years. His polished glistening style has been little changed by his years away from jazz, a fact which is demonstrated most forcibly on 'S Wonderful. He and his colleagues make I Must Have That Man a beautifully constructed mood effort, particularly notable for Buck Clayton's subdued muted trumpet. The selections include a reflection on Powell's new life, his composition Sonatina for Piano, which is a pleasant work but, being completely legitimate, out of place in a jazz collection. The ten minutes devoted to it might more aptly have been spent on another Powell combo number.

The Barney Kessel LP contains some of the leader's free flowing guitar work in the manner of Charlie Christian as well as his very expressive chording on gently paced ballads. He gets provocative support from the swinging flute of Bud Shank (cleanly and completely recorded) but on those occasions when Shank switches to the alto the sound combination is decidedly less interesting.

To reassure those who feel that there must be a fly in every ointment, we touch briefly on the sixth disk in this otherwise splendid group: the Sir Charles Thompson Sextet. Only the occasional appearances of Sir Charles himself lifts this disk from a drab routine, an unhappy circumstance since the pianist deserves better, as headman of his own group, than he gets here.

John S. Wilson

KID ORY'S CREOLE JAZZ BAND, 1953

GOOD TIME JAZZ L-21. 10-in. 25 min. \$3.00.

Teddy Buckner, cornet; Kid Ory, trombone; Pud Brown, clarinet; Lloyd Glenn, piano; Julian Davidson, guitar; Ed Garland, bass; Minor Hall, drums.

South Rampart Street Parade; The Girls Go Crazy; St. James Infirmary; Bill Bailey.

Buckner; Ory; Bob McCracken, clarinet; Don Ewell, piano; Davidson; Merty Corb, bass; Hall.

Milneberg Joys; Creole Love Call; Bucket's Got a Hole in It; Aunt Hager's

BARNEY KESSEL

CONTEMPORARY C 2508. 10-in. 25 min. \$3.00.

Barney Kessel, guitar; Bud Shank, alto saxophone and flute; Arnold Ross, piano; Harry Babasin, bass; Shelly Manne, drums. Tenderly; Just Squeeze Me; Bernardo; Vicky's Dream; Salute to Charlie Christian; What Is There to Say; Lullaby of Birdland; I Let a Song Go Out of My Heart.

VIC DICKENSON SEPTET, VOL. 1

VANGUARD 8001. 10-in, 21 min. \$4.00.

Edmond Hall, clarinet; Ruby Braff, trumpet; Vic Dickenson, trombone; Sir Charles Thompson, piano; Steve Jordan, guitar; Walter Page, bass; Les Erskine, drums.

Russian Lullaby; Jeepers Creepers.

VIC DICKENSON SEPTET, VOL. 2

VANGUARD 8002. 10-in. 19 min. \$4.00.

Same personnel as above.

I Cover the Waterfront; Sir Charles at Home; Keeping Out of Mischief Now.

SIR CHARLES THOMPSON SEXTET

VANGUARD 8003. 10-in. 27 min. \$4.00.

Joe Newman, trumpet; Pete Brown, alto saxophone; Benny Powell, trombone; Sir Charles Thompson, piano; Gene Ramey, bass; Osie Johnson, drums.

Bop This; Memories of You; Oh Joe!; For the Ears.

MEL POWELL SEPTET

VANGUARD 8004. 10-in. 32 min. \$4.00.

Buck Clayton, trumpet; Henderson Chambers, trombone; Edmond Hall, clarinet; Mel Powell, piano; Steve Jordan, guitar; Walter Page, bass; Jimmy Crawford, drums.

'S Wonderful; It's Been So Long; I Must Have That Man; You're Lucky to Me; Sonatina for Piano.

objective re-creations of music in the classical forms. - The sound is not the best that this organization has enjoyed. Both sides of the disk have shimmering violins, and while this may be cured fairly easily in No. 10, the reverse requires a preposterous reduction of treble for reproduction on good equipment. C. G. B.

. SCHUMANN

Concerto in A Minor for Piano and Orchestra

Clara Haskill, piano. Hague Philharmonic Orchestra, Willem Van Otterloo, cond.

Liszt: Concerto No. 1 in E Flat Major for Piano and Orchestra.

Cor de Groot, piano. The Radio Philharmonic Orchestra, Willem Van Otterloo, cond.

EPIC LC 3020. 12-in. 47 min. \$5.95.

Tidy, well ordered, competent performances of two famous concertos, neither likely to displace other recordings currently available. Miss Haskill's Schumann is a surprisingly detached, dry and uninteresting traversal of the work. Adopting an unusually heavy tone, and maintaining it at a maddeningly uniform level throughout, she almost succeeds in destroying every romantic aspect of this lovely work.

The De Groot technique is more than adequate to the demands of the Liszt, but here again there seems to be a lack of feeling for the work, for he fails to infuse it with any fire or passion, without which this work simply won't stand up. Let's call it the equal of Iturbi's exposition . . . without harming

There is a noticeable improvement in Epic's sound, when compared to earlier issues reviewed last month. The painful sogginess of the middle has been properly strengthened, so that we now have a superb clear sound throughout all cycles. On each side, Van Otterloo provides driving accompaniments, as if beckoning the soloists to follow, but it is a lost cause. They simply don't, or won't. I. F. I.

SEBOR Goldhead - Polka - See Dvorak.

Chorale No. 1; Three Chorale Preludes tThomson: Variations on Sunday School

Marilyn Mason, organist, St. Paul's Chapel, Columbia University, New York.

ESOTERIC ES 522. 12-in. 22, 22 min. \$5.95.

Sessions' Chorale No. 1 is a big, toccata-like composition, a bit on the bombastic side. The Three Chorale Preludes, however, are works that manage to combine great profundity in structure and organization with an extremely sensitive respect for the medium in its subtlest aspects. Such, at least, is their effect when they are played by a musician of Miss Mason's skill and insight; one has heard them played by others without half so much result.

Thomson's Variations on Sunday School Tunes is a work without precedent in the literature. The tunes themselves are hymns of the most obvious and commonplace kind, and Thomson has set them to recall the wheezy, foot-pumped harmoniums that stand in thousands of dusty church assembly

rooms from coast to coast. He has not overlooked the keys that stick, the keys that don't work, and the wolves that snarl unexpectedly, but he also remembers the lovely thin tone of which the harmonium is capable, and he perceives many significant, quite moving implications in the tunes. turesque American folk-lore pieces are common enough in other media, but one suspects that this is the only organ piece in existence which arises from the American folk lore of that instrument.

STRAVINSKY

Concerto for Two Pianofortes Soli; Sonata for Two Pianos; Trois Pieces Faciles; Cinq Pieces Faciles.

Ethel Bartlett and Rae Robertson, pianists. M-G-M E 3038. 12-in. 17, 10, 5, 7 min. \$4.85.

This disk contains all of Stravinsky's music for two pianos or one piano, four hands. The Concerto is the most important of them. It is a large, incredibly difficult, splashy, dynamic, and marvelously constructed virtuoso piece somewhat suggesting the same composer's great Symphony in Three Movements. The sonata is in a more clipped, condensed and classical vein, but still with plenty of sonority. These two works for two pianos are relatively late, the concerto having been composed in 1935 and the sonata in 1944. The two sets of Pièces Faciles are much earlier. They were written in 1915 and 1917, at a time when Stravinsky delighted in little works in a satiric style; they are parodistic dances and marches of various kinds, and they are better known in their alternative versions as Stravinsky's Suites, Nos. 1 and 2, for small orchestra. Both remain extremely amusing piano music, however. In the Trois Pièces the right hand part is easy and is intended for an amateur; in the Cing Pièces the amateur takes the bass. But neither Miss Bartlett nor Mr. Robertson can be conceived of in the amateur class. For my money they form the best two-piano team in the world today, and this record of theirs is a beauty from every point of view. A. F.

TCHAIKOVSKY

Barcarolle; Divertissement Chocolat; Dance of the Sugar Plum Fairy; Snow Flakes Waltz from "The Nutcracker Ballet;" Melodie; Danse; Russe; None But the Lonely Heart - See Brahms.

THOMSON

Variations on Sunday School Tunes - See Sessions.

WALTON Belshazzar's Feast

Dennis Noble, baritone. London Philharmonic Choir and Philharmonic Promenade Orchestra, Sir Adrian Boult, cond. WESTMINSTER WL 5248. 12-in. 36 min.

It would be a captious critic indeed who could fault this superlative recording of Walton's massive and exciting cantata. Far better to hand out the bouquets at once, though the problem is to know where to start, for this seems to have been one of those rare sessions where everyone was in top form. Bouquets to -

The engineers, who, overcoming the prodigious problems involved in recording this work, have achieved a perfect balance between soloist, chorus and orchestra, an almost unbearably true to life sound and a carefully adjusted control of its dynamics. Dennis Noble, for his vibrant and moving work as soloist, and the Philharmonic Choir, for singing notable for cleanness of attacks, and for their care in enunciating the text, not always a strong point in recordings of this type. The orchestra, for the brilliance and persuasiveness of its playing, and perhaps above all, to Boult. Gathering the forces at hand, he propels them through a splendidly virile and dramatic performance that is overpowering in its impact.

The work was composed in 1931, but did not appear here on records until 1943 in the Victor set (DM 974) conducted by the composer. A re-playing of this set for comparative purposes, discloses a more subdued approach, certainly far less forceful, and considerably smaller-scaled. Noble was the soloist, then as now, and equally as good, but the choir at Walton's disposal is neither so well drilled nor so vocally correct as the one in this new recording. J. F. I.

WEISS

Bohemian Dance No. 3 - See Dvorak.

Italian Serenade in G Major Quartet in D Minor

New Music Quartet. COLUMBIA ML 4821. 12-in. \$5.95.

These two works represent the only mature chamber music compositions by Hugo Wolf, a man noted mostly for his songs. The jaunty little Italian Serenade is, of course, a familiar and irresistible piece, though its treatment on this disk is a trifle perfunctory, lacking in romantic warmth and flexibility. The major offering here is the Quartet, which receives its initial performance on records. After listening to it, one wonders why it is not part of the standard repertoire. True, there are many reminiscences of the late Beethoven quartets - especially Op. 95 plus more than a hint of Lohengrin and Walkure; but it is, on the whole, an admirably integrated work and one which makes extensive demands upon the players. It is accorded a very fine, perceptive reading here, and the reproduction is clear, though it tends to accentuate the highs.

MUSIC ON TAPE

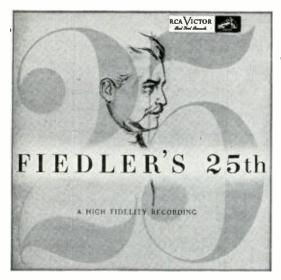
DVORAK Symphony No. 4 in G Major

Cincinnati Symphony Orchestra, Thor Johnson cond.

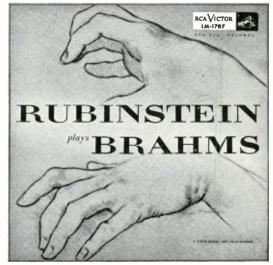
A-V TAPE LIBRARIES 1026. 7/71/2 ips. 33 min. \$9.95.

Thor Johnson is competing over his head here, and it is no foul blow to him to point out that even Kubelik and Szell edge him in Dvorak, that Bruno Walter distances him and that Vaclav Talich, the old master, leaves them all scrabbling in the lurch. However, Talich is on a scratchy, hard-to-get

HIGH FIDELITY MAGAZINE



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MAY, 1954

Iron Curtain Suprahon disk; Walter on Columbia is a vintage item; neither of the other two can approach the A-V Johnson version in sound. And musically Johnson is far from bad. Put it this way: people who are waiting for definitive versions before they pay \$9.95 for scratchless tape should not buy this. Those who want perfect reproduction now of what reasonably well-placed microphones picked up at a reasonably well-played performance should. The recording is a studio-blend of two tapetracks, recorded for binaural playback (which is also available from A-V, price unannounced at reviewing time), and very good, though not spectacular. Remington recorded this same performance for disk-reproduction; it will be interesting to compare the two when the disks are released. J. M. C.

SIBELIUS

The Origin of Fire; Song of My Heart; Finlandia; Pohjola's Daughter.

Helsinki University Chorus; Sula Saarits, baritone solo; Cincinnati Symphony Orchestra, Thor Johnson, cond.

A-V TAPE LIBRARIES 1027. 5/7½ ips, double-track. 15, 14 min. \$7.75.

Whatever Mr. Johnson's limitations in Dvorak (see Dvorak), they do not apply to Sibelius. Here he is restrained, tasteful and articulate throughout. The great Finn's wonderful woodwind-work comes forth in all its scenic subtlety; the strings mass well and the young chorus is properly touching. Pohjola's Daughter is the prize piece in the package; there is a slight glee-club flavor to the a capella renditions of Song of My Heart

and the national-hymn excerpt from Finlandia. But all are good. Microphone-placement seems to have been less than inspired (it is better in the companionissue, the Dvorak Fourth Symphony, less well performed). The engineer experimented freely, primarily intent on a good binaural registration, and ran into a little blurring, not bad. All in all, though, this can be warmly recommended. I do not know that the Origin of Fire has been recorded in recent years. It's worth hearing. J. M. C.

COLLECTIONS AND MISCELLANY

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FIVE CENTURIES OF CHORAL MUSIC

Italian: Rosselli: Adoramus Te; Palestrina: Alma Redemptoris Mater.

American: Everett Titcomb: I Will not leave you Comfortless; William Self: Hymn of Praise. French: Franck: O Lord Most Holy; Gounod: Jerusalem.

Bohemian: Fr. Joseph Schuetky: Emitte Spiritum Tuum.

English: Tallis: If Ye Love Me.

German: Melchior Franck: Father, Thy Holy Spirit Send; Bach: Three Chorales.

The Male Choir of All Saints Church, Worcester, Mass. William Self, director.
CLASSIC EDITIONS CE 1023. 12-in. \$5.95.

It is regrettable that the obvious devotion and skill that have gone into these two disks are not matched by equal vocal ability. In an attempt to be as fair as possible, this reviewer made a point of listening to these records several times, at widely separated intervals. On each occasion, however, he found himself arriving at the same conclusions.

In all purely musical matters - ensemble, pitch, diction, interpretation, balance - the performances leave nothing to be desired. They demonstrate a high degree of ability, indeed. Moreover, when the chorus sings softly, the tone quality is quite gratifying. However, when the level rises to anything above a mezzo forte . . . "there's the rub." One is tempted to ascribe this trouble to the presence of the boys, whose tone becomes spread and unpleasant in the louder passages. Further listening, though, reveals the fact that the men are guilty of the same fault. The few solos are sung by a boy soprano who sings like any other boy soprano.

The occasional intrumental accompaniments and obligatos are played in a completely professional manner by Henry Hokans, organist, Melvin Kaplan, oboist, Tina di Dario, bassoonist, and Daniel Pinkham, harpsichordist. Technically the recording is fine, and conveys the open, spacious acoustics of a church. D. R.

Rus cana

MASCAGNI

cavalleria rusticana

Just released on only two beautiful long-playing records is Mascagni's immortal masterpiece, CAVALLERIA RUSTICANA and it boasts MARIO DEL MONACO as TURIDDU; ELENA NICOLAI as SANTUZZA and ALDO PROTTI as ALFIO. This is the "official" and "great" cast that "regularly" sings this opera at LA SCALA AND AT EVERY OTHER IMPORTANT OPERA CENTER IN ITALY. For example, no fewer than 33,000 opera fans turned out to hear them at THE ARENA IN VERONA this past summer. We have placed the complete opera in luminous ffrr sound on three sides of the album and added a superlative operatic recital by the world's finest dramatic tenor as a dividend for Side Four. This recital includes rarely heard arias from LORELEY. IL TABARRO and LA FANCIULLA DEL WEST as well as familiar items from TURANDOT, ANDREA CHENIER and LA BOHEME sung as only MARIO DEL MONACO can do them.

Turiddu Mario del Monaco Santuzza Elena Nicolai Alfio Aldo Protti Lola Laura Didier Lucia Anna Marie Anelli

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CONTEMPORARY AMERICAN MUSIC

Vladimir Golschmann conducting the Concert Arts Orchestra.

CAPITOL P 8245. 12-in. \$5.70.

Four short orchestral pieces: Aaron Copland's Quiet City (eight minutes), Paul Creston's Two Choric Dances (12 minutes), Samuel Barber's Adagio for Strings (six minutes), and David Diamond's Rounds, also for string orchestra (15 minutes.) Of these, the most important is the Copland, which is a rather strange, lonely nocturne with a brilliant, free, declamatory part for a solo trumpet and a part for a solo English horn which is a kind of quiet shadow of the brass instrument. (These parts are gorgeously played by Harry Glantz and Albert Goltzer.) Diamond's Rounds is a breezy, genial, vigorous, somewhat neo-classical piece that goes on a trifle too long for its content. Barber's Adagio is a bit of solemn romanticism richly exploiting the full sonorities of the strings, and Creston's Choric Dances would be well adapted to an ominous, slightly savage and bloody ceremonial in some Greek tragedy. Excellent performances and recording. A. F

FOLLOW THE SUNSET

Charity Bailey. Narrated by Robert Em-

FOLKWAYS FP 706. 10-in. 23 min. \$4.75.

The phenomenon of sunset, as it occurs in various parts of the world, is the subject of this educational musico-geographic tour. In simple words, the younger fry are told how it happens, and why it happens at different times in the spots visited. To create an illusion of both time and place, lullabies of Mexico, Hawaii, China, Israel, Africa and Wales are used as musical accompanients, as we follow the sun around the world.

These lullabies are quite disarmingly sung by Miss Bailey, and Robert Emmett is a properly un-pompous narrator. Unfortunately the recording is quite spotty and rough, and my copy had an excess of surface noise.

J. F. I.

HAITIAN FOLK SONGS

Lolita Cuevas. Arrangements and guitar by Frantz Casseus.

FOLKWAYS FP 811. 10-in. 28 min. \$4.75.

The gentler side of Haitian folk music is exploited in this little collection of seven songs and one instrumental solo. The graceful lift of the "Meringue de Salon" with its almost calypso like rhythm, the soft croon of the Haitian Iullaby, the delightful little chanson "Ti Zoizean" have a charm that is more subtle than the crop of voodoo recordings currently enjoying so much favor.

Miss Cuevas' voice, softly caressing, of exactly the right musical timbre, is ideal for these muted songs, and she is most admirably accompanied by Frantz Casseus, on the guitar. The recorded sound is slightly dull, but acceptable and well balanced. J. F. I.

LOCATELLI Cello Sonata in D Major FRESCOBALDI Toccata (trans. Cassado)

BOCCHERINI Cello Sonata in A Major

Antonio Janigro, 'cello; Eugenio Bagnoli, piano.

WESTMINSTER WL 5243. 12-in. \$5.95.

Janigro again gives evidence of his technical mastery and stylistic and tonal eloquence in fine-grained performances of this attractive and often difficult seventeenth and eighteenth century music. The two sonatas are most familiar in their present versions for 'cello: the Frescobaldi Toccata, however, was originally for organ, and is also known in an orchestral transcription by the late Hans Kindler. One unique feature of the Boccherini Sonata is the inclusion of the usually omitted third movement. The en-gineers are almost always very kind to Janigro, reproducing his firm tone most faithfully, and the present disk lives up to the high standards set by previous issues. P. A.

SCANDINAVIAN MUSIC FOR OR-CHESTRA

Covent Garden Orchestra, John Hollingsworth, cond. MGM E 3082. 12-in. \$4.85.

The only things one needs to worry about here are Hugo Alfven's familiar, much recorded Swedish rhapsody entitled Midsumer Vigil (12 minutes) and the same composer's firm, dignified Elegy from his suite

entitled King Gustav Adolf II (six minutes).

Midsummer Vigil, if you are not already aware of it, is a Swedish folk-tune piece, full of delightful dances and songs, very brilliantly scored. The rest of the disk is given over to pretentious trivialities, including Johan Svendsen's Carnival in Paris, Sibelius, Romance in C, and something called the Dance of the Cockerels from an opera entitled Masquerade, by Carl Nielsen. The recording is bright, here and there a little rough.

MARJORIE SCHLOSS A Concert of Rarely Recorded Lieder.

Robert Franz: Sonntag; Schlummerlied; Nebel; Die Liebe hat gelogen. Hugo Wolf: Die Nacht; Liebesglück; Mergenstimmung; Ob auch finstre Blicke glitten. Robert Schumann: Lied eines Schmiedes; Meine Rose; Kemmen und Scheiden; Die Sennin; Einsamkeit; Die Schwere Abend. Richard Strauss: Blauer Semmer; Wenn!; Weisser Jasmin; Stiller Gang.

Marjorie Schloss (s); Jonathan Brice, piano. INTERNATIONAL RECORD COLLECTORS' CLUB L-7000. \$5.95. (By mail: 318 Reservoir Avenue, Bridgeport, Conn.)

This is the first LP, and the first issue of other than primarily historical interest, by the International Record Collectors' Club, which since 1932 has from time to time made available reprints and re-recordings of hard-to-get 78s by noted singers of the past. Whatever the reason for this shift in policy, the result is worth hearing. Marjorie Schloss, who has taught voice in New York for some time but got around to giving her debut recital there only a year and a half ago, has atranged an unhackneyed and





sensitively juxtaposed sequence of lieder, which she sings with quite exceptional musicality and emotional flexibility. Vocally she approaches complete effectiveness most nearly in songs that do not lie in too high a tessitura - like the Franz songs, which are actually cast for mezzo-soprano. Although her voice is a true soprano in quality, its middle part is the most sympathetic, and her intonation up around E-F is not invariably pinpoint accurate, her full-voice high notes not very attractive. However that may be, she is certainly a ripe, intelligent artist whose singing wears much better than much that is prettier but more superficial. Jonathan Brice's collaboration at the piano is first-class. The recording, supervised by Peter Bartok, is intimate, cleanly defined, but at the same time live and spacious; the surfaces are notably good.

FERRUCCIO TAGLIAVINI: ARIAS

Cilea: Lamento di Federico, from L'Arlesiana. Puccini: O dolci mani, from Tosca. Wolf-Fertati: Luceta xe un bel nome, from I Quattro Rusteghi. Verdi: Parmi veder le lagrime, from Rigoletto; Dal labbro il canto, from Falstaff. Giordano: Come un bel di di maggio, from Andrea Chénier. Rossini: Eccoridente in cielo from Il Barbiere di Siviglia. Mascagni: Ed anche Beppe amo, from L'Amico Fritz. Bellini: Prendi l'anel' to dono, from La Sonnambula.

CETRA A-50155. 12-in. \$5.95.

These arias, transferred to LP from pretape 78s of good studio quality are of special interest because they represent Ferruccio Tagliavini's singing as it was known in this country at the rime of his enormously successful Metropolitan debut. He, like an increasing number of American debutants since, found here the nucleus of a fan club among admirers of his recordings. These are the performances they had heard, and the performances sound essentially as he did on arrival. Since the enthusiasm for Mr. Tagliavini has waned somewhat, it is interesting to go over this evidence again.

Among those who spoke well of Mr. Tagliavini at first but no longer do so there is a tendency to attribute their change of attitude to vocal deterioration on his part or to his acquisition of a disaffectingly mannered way of singing. However, if the quality of the voice has changed for the less beautiful the change has not been much. And the mannerism most complained of a habit of singing piano or mezza voce with a tone so covered that it sounds almost crooned, then suddenly jerking into a more open tone in climaxes - has only become more pronounced than it was. On the evidence. Mr. Tagliavini actually sang in and before 1948 pretty much the same way he does now; his vocal narcissism cannot be said to have increased. Such as the difference is, it would seem to lie in the degree of fineness of vocal control rather than in the mannerism itself - and probably also in the fact that now the voice is familiar instead of excitingly new there is more emotional leisure to be employed in vexation at the emptiness of most of his private vocal paraphernalia.

However that may be, this record holds much singing that is just about perfect of its kind. Whether you like the kind or not is another matter entirely, but there is no

denying the phenomenally controlled floating of tone, the spinning pianissimos, the interminable phrases in the middle voice that bloom out so easily (as they do not invariably now) into top notes that have ringing metal. So remarkable is the singing as singing that at the moment of hearing it seems not really to matter that so much of it is contrived, untasteful, and essentially pretty meaningless. It is snide praise to say that Mr. Tagliavini accomplishes most in the Cilea and Mascagni confections; but it is true. It is also true that the smoothness with which he delivers the Rossini, Bellini and Verdi excerpts is impressive, even if the style is not. Recommended, not without musical reservations, as being representative of the best vocal estate of a singer whose shortcomings are at least partly public responsibility and who, whether because or in spite of them, is having an important international career. Two further comments: Mr. Tagliavini's singing of Parmi veder - perhaps the best performance on the disk, all told—can also be had on a RCA Victor curiosity called "Ten Tenors, Ten Arias." The Giordano aria should have been left for heavier voices. J. H., Jr

THE MUSIC BETWEEN

A BAND CONCERT: Deutschmeister Band, conducted by Julius Herrmann.

WESTMINSTER WL-3011. 10-in. \$3.95.

N. Drescher — Grinzinger Marsch; Steirischer Iodler; P. Fahrbach — Im Kahlenbergerdorf; C. M. Ziehrer — Dorner Marsch; Reigen (Wiener Walzer); J. Weideman — Grenadier Marsch; C. M. Ziehrer — Das Liegt Bei Uns Im Blut; Novotny — Aller Ehren Is Oesterreich Voll.

The Deutschmeister Band is internationally celebrated; founded in 1741, it has survived several local wars, two world wars, and the collapse of at least one monarchy. In short it's quite a tradition around Vienna, but I'm afraid it will have a fairly tough time endearing itself to Americans in such permanent terms. For one thing, the waltzes it plays, on this record at least, have an air of melancholy about them. For another, its marches lack snap; the tempi - except for the walloping Grinzinger Marsch - are sluggish enough for the goosestep, and at its best that's an unpleasant association. I prefer the brisk, get-it-over-with quick step of our Army bands and it's not to be found here. Westminster has treated the band nobly, however, soundwise.

BACKGROUND MUSIC, Vol. 5 & Vol. 6.

CAPITOL P-489. 12-in. \$5.70.

Sweet And Lovely; Make Believe; Missouri Waltz; Peg O' My Heart; Jealous; Moonlight And Roses; Pagan Love Song; Poor Butterfly; By 1 be Light of the Silvery Moon; Down By The Old Mill Stream; Home On The Range; I'm Forever Blowing Bubbles; There's A Long, Long Trail; I Love You Truly; Good Night Medley.

If there is such a thing as functional music making this record would fall in that category. Altogether the album offers 16 songs. They are quietly played, without vocals, and they won't conflict with anyone's conversational desires. Also available on separate ten-inchers: Vol. 5 (Sweet and Sentimental), Capitol H-473 and Vol. 6 (Songs for Harmonizing), Capitol H-472.

KISMET: Percy Faith and his Orchestra. COLUMBIA CL-6275. 10-in. \$3.00.

Sands of Time; Stranger in Paradise; Fase; And This Is My Beloved; Not Since Nineveb; Baubles, Bangles and Beads; He's In Love; Bazaar of the Caravans.

Kismet again, for the second time in two months, but without lyrics this time round. There are vocals of a sort; Mr. Faith's ladies' chorus participates, keening away at appropriately sad or morose moments. Mr. Faith gives the songs he has selected from the Borodin score his full treatment; there's plenty of bonging, belling and other exotic effects. Columbia's engineers, on their part, give Mr. Faith the full treatment. My copy, however, was badly grooved on the And This is My Beloved band.

RODGERS AND HART: Louise Carlyle; Bob Shaver; accompaniment by the John Morris Trio.

WALDEN RECORDS 304. 12-in. \$5.95.

Did You Ever Get Stung?; A Tree in the Park; Nobody's Heart; Sentimental Me: To Keep My Love Alive; Wait Till You See Her; A Ship Without a Sail; Any Old Place With You; Easy To Remember; I've Got Five Dollars.

This is superb music and record making. Taking ten Rodgers and Hart tunes that are

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rarely played (for what reason no one will ever know), Walden Records has organized a task force notable for talent, restraint and taste to play, sing and engineer them. They are played by the John Morris Trio, a group of young men on bass, piano, celeste and guitar; their accompaniments — and Mr. Morris' sympathetic arrangements — would be worth a million dollars to any singer or composer. The songs are sung by Louise Carlyle and Bob Shaver. Miss Carlyle can turn from the buoyancy of Did You Ever Get Stung? to the malice of To Keep My Love Alive with no audible effort; Mr. Shaver works wonders with A Tree in the Park and Any Old Place With You. The package was designed by Harry Hirschfeld; it's a delight. And Robert E. Blake, listed as recording engineer, has come through with a beautifully-balanced, crystal-clear job.

POLYNESIA!: Native Songs and Dances of the South Seas.

CAPITOL H-483. 10-in. \$2.98.

Tamure: Vana Vana: Tanga Tika: Vahine Anamise; Minoi Minoi; Manu Rere; Papio; Cafe au Lait.

As Capitol claims, the songs of Polynesia are happy songs. Even more, as they are sung here by Charles Mauu and the "Royal Polynesians," they provide an album of wonderful heartiness and effervescence. Here and there a song shows itself to be authentically under the influence of the native American popular song (including one that sounded to me remarkably like Ricochet Romance), but in general, they evoke a South Seas and Polynesia of rolling breakers, blue skies, and no neuroses. I particularly liked Tamure, an open invitation to the listener to sing or dance to native rhythms. Capitol's sound here is superlative: big, close, and amazingly clean-cut.

THE WONDERFUL WALTZES OF RICHARD RODGERS: Paul Britten and his Orchestra.

MGM E-197, 10-in, \$3.00.

Lover; Carousel Waltz; Falling In Love With Love; Oh What A Beautiful Morning; This Nearly Was Mine; Out Of My Dreams; It's A Grand Night For Singing; I'm In Love With A Wonderful Guy.

THE WONDERFUL WALTZES OF IRVING BERLIN: Paul Britten and his Orchestra.

MGM E-216, 10-in, \$3.00.

All Alone; The Girl That I Marry; Because I Love You; The Song Is Ended; Always; What'll I Do; Russian Lullaby; You Forgot To Remember.

In recording Irving Berlin's and Richard Rodgers' waltzes, MGM has come up with two LPs that are both expertly-played and intelligently engineered. Mr. Britten's orchestra approaches the waltz with a good deal of politeness and deference; the results make for sober, sturdy listening. As a matter of fact, these lovely melodies couldn't ask for better-defined or more careful treatment and, to everybody's credit, they shine even brighter for it.

ROBERT KOTLOWITZ



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THE BEST OF JAZZ

IAM SESSION COAST-TO-COAST

COLUMBIA CL 547. 12-in. 48 min. \$3.95.

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Beale Street Blues; Emaline; Don't Worry Bout Me; I Can't Give You Anything But Love; Riverboat Shuffle; Jam Session Blues; Ole Miss.

The Rampart Street Paraders: Clyde Hurley. trumpet; Abe Lincoln, trombone; Eddie Miller, tenor saxophone; Matty Matlock, clarinet; Stan Wrightson, piano; George Van Eps, guitar; Phil Stephens, bass; Nick Fatool, drums.

Black and Blue; I Ain't Gonna Give Nobody None o' This Jelly Roll; Ja-Da; The Shiek of Araby; Squeeze Me; South Rampart Street

Eddie Condon's gang has probably never been recorded better than they are on this disk and they have rarely played better even on their home ground in the maestro's Greenwich Village deadfall. There is tremendous vitality in their ensemble attacks on Beale Street Blues, Riverboat Shuffle and the windup jam session and the soloists play with an alert enthusiasm that belies the fact that they've been doing this stuff for years.

The medley of ballads (Emaline, Don't Worry 'Bout Me, I Can't Give You Anything But Love) is played with a lyric beauty that is refreshingly non-fatuous, particularly by Ed Hall on Don't Worry Bout Me, the kind of thing he rarely gets a chance to record. It has been Columbia's pleasant notion to include some of Condon's acid instructions to his men on this disk but even as this notion was being carried out the company was apparently assailed by doubts for the Condon voice has been recorded at an irritatingly low volume. If Columbia hasn't the courage of its convictions to make Condon's comments readily audible, it ought to leave such documentation to others.

The Rampart Street Paraders, who occupy the other side of this disk, are a group of West Coast studio men who play in the routine fashion that was once common to the groups which Condon used to ornament Nick's. Trombonist Abe Lincoln offers a couple of stirring choruses of The Sheik and Clyde Hurley blows a forceful trumpet on Black and Blue but otherwise the men hasten through their paces, collect their pay and go home.

GERRY MULLIGAN QUARTET

PACIFIC JAZZ PJLP 5. 10-in. 25 min. \$3.85.

Gerry Mulligan, baritone saxophone; Chet Baker, trumpet; Carson Smith, bass; Larry Bunker, drums.

I May Be Wrong; I'm Beginning to See The Light; The Nearness of You; Tea for Two; Love Me or Leave Me; Jeru; Darn That Dream; Swinghouse.

CHET BAKER QUARTET

PACIFIC JAZZ PJLP 6, 10-in. 23 min. \$3.85.

Chet Baker, trumpet; Russ Freeman, piano; Carson Smith, bass; Larry Bunker, drums. Long Ago and Far Away; Happy Little Sun-beam; Moon Love; Bea's Flat; No Ties; Band Aid; The Thrill Is Gone; All the Things You Are.

RUSS FREEMAN TRIO

PACIFIC JAZZ PJLP 8. 10-in. 23 min. \$3.85.

Russ Freeman, piano; Joe Mondragon, bass;

Shelly Manne, drums.

Yesterday's Gardenia's; Bock's Tops; Don't Worry About Me; Backfield in Motion; You Stepped Out of a Dream; Laugh Cry; At Last; The Eye Opener.

Three of the more intriguing of the West Coast modernists are involved in a game of musical chairs on these disks. The Mulligan Quartet, in which Chet Baker plays trumpet, appears to be a bit past its peak in this collection and inclined to ride on its reputation. This reputation was built on inventively conceived and tightly knit works in which the foursome worked together in warm intimacy, with Mulligan's baritone saxophone and Baker's trumpet blending in some startling, though subdued, effects. On their current disk, this hallmark is given full dress - and extremely good - display only on The Nearness of You. Otherwise, the tendency is to trade off solos, mostly pleasant and capable, the best being Baker's soulful brooding on Darn That Dream.

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The Music Box

Great Barrington, Mass.

The Baker Quartet is the Mulligan Quartet with pianist Russ Freeman in place of saxophonist Mulligan. Freeman appears to be the controlling factor in the group. He wrote four of the numbers on this disk and it is these numbers on which Baker appears at his best, playing with greater range and more vitality than he evidences in his work with Mulligan. Freeman chimes in with some adept, fleet-fingered solos and adds enormously to Baker's effectiveness with an accompaniment which keeps accenting the rhythmic qualities of the numbers. The remaining selections, popular standards, are taken at either whirlwind or funereal pace, neither particularly appropriate.

When Freeman emerges in charge of his own trio, he attempts the same programming as is used on the Baker collection: four Freeman originals and four standards. But this time it is the Freeman originals that are the weak point of the disk, largely because Freeman's uptempo style - and he writes persistently uptempo - lacks pacing, dynamic variety or any evidence of feeling. For a chorus or so, when he has another instrument to spell him, this is not too noticeable but spread out over three minutes it grows monotonous. On the other hand, the slow, slow ballad treatment which palls when delivered by Baker's trumpet, proves an excellent medium for Freeman since his piano allows for embellishments that are impossible on the trumpet. Freeman is at his best on At Last and You Stepped Out of

The balance on all three disks is quite rational and the recording, particularly on the Mulligan LP, admirable.

JIMMY YANCEY

RIVERSIDE RLP 1028. 10-in. 25 min. \$3.95.

Jimmy Yancey, piano.

La Salle Street Breakdown; Two O'Clock Blues; Janie's Joys; Lean Bacon; Big Bear Train; Lucile's Lament; Beezum Blues; Yancey Limited.

Jimmy Yancey is usually counted among the boogie-woogie men, particularly since Meade Lux Lewis immortalized him in one of the few distinguished boogie-woogie compositions, Yancey Special. But though Yancey had a high talent for the limited boogie-woogie style, his great gift was as an interpreter of the blues. This disk is made up of sides Yancey cut for the old Solo Art label in 1939 which were misplaced and unissued until now. It is fairly evenly divided between boogie and blues but while Janie's Joys, for instance, is the rocking type of boogie which shows Yancey at his best in that field, his work is most meaningful in a pair of blues - Lean Bacon, a straightforward and soulful moan, and Lucile's Lament, a sort of blue rag which runs a flowing and involuted course. The recording career of Yancey, who died last year, was quite brief and some of the numbers on this disk are among his best efforts.

TURK MURPHY AND HIS JAZZ BAND

When the Saints Go Marching In.

COLUMBIA CL 546. 12-in. 41 min. \$3.95.

Turk Murphy, trombone and vocals; Bob Helm, clarinet and vocals; Bob Short, tuba

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and trumpet; Wally Rose, piano; Dick Lammi, banjo; Freddie Crewes, tuba.

St. Louis Blues; I Wished I Was in Peoria; Tishomingo Blues; Down in Jungle Town; How Come You Do Me Like You Do; Roll, Jordan, Roll; Bill Bailey, Won't You Please Come Home?; I Wish I Could Shimmy Like My Sister Kate; Santa Claus Blues; Baby, Won't You Please Come Home?; Evolution Mama; When the Saints Go Marching In.

Something will have to be done about Turk Murphy's penchant for singing. Since he moved his band to the Columbia label, he has tended to sing almost everything he has recorded. Murphy is a shouting type of singer, hard working and serious but not particularly ingratiating and while a single Murphy vocal can provide variety or a change of tonal color in a series of numbers, a succession of them becomes monotonous. The monotony is increased when clarinetist Bob Helm, an even less prepossessing singer. is also set to vocal tasks as he is on this disk. Add to this Murphy's unhappy notion of setting up a front line made up of only his own plugged trombone and Helm's clarinet on many of these numbers plus Helm's unaccountable and newly displayed predilection for playing in a credible imitation of Boyd Senter and you have a disk which is a horrible descent from the well-knit traditionalist jazz that Murphy has put out in the past. What little musical satisfaction to be found here occurs when Bob Short occasionally gives up his tuba in favor of the trumper and plays behind a vocalist or joins (and brings to life) an ensemble and when pianist Wally Rose is allowed a brief turn in the spotlight. JOHN S. WILSON

THE SPOKEN WORD

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Maurice C. Dreicer is described by his press release as having "spent over a quarter of a century studying in most parts of the world the intricacies of mixology." Just what prompted him to distill the essence of his 25 years of research into a long playing record is not quite certain. However, the result is a minor classic which combines a dramatic rendition and an appreciation of the cocktail hour that will probably be approved by even the critical ear of Goddard Lieberson on the one hand and Bernard DeVoro on the other.

Mixologist Dreicer quite naturally begins his vocal barrender's guide with the martini. Rejecting what he calls the Civil Liberty martini (in which the gin and vermouth have equal rights), Dreicer says that he prefers the William Jennings Bryan martini. He reminds his thirsty listeners that Bryan ran on a platform of free silver based on a 16-1 ratio and suggests that while Bryan (who drank grape-juice) probably did not know much about silver, he had the right formula for the martini and didn't know it. Having dispensed with a joke too good to pass up, he then gets down to business and gives the recipe for a real martini - eight ounces of gin and a quarter of an ounce of vermouth, which even a (sober) child can



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see is 32.1. He describes five additional, and inferior, versions of the martini and then proceeds to inform the listener of the subtleties involved in the preparation of the better known cocktails, pouring, mixing and tinkling ice cubes as he goes and flavoring his recipes with historic and anecdotal ingredients as needed. He concludes with a few esoteric specialties carrying such tempting labels as a Black Velvet, Dreicer's Devil's Disciple and the Blue Blazer, the latter a rather dramatic mixture which should be approached cautiously by the consumer, preferably clothed in asbestos. In all, he gives the formula for 28 drinks and the most remarkable aspect of the record is that at the end of the second side there is not a trace of word-slurring; Mr. Dreicer admirably confines his activities to mixing and stirring. (Although a master libationer, Mr. Dreicer is still an apprentice in the record distribution business; hence to get his record one must go to Liberty Music Shop, New York City, or write to Suite 3026, 11 West 42nd St., New York City.) R. H. H., Jr.

DYLAN THOMAS In a Reading From His Work

Lament; Poem on His Birthday; Should Lanterns Shine; There Was a Saviour; A Refusal to Mourn the Death, by Fire, of a Child in London: If I Were Tickled by the Rub of Love; And Death Shall Have No Dominion; A Winter's Tale.

CAEDMON TC 1018. 12-in. \$5.45.

It is to be lamented that we have no phonograph records of Keats reading from his own works, or Blake, or Swinburne, or Hopkins or Rimbaud or any of the other poets to whom the Welshman Dylan Thomas has been compared. However, of Thomas, whose unfortunate death last November has served to emphasize one function of the long playing record, we now have at least two 12-inch Thomas records preserved for the enchantment of future generations.

The second Dylan Thomas readings suffer by comparison with the first only because his earlier reading of A Child's Christmas In Wales, is nearly unsurpassable, even by Thomas himself. Listening to Thomas reading the eight poems on this record, it is hard to believe that he is really dead. In fact, one wonders if poets ever really die, or whether they just pass from age to age changing form and name as they go. "The ball I threw while playing in the park has not yet reached the ground," said Thomas. Perhaps R. H. H., Jr. it never will.

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HIGH FIDELITY MAGAZINE

EARS: THE LAST LINK

By RICHARD W. LAWTON, M.D.

An examination into the physical performance characteristics and limitations of the human ear, the final link in the audio reproduction chain, to determine whether or not exterior hi-fi equipment is rendered futile by the weaknesses of such a tremendously complex mechanism of nature.

MUCH research on the hearing process in man was done early in this century, but it did not have fidelity as its primary interest. It had been stimulated largely by the increasing use of the radio and telephone as a means of communication. The end in view was the development of communication facilities that would operate at a peak efficiency in the frequency range of the human speaking voice. The goal was simply clear, intelligible transmission of speech.

Such recent advances as the development of FM radio and modern audio-amplifier circuits have made possible extraordinary high-fidelity sound reproduction, so that now we must pose the question: what order of fidelity can be expected from the human ear? For, actually, the ear is the last component in any audio system. Is it a weak link in the chain?

In his introduction to Fletcher's classic book Speech and Hearing, H. D. Arnold wrote: ". . . Through long familiarity we have come to feel, if not contempt, at least indifference toward the marvelous mechanism through which [the ear] works. Hearing, we are inclined to consider as little a matter for concern as breathing; and so long as our own faculty remains unimpaired we feel little curiosity concerning the provisions of nature either for ourselves or for others." He concluded that the phonograph should excite a keener interest in how we hear, and that by studying the performance of the ear we might better accommodate our instruments to its requirements. This was written in 1928. He could hardly have imagined the precision that amplifiers would achieve in the next quarter-century.

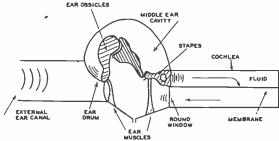
With the increased interest in wide-range sound reproduction has come an increased awareness of the part played by the human ear in the enjoyment of reproduced music — and, indeed, of any music. To anyone connected, in any way, with music, hearing is really a "tool of the trade," and it cannot be taken for granted. Herewith is a short account of how the sound waves around us are converted into sensation.

At the outset, a distinction must be made between sound reception and sound perception. It's the old story of the tree falling in the forest: is there any sound? Of course, the answer depends on what one means by sound. The position is often taken that there is no sound without

hearing; that sound, like light, is an experience of consciousness. The apparatus for the reception of acoustic energy in lower animals may be described, but who can say what sound the animal hears? There is a tendency to say the animal hears what we would hear if we had the same apparatus, but such conclusions may be far from the truth. This problem may seem trivial but because much of what we know about the mechanism of hearing in man has been gained from the study of the process in animals, one must be on guard against unwarranted inferences.

For example, the cat and man are closely comparable so far as concerns the range of frequency to which the hearing apparatus is sensitive. Because of this and other similarities, the ear of the cat has been studied—vice that of Homo sapiens—quite extensively. It does not follow, however, that the cat "hears" in exactly the same sense that we do. A similar state of affairs exists with regard to the other senses in animals. The brook trout, for instance, is noted for its discriminating taste in flies. Many a fly-tying angler might be dismayed, however, to learn that fish in general are colorblind, although they possess an eye which, structurally, is on a par with man's.

The hearing apparatus of man begins with a tunnel leading to the ear drum. This tube is not a particularly



A very simplified representation of the human ear mechanism.

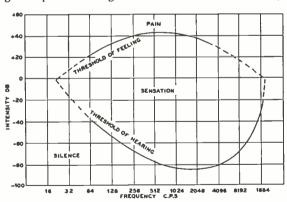
good wave-guide; that is, all frequencies are not conducted equally well. It shows a resonance point at about 4,000 cycles per second. Part of its function is to warm the air in contact with the drum, and to protect the delicate drum membrane.

When the drum moves under the influence of pressurevariations in the air, this pressure variation is transmitted via an anterlocking set of three bones (one of which is attached to the drum) to a fluid-filled canal encased in the temporal bone of the skull. The little set of three bones lies in a small cavity behind the drum called the middle ear. They are held in place by tiny muscles and ligaments. The last bone of this set of three makes contact with the fluid in the inner canal. Vibrations of the drum are thus reproduced more or less faithfully as pressure variations in the fluid.

The inner bony canal containing the fluid is divided along its length by a membrane. It is this membrane which bears the nerve cells. Any disturbance transmitted to the fluid, be it sound waves or a blow on the head, is communicated to this membrane. Movement of the membrane stimulates the nerve cells, and they discharge in rhythmical fashion, sending a special pattern of signals along the auditory nerve to the brain. The brain, receiving this complex signal pattern, integrates it with such factors as memory and experience, and the conscious result is what we call hearing.

The study of the mechanical parts of this whole organ is a tough order, for they are almost wholly buried in bone, making direct experiment — to say the least — very inconvenient. Extreme smallness is also a stumbling block. However, the stimulus for hearing can be well controlled and measured by precise electronic equipment, which is not the case with many other sensations (notably smell and taste).

The stimuli for hearing, of course, are sound waves, of varying frequency and intensity. The intensity required to produce the barest sensation of hearing at various frequencies in the audible range is shown in an accompanying chart. This is the oft-cited Fletcher-Munson curve for normal hearing. It depicts the sensitivity of the ear throughout this range of frequencies. Actually, the ear seems to be most sensitive at around 2,000 cps, but it is general practice among scientists to standardize sensitivity



Vertical distance within curve shows dynamic range of hearing.

measurements at 1,000 cps. At 1,000 cps the intensity required to produce recognizable sensation is of the order of 10⁻¹⁶ watts per square centimeter, or about a thousand billionth of a watt! This intensity is so small that one is hard-pressed to find a comparison in everyday life. However, the intensity of a sound wave is an expression of the amplitude of vibration of the air particles trans-

mitting the energy. And we can compute the amplitude of vibration of an air particle at 1,000 cps and at 10⁻¹⁶ wattsper-square-centimeter intensity, for a drum whose area is about one square centimeter. This exercise in algebra leads to the startling conclusion that the ear drum at this intensity must be executing incredibly small movements, probably about 10 times less than the distance across a single gas molecule! With such extreme sensitivity it is remarkable that we are not perpetually plagued by the noises of the circulating blood.

The range of frequencies the ear of man can hear varies widely from person to person, but for the normal adult it is generally between 16 and 20,000 cps. The frequency-range in some animals is much wider. The parrot appreciates tones up to 25,000 cps, the dog to about 38,000 cps. High-frequency whistles, which take advantage of this extended range of hearing in the dog, but which do not offend the neighbors, are well known, particularly to people who tell "high-fidelity" jokes. The bat has an extraordinary aural frequency-range. It extends upward to 98,000 cps, and is used as a "radar" system. By emitting supersonic sounds during flight, and detecting their reflection from solid objects, the bat is able to maneuver successfully in total darkness.

At high intensities, the movements of the ear drum in man may be as great as 8 to 16 thousandths of an inch. Such intensities are a million times more than are required just to produce hearing. Such large vibrations actually are felt as a tickle, because the small bones attached to the drum make contact with the walls of the middle ear cavity. This tickle sensation comes as a warning—just before rupture of the drum or dislocation of the bones.

The sensitivity curve for hearing is U-shaped, requiring more intensity at both high and low frequencies than in the middle to bring about a sound sensation. How does this irregular relation come about?

It would seem likely that, at least in part, it might be the result of peculiarities in the ear drum itself. The drum resembles in some respects a conical loudspeaker operated in reverse, although it is a more complicated structure. It is asymmetrical in shape and asymmetrically weighted by the bones of the ear. It is shaped like a shallow, indented disk with a rolled edge, the eccentric hollow facing outward. It is not uniformly thick, either. It shows stiffening in the center and at the edge. These regions have the maximum strength and perform the maximum movement. The mode of vibration of the drum is in dispute. Some believe that the thicker areas vibrate as a unit, others that the drum exhibits nodes and antinodes, much as does a loudspeaker. It is very highly damped - indeed, in one experiment complete cessation of vibration took place in four thousandths of a second following a 1,400-cycle tone. Over the range of minute displacements encountered in normal hearing, the drum performs in a remarkably linear fashion.

Because the pressure waves received by the ear drum are usually quite small, it is the function of the small bones of the middle ear, the so-called ear ossicles, to convert this small pressure, which is spread over the relatively large area of the drum, to a much larger pressure which

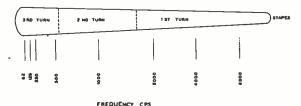
is concentrated at the base of the last bone of the chain, the *stapes*. The stapes stoppers up one opening of the fluid-filled canal of the inner ear, and it is the movement of the stapes which is responsible for the pressure waves in the fluid. Before the advent of modern electronic tools, the study of this minute bony chain presented a considerable problem. It was attacked by the examination of these bones under the microscope. Careful engineering drawings were prepared, 20-to-1 scale models were constructed, and the transmission characteristics of the assembled model were determined.

It immediately became apparent that two tiny muscles, one attached to the first bone near the drum and the other attached near the joint of the second and third bones, played an important role in transmitting the sound energy along the chain. It was found that when both muscles contract, the action is to loosen the joint between the first two bones, through a lever-type action. In addition, the contraction of the muscle attached near the drum results in a tightening of the drum, which favors the transmission of high frequencies. When the muscles relax, the drum is slackened and the joint rigidly held together by its ligaments. This, in turn, favors the transmission of low tones, with a corresponding decrease in high-tone transmission. The effect is illustrated by a rapid descent in an elevator. As the elevator falls rapidly, the air pressure outside the drum exceeds that on the inside of the drum. The drum is pushed in, just as if contraction of the muscles had occurred. There is a noticeable loss in sensitivity for low tones; voices in the elevator sound thin and unreal, until there has been a chance for equalization of the pressures at the ground floor. One of the factors which may contribute to the high-tone deafness in older individuals is an increased rigidity of the joints of these tiny bones. One might almost call it "arthritis of the ear."

It is a curious fact that sound energy itself, falling on the drum, stimulates the muscles of the middle ear to contract by a nerve reflex. Very loud sounds evoke a very strong contraction. Intense sounds, which endanger the nerve cells of the inner ear, may evoke such strong contractions in these muscles that the joint may actually be dislocated, as nature sacrifices the drum or the bones to protect the nerve-cells. For small intensities, transmission through this bony chain is remarkably linear. In a sense, the transmission-system of the ear can be likened to the output transformer of an audio amplifier. It functions to match the impedance of the air with the impedance of the fluid in the inner ear much the way the output transformer matches the impedance of the amplifier with that of the loudspeaker.*

The fluid-filled canal of the inner ear, the cochlea, takes a spirally converging course in the bone. It looks somewhat like the shell of a snail. It is really two canals, for it is divided by a membrane along its entire length.

(In the accompanying diagram, the canals, separated by the membrane, are shown pulled out straight for the sake of simplicity.) The two canals are connected at the top by a tiny hole. The entrance of one of these canals is plugged by the stapes; the entrance of the other is in the wall of the middle ear cavity. This latter opening, the round window, is covered by a membrane. When pressure



Fundamental resonance points along membrane for various tones.

waves are impressed on the fluid of one canal by the movement of the stapes, they are transmitted to the other canal through the membrane, for usually the pressure variations are too rapid for fluid to flow from one canal to the other through the tiny hole. The membrane of the round window can be seen to vibrate as the pressure is transmitted to it. Because the cochlea is encased in bone and therefore cannot be distended, the round window serves to damp out pressure waves that have traversed the canals.

The pressure variations in the fluid result in a complicated movement of the long membrane which, you will recall, bears the nerve cells. Because of the structure of the membrane and because it is surrounded by fluid, it seems probable that the membrane as a whole is highly damped, although actual measurements have never been made. High damping means rapid equilibration, although at the expense of selectivity.

There is always one place along the membrane that is maximally displaced from its normal position. This is the region of the fundamental, if the ear is listening to a relatively pure tone. In this region the nerve cells are excited more and discharge at a greater rate than their immediate neighbors. Even for a pure tone, however, the response of the membrane is not a truly simple one. It is displaced in a complicated fashion, giving rise to membrane harmonics. A careful listener can sometimes distinguish these "aural harmonics."

The way in which the nerve cells discharge has been studied by recording from single nerve fibers in their course between the ear nerve cells and the brain. This is accomplished by inserting a minute insulated needle electrode into the nerve as it enters the brain. If this recording needle is minute enough, its bare tip will contact only a single fiber. When the nerve cell discharges, the impulse is detected as a small voltage-difference as it passes by the recording needle. This transient potential requires high amplification and then may be visualized or recorded as a "spike" on the oscilloscope. For very low intensities, giving rise to just audible sound, each fiber appears to be tuned to some particular frequency. As the intensity is progressively increased, the nerve fiber shows progressively greater activity. In addition, the fiber will lose some of its selectivity, and begin to show dis-Continued on page 80

^{*}The analysis of the transmission system of the ear by electrical analogues is complicated by the fact that the impedance of the inner ear is a function of frequency. However, from 300·1,500 cps it shows a uniform gain of 10·14 db, falling off above. The impedance transformation is 336 and the transformer ratio 18 for the average normal human ear.



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SPECIFICATIONS (furnished by manufacturer): Model 756 dual-track tape recorder with built-in power amplifier and speaker. Accepts up to 7-in. reels. Tape speed: 7½ ips. Controls: push button type; fast forward, fast rewind, play, record, stop. Connections microphone, radio-phonograph, external speaker, remote control. Built-in revolutions counter. Wew and flutter: Less than .5% RMS. Frequency response: 40 to 12,500 cycles. Signal-to-noise ratio: 42 db. Tubes: 5879, 12AX7, 6AQ5, 6C4, 6E5. Price: \$239.95. Address: Ampro Corporation, 2835 North Western Avenue, Chicago 18, Illinois.

This is a good package unit recorder, easy to operate, easy to load, ruggedly built, and of good sound reproduction qualities considering the size of the speaker enclosure. Flutter is at a very low level. It has a standard phone jack output connection to an external speaker and sound will be improved substantially if a moderately good external speaker is added. However, this recorder (or rather, the power amplifier built into this recorder) should not be expected to drive a full-fledged hi-fi speaker system. If so used, the weaknesses of the power output stage will become apparent and distortion will be noticeable. This subject has been discussed at length elsewhere in High Fidelity, so 'nuf said for the nonce, except to repeat that this unit is definitely one of the better "package" units.

The push-button controls (it would be better if we called them "push-lever" since they are in the shape of shortened piano keys) are positive in their action and require but little pressure to operate. The stop key must be depressed between each operation; you cannot go from, for instance, play to fast forward without stopping. The record level indicator is of the tuning eye type — an inverted V which closes on volume peaks. Cute trick: the characteristic green glow of this tube goes out except when the stop or the record button is depressed.

A revolutions counter, which is particularly easy to reset, is connected to the supply (left-hand) reel. This facilitates finding a given spot in a reel of tape.

Left-hand is the supply reel; right-hand the take-up. Loading is extremely simple: just drop the tape into a slot. The record/playback head is one of the best made, and equalization circuits are good. Erasure is good. A tone control operates on playback only and provides a reasonable range of control. Record and playback levels

are controlled by the same knob (extreme left-hand one in the photograph); an on-off switch is also attached to this knob.

The record lever is locked out by a small button immediately to the left of the lever; the button must be pushed to the left about 1/2 this of an inch before the record lever can be depressed. Two fingers of one hand are sufficient to operate this control.

A standard, relatively inexpensive microphone is provided with the recorder. Results will be improved, from the sound point of view, if a somewhat better microphone is used.

A remote control comes as an accessory; it can be plugged into a jack panel on the side of the recorder case, near the carrying handle. All other external connections are made to this same panel.

By making the proper connections, the recorder can be used as a public address system that may be valuable as



Ampro model 756 tape recorder: one of the better package units.

an emergency sound-relay system from baby's room to another, and so forth . . . the possibilities are legion!

To summarize: this is a good package unit. The quality—up to the power amplifier stage—is sufficiently high so that, from the point of view of the man who wants to use his recorder in conjunction with a hi-fi system, we

wish Ampro had included a jack wired in *ahead* of that final stage. Maybe Ampro will, one of these days; then we'll do another TITH report. — C. F.

Browning RJ-42 Tuner

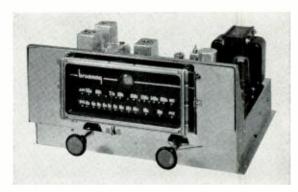
SPECIFICATIONS (furnished by manufacturer): Tuner chassis with built-in power supply, incorporating separate FM and AM sections. AM has sharply-tuned whistle filter; FM section can be operated with or without AFC (automatic frequency control). Two cathode-follower outputs, one affected by back-of-chassis level control. Two non-switched AC outlets on chassis rear, maximum load 500 watts. Double-band tuning eye, operative on both FM and AM. Sensitivity: FM, 5 microvolts for 25 db quieting, 8 microvolts for 30 db quieting; AM, useful output with 1 to 2 microvolts input. Bandwidth: FM, 220 kc. at 3-db points; AM, 10 kc. at 3-db points. Audie response: FM, 16 to 15,000 cycles, ±3 db; AM, 20 to 5,500 cycles, ±3 db, down 6 db at 6,800 cycles. Whistle filter cuts 40 db at 10,000 cycles. Audio output: .5 volt at average modulation levels. Distortion: FM, .25% total harmonic at 25 kc. modulation swing, 1.327% at 75 kc. Tubes: 2-12AT7, 6J6, 4-6AU6, 2-6AL5, 6AL7, 6BA6, 6BE6, 6BD6, 12AU7, 5Y3. Dimensions: 14½ in. wide by 7 high by 11½ deep. Price: \$149.95. Manufacturer: Browning Laboratories, Inc., Winchester, Mass.

Some manufacturers make equipment that invariably radiates an aura of solid, dependable quality and uncompromisingly conservative design; Browning is one of them. A good look at the RJ-42 is sufficient to inspire a firm belief that this tuner will work well and stay working, and no fooling around.

Of the latter supposition we have no supporting evidence except the excellent reputation of the line. But we can vouch for the fact that it works well now: as a matter of fact, there are few tuners that can match its performance on FM, and on AM we are inclined to believe that it has no peers. Perhaps we should qualify — there are some wideband AM tuners that have better audio response, but are virtually useless more than five miles from a transmitter; at the other extreme, there are communication receivers with practically no fidelity that are better for long-range reception; but for an intelligent, practical balance between the two, the RJ-42 is top-notch.

Only two controls are in evidence on the front panel. That on the left is a selector switch with four positions: AC off, AM, FM-AFC, and FM (without AFC). The knob on the right is the tuning control for both FM and AM. No volume control is furnished as such, the RJ-42 being designed for use in systems that include preamp-control units either separate or as part of the power amplifiers. However, there is a level-set control on the back of the chassis that can be used to adjust the nominal output of the tuner to match the other audio sources in the system. This control is effective on one of the outputs; the other, suitable for feeding a recorder, is unaffected by the control setting. Both are low-impedance outputs, so that reasonably lengthy connecting cables can be used. The recorder output, unusual in a straight tuner, is a fine idea; even if the control unit in the system has a recorder output unaffected by volume and tone controls (which many do not), a direct connection may be desirable.

The two AC outlets on the back of the chassis, capable together of handling 500 watts, will often be useful too.



Browning RJ-42 FM-AM tuner reflects new design philosophy.

They are not switched by the tuner, presumably because of the same reasoning that resulted in the elimination of the front-panel volume control — that is, control functions will be centralized elsewhere.

Browning's tuning eye circuit gives genuine tuning indication, not simply signal-strength clues. Perfect tuning (for minimum distortion) can be obtained with this method even if the tuner should become misaligned slightly. This is not so important now as it used to be, because most tuners now have AFC circuits which keep a station tuned fairly accurately and automatically. Other considerations: adequate accessories, and a really excellent, detailed instruction book. — R. A.

Fleetwood TV Systems

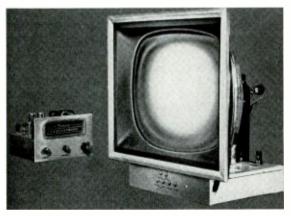
SPECIFICATIONS (furnished by manufacturer): A series of remote, and non-remote, controlled television chassis for 21, 24, and 27-in. picture tubes. On remote units, picture chassis power relay operated by on-off switch on tuner chassis. UHF tuning strips may be used instead of regular channel strips. Forty-foot cable supplied with remote units; cable may be extended up to 200 ft. or so without loss in quality of sound or picture. Tuner chassis: 7 in. high by 111/2 in. wide by 81/2 in. deep. Controls include: on-off, volume, contrast, channel selector, and fine tuning. Picture chassis controls include height, vertical linearity, brightness, focus, horizontal hold, vertical hold, and (on rear of chassis) width, horizontal drive, horizontal linearity. Prices (less picture tubes): model 600 remote control unit for 21-in. tubes, \$264.50; model 610 is same as 600 except nonremote control and costs \$199.50; model 700 is remote control unit for 24 and 27-in. tubes, costs \$289.50; model 710 is non-remote for 24 and 27-in. tubes, cost is \$219.50. Tube mounting kits for remote units are \$10.00, \$15.00, and \$18.00 for 21, 24, and 27-in. tubes respectively; frame, safety glass and mask kits are \$15.00 and \$25.00 for 21 and 24 or 27-in. tubes. Cabinets for remote tuners available; picture chassis may be purchased separately for installations using two or more picture tubes controlled by one tuner. Address: Conrac, Inc., Glendora, Calif.

Using Conrac's 27-in. Fleetwood television chassis, we got just about the best picture we have ever seen in this fringe area location. We also suffered the worst disappointment we've ever had! The disappointment had, we suppose, a certain element of humor to it; it had nothing to do with the quality of the equipment. All blame could be laid at the door of the Federal Communications Commission.

To make a long story short, when we first corresponded with W. J. Moreland, President of Conrac, about doing a

TITH report he was delighted; said if there were any UHF stations impending in our area, he'd equip the tuner for those channels. At that time, four UHF channels were possible. Of the standard channels, 4 was the only one we could be absolutely sure of receiving at almost any location in the Great Barrington area. In some locations, channels 2, 4 and 5 from New York City could be seen fairly well. Anyway, by the time the set arrived and we had finally gotten around to unpacking it, our channel 4 station had been switched by the FCC to channel 6 . . . and the Conrac service men had filled in channel 6 with UHF channel 55 strips! So there on the workbench was a beauty of a remote-controlled 27-in. TV receiver — and not a prayer of getting a signal!

Incidentally, we got some fast service from Conrac: we telegraphed them one Thursday afternoon for the channel 6 tuning strips and had them by airmail Saturday noon. It took about three minutes to snap out the channel 7



One of the Fleetwood remote-control television assemblies.

strips (no stations here on ch. 7) and drop in those for channel 6. The resultant picture was outstanding: exceptional sharpness, brilliance, and beautiful gradation from almost clear white to jet black.

Photography having been a hobby of ours for many years, we tend to evaluate the television image as if it were a photographic enlargement. We get thoroughly annoyed with washed-out greys and over-contrasty blacks and whites; those two conditions characterize all too many TV pictures. The Conrac Fleetwood (Conrac is the manufacturer's name; Fleetwood the brand name) gave a beautiful "enlargement," crisp, clean, and sparkling. Mr. Moreland had told us that we should not expect extraordinary fringe area results; the tuner was designed with the best possible picture in mind. We'd say he had achieved his design objectives admirably.

As stated in the manufacturer's specifications, the tuner and picture chassis (plural) are interconnected by a 40-ft. cable, which is slick, particularly with these big picture tubes. With a 27-in. tube you won't want to sit much nearer than 12 feet from the screen. Installation and adjustment are very simple, though a 27-in. tube is a terrifying object. Anyone who has fussed around to any extent with TV installation will have no trouble with the Fleet-

wood but the usual warnings apply: there are 19,000 volts running around the picture chassis, and whoever makes the installation had better know where they are! The cable, by the way, can be extended to 200 ft. or more.

The tuner chassis is simple and compact. As the channel selector knob is turned, individual pilot lights flash the channel number on an edge-lit glass panel. The channel numbers can be changed quite simply, so that when an unused standard channel is converted to UHF, the new channel number is substituted and the panel always reads correctly. On our set, for instance, the following numbers flash on as the selector is rotated: 2, 30, 4, 5, 55, 6, 61, 9, 64, 11, 74, and 13.

Several methods of interconnecting with a hi-fi system are possible. The picture chassis incorporates a 4-watt, 6V6 output stage which can be connected to an external speaker. The picture chassis also has on it an audio output connection, which takes off ahead of the power output stage and can be connected to a hi-fi amplifier. If this connection is used, the volume control on the tuner chassis is operative. On the tuner chassis there is a third connection, which takes off ahead of the volume control. This output is of the cathode follower type, so the length of cable used to connect it to the hi-fi control unit is not significant (within reason, please!).

As indicated in the specifications section, both remote and non-remote models are available; 21, 24, and 27-in. tubes can be used.

This is a thoroughly fine set; congratulations, Mr. Moreland! — C. F.

UTC Amplifier Kit

SPECIFICATIONS (furnished by manufacturer): The "Linear Standard" power amplifier model MLF is supplied in kit form. Power output: 20 watts. Frequency response: +0, -1 db, 20 to 20,000 cycles. Intermodulation distortion (40 and 7,000 cycles, 4:1) 0.06% at 1 watt, 0.34% at 10 watts, 1.0% at 20 watts. Price: \$108.00. Address: United Transformer Company, 150 Varick Street, New York, N. Y.

There are 62 components in this kit, plus chassis, tubes, and so forth. By careful planning, they can be so arranged that there will be only 104 wires to connect. Yet the instructions which accompany the kit read: "To complete assembly of the amplifier, remove the chassis bottom plate and connect the color-coded leads to the 17 numbered screw terminals." Those are all the assembly and wiring instructions.

Anyone who has ever even thought about assembling a kit will understand why we greet these instructions with:!!!

The secret of this kit's simplicity is shown in Fig. 1. Of the 62 components required, 55 are mounted on a one-eighth inch thick sheet of Bakelite, on which "wires" have been etched. The sheet is then dip-soldered, in one operation. The result is that the kit builder has nearly all his work done for him and that bugaboo of the unskilled — soldering — is completely eliminated. The old cartoon caption of "Look! No Hands!" can be rightly changed to "Look! No soldering iron!" Incidentally, the 7 components which mount on the main chassis come already mounted,

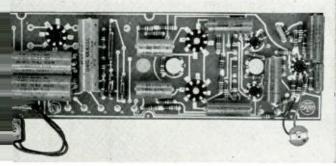
the sub-chassis is in place, tubes are installed — all that the builder has to do is remove the bottom plate, drop screws through the lugs on 17 wires, and screw them down. Half an hour should be ample time to complete the whole job. Fig. 2 shows the amplifier with the bottom plate removed; all wires are in place.

The amplifier has an on-off switch, pilot light, input connection, and tapped output connections to provide correct match for speakers having voice coil impedances from 4 to 32 ohms. Output tubes, normally, are 5881's, though types 1614, 6L6, or KT66 may be substituted. Two 6AU6's, a single 12AX7, and a 5V4 rectifier are used in addition.

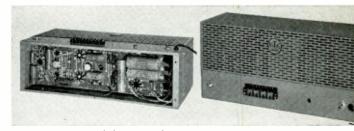
The circuit — known as the Linear Standard circuit, after UTC's top line of equipment — resulted from a long development program during which the causes of high fidelity amplifier distortion were analyzed in use. With some amplifiers using feedback it had been found that high-frequency oscillation would occur because of speaker and speaker lead capacities. These oscillations, while not audible, were found to cause serious distortion. Because of the response humps at very low frequencies, it was found that record wow, line voltage surges, and so on would push the speaker cone out of its linear region and cause distortion. The Linear Standard circuit was designed to use a total of 36 db of feedback (in three 12-db loops) plus a stabilizing network to eliminate the two causes of distortion mentioned above.

The circuit was designed by UTC's Joe Diamond, who had used similar design approaches for instrumentation amplifiers. Another UTC engineer, Jules Knapp, was assigned the project of designing a kit which could not be put together in such a way that oscillation, distortion, or other evils could spring up — previous circuits using high feedback needed great care in wiring and parts layout for optimum results. He hit upon the etched circuit idea; the result we have discussed. Simplicity itself to put together, and not one chance in a thousand for a mistake. Having the great bulk of the wiring done by precision methods means identical — and optimum — performance from every kit. Furthermore, each can be fully checked out before shipment as a standard production procedure.

How carefully all details are planned is indicated by the fact that the feedback resistor is screwed in place. For optimum results, it should be changed depending on speaker voice coil impedance. So UTC made it easy.



"Printed" wiring and mounted components make this an easy kit



Everything is assembled; you simply make 17 screw connections.

All in all, this is a slick piece of equipment. Components are operated well under tolerances; the output transformer is UTC's best. Sound is excellent, with crispness and clarity. The kit is so nearly a completed amplifier that it's not quite fair to compare its price of \$108.00 with other kits that require considerably more labor.

The low and high-frequency oscillations that UTC found in some feedback amplifiers were not visible on normal static laboratory tests, but became evident to them on the basis of analysis through transient testing. The high-frequency oscillations are considerably above the audio range, running from 25 kc. to 450 kc., depending on wiring capacity and the capacity of the speaker load. While these oscillations cannot be heard, they load up the amplifier so that music coming through is more readily distorted. We would suggest that if you think you are having difficulty with high-frequency oscillation, try cutting down the length (and capacity) of your speaker leads. Of course, the capacity of the speaker elements themselves can't be changed. — C. F.

Vee-D-X Broadband FM Antenna

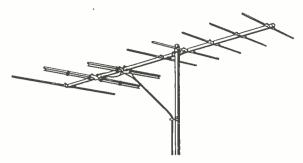
SPECIFICATIONS (furnished by manufacturer): Model BBFM is an 8-element Yagi antenna giving 8 db gain over the FM band. Front-to-back ratio is 27 db. Can be stacked to furnish 11 db average gain. Impedance: 300 ohms. Construction: aluminum, all elements mounted on boom, necessary only to swing elements to position perpendicular to boom and tighten wing nuts. Dimensions: 92 in. long by 31 5/8 in. wide, maximum overall. When two are stacked, overall height is about 5 ft. Price: \$27.48. Manufacturer: LaPointe Electronics, Inc., Rockville, Conn.

A basic Yagi antenna consists of a dipole antenna with a longer reflecting element in back of it and a shorter directing element in front. The dipole is called the driven element because the lead-in wire is attached thereto; the reflector and director are grounded to the boom or crossarm that supports the elements physically. Advantages of the basic Yagi are high gain and a high front-to-back ratio; the latter means simply that the ratio of signal picked up from the forward direction to that picked up from the back is better than in other types, so that it is easier to point the antenna toward the desired station and to minimize pickup of an undesired station on the same or a close frequency. Disadvantages are a narrow frequency range of coverage and a narrow beam width — that is, the antenna must be aimed accurately in order to pick up a desired

station with full efficiency. Gain can be increased by increasing the number of directors, but this narrows the beam width and reduces the frequency coverage as well. To complete the circle, frequency coverage (bandwidth) can be increased by employing two driven elements, properly phased, and by careful design of the other elements - but this decreases the gain figure!

Because of such problems FM Yagis have been designed to cover only a part of the band, and have had a total of four or five elements. Where increased gain is required they are stacked in pairs or quadruples. These arrays are employed normally to pick up one desired long-distance station, or possibly more if others happen to lie in the same direction and are in the same frequency range. For other stations, another antenna is needed.

The Vee-D-X broadband antenna is an attempt to eliminate the need for multiple-antenna installations. By solving what must have been a monstrous design problem, LaPointe has come up with an 8-element Yagi, in which two of the elements are driven, and which covers the entire 20-mc FM band with full efficiency. In addition, its gain is a whopping 8 db throughout this range. It is highly directional; most installations will require a rotator for full-circle coverage. But a single-bay Yagi or even two bays is practicable with a rotator, while only the most intrepid would attempt to rotate a four-bay array; furthermore, as was pointed out, previous high-gain arrays covered only part of the frequency range - this one can be used for any station in the FM band.



Here's a broadband Yagi antenna that covers the whole FM band.

Best part of the story: it works as well as it's supposed to. We had previously a stacked pair of five-element Yagis on a rotator. That antenna (from the same manufacturer, incidentally) was cut for the lowest quarter of the FM band. When we replaced it with the new singlebay antenna, we noticed a distinct improvement even in this part of the band, and in the upper parts we brought in stations we'd never been able to get before. Aiming is extremely sharp; we can now eliminate interference from stations we couldn't get rid of in any other way. A recommendation and a warning: use a rotator that indicates antenna direction by increments no greater than 10 or 15 degrees, because you'll need such accuracy to hit a desired station quickly; and be certain, when you put up the antenna, that the connecting link between the two driven elements is twisted half a turn, no more, no less. - R. A.

Walco Stati-Clean Spray

SPECIFICATIONS (furnished by manufacturer): Stati-Clean is an anti-static record spray, packaged in an aerosol-type pressure can. Single application lasts for many playings. Eliminates dust attraction and keeps records clean by preventing build-up of static charges. Wiping and cleaning cloth supplied. Price: \$1.50 (slightly higher in the West.) Manufacturer: Electrovox Company, Inc., 60 Franklin Street, East Orange, N. J.

There is little doubt that LP records are more vulnerable to dust and dirt than are 78s. This is especially unfortunate because, as everyone who plays many LPs knows, the vinylite mixtures from which they are made are easily charged with static electricity - with the result that the records actually attract dust from the air as they are played and handled afterward. Dusting the records (especially when a dry cloth is used) does more harm than good, since the rubbing action increases the static charge and the records pull dust particles from the cloth.

Many products designed to counteract or eliminate the static charging process have appeared on the hi-fi scene recently. Stati-Clean, however, has been available since the beginning days of LP, and since that time has accumulated a considerable number of regular users. We must admit that we were skeptical, to begin with; but when the comments we picked up were generally favorable, we arranged for a belated TITH report.

Following the clear instructions, we directed two short blasts of mist from a distance of 12 inches toward each

side of three records, wiping each side with the soft cloth provided for that purpose. Then we played the records, alternating sides with a group of three similar but untreated disks. After playing each side we held the record over an ashtray, with the just-played side down. In every case the ashes flew up to an untreated record; toward the treated records the ashes showed little or no affinity. Why does the spray work? We still don't know, but it obviously does.

After repeated plays and repeated applications of the spray, we could notice no deterioration (or improvement) in audio quality because of its use. During this test, which was supposed to represent an accelerated trial of the spray's long-term effects, there seemed to be no buildup of residual deposits on the records such as one might expect. At the end of the test the records were still quiet and dust-free. If the tests were truly valid, and there is every reason to believe that they were, then Stati-Clean spray deserves its fine reputation. - R. A.

MANUFACTURER'S COMMENT: We are enclosing a copy of a report from the N. Y. Testing Laboratories, made on STATI-CLEAN in 1950. It certainly verifies your findings, as you will note.

The N. Y. Testing Co. report does show that (and we stress this point too) one application of STATI-CLEAN renders the record inert for 35 playings. This will be equivalent to months for most record collectors. If you see fit to insert this point—that is, that repeated sprayings after or before each playing are not necessary, we think that it would be entirely accurate and proper. One other important point which was omitted from your report. There have been increasing numbers of articles appearing, pertaining to the damage that dust causes to LP records. The enclosed report from Linde Air Products is particularly pertinent to this subject—and you will note upon reading it that Linde engineers found that a tenfold increase in both needle and record life resulted from playing dust-free records. Thus, STATI-CLEAN is not only a treatment to make records sound better—to eliminate ticks and static pops, but to actually preserve records against excessive wear caused by dust

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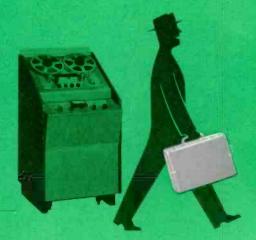
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- Full fidelity range, 30 to 15,000 cycles at only 7½ in/sec.
- Three separate magnetic heads (erase, record, playback).
- Meter for positive record and playback level control.
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LETTERS

Continued from page 23

words goes to needless lengths, for 1 am sure most of his readers would agree that he has the ear, the taste, and the discrimination to make his judgments carry great weight. Personally, 1 would appreciate finding out what he thinks without having to do frequent double-takes because of how he says it.

Carl A. Sauer Phoenix, Arizona

SIR

I have just purchased "A Study in High Fidelity," and listening to Studies in Percussion gave me an idea I thought you might pass on to some record company.

I would like to see a record made of all sounds of the various instruments used in a symphony orchestra, including special effects. A booklet with a picture of each instrument and some commentary on each should go with it. I'm new to hi-fi and to classical music, and I would appreciate a record like this as, I am sure, would many other record-buyers.

Richard W. Knapp

SIR:

May I offer a word of advice regarding all Wharfedale speakers? It is not generally known that the dust covers are required to be kept on while the speaker is in use. The "spider" employed in this speaker leaves the voice coil open; this device, however, does seem to give a crisper bass than the conventional type. The highs do not seem to be affected by retaining the dust cover, but, if desired, it may be cut away around the cone face, after the speaker is mounted.

I should like also to make comment on your "Tested in the Home" report on the Thorens CD43 changer. It is stated "... If the overarm is left up, the changer will go on cycling as for a 10-in. record indefinitely." This is a dangerous piece of advice; if the over-arm is left up, nine out of ten of these changers will irreparably damage the record. The tone arm, upon making contact with the first groove, will skate with damaging effect right to the center groove, tearing the record in a wide arc.

L. A. Roper Victoria, B. C., Canada

SIR

A majority of your readers may have this problem: We are long on musical appreciation and knowledge — but woefully ignorant on all phases of audio engineering and electronics. I think if this field was taken up in easy stages as sort of a continuing study course by your people, it would be invaluable to many of us.

Richard B. Menin New York, N. Y.

An excellent suggestion to which we are giving considerable thought. — Ed.

IT MAKES Good Sound ... AND Good Sense, TOO

you buy good records so you can enjoy good sound. You fondle these records, and handle them ever so gently, because you know that once the surfaces are marred, the quality will be gone to you forever.

You must realize then, that your record changer becomes an all-important factor in the matter of record quality. It must treat with your records even more gently than you could yourself, and it must contribute nothing which might impair the quality of the sound. Its tone arm must track at

light stylus pressures and with free lateral compliance to protect the groove walls from wear.

Its speed must be constant for correctness of pitch, and to avoid 'wow'. It must be free from rumble, and from audible resonances. It must retain and reproduce all of the quality in the record, protect it for future plays, and it must contribute no distortions of its own.

In the light of these requirements, examine the features of the COLLARO, and see if they don't meet all the exacting specifications that make this

The High Fidelity Record Changer for High Fidelity Reproduction



The Tape That Mirrors the Original Sound

SOUND RECORDING



THE FINEST TAPE YOUR RECORDER CAN USE

Just as the reflection of a perfect mirror is faithful to the original image, in every detail, so too does IRISH Green Band RECORD, RETAIN and REPRODUCE the original sound with flawless fidelity. This can be confirmed by tests. Instruments will reveal that IRISH Green Band offers

will reveal that IRISH Green Band offers lower noise level, uniform sensitivity, minimum amplitude variation, less distortion.

But instrument tests are only the landmarks

of good design and production. The final proof is in the hearing. Therefore, to know and appreciate the quality of IRISH Green Band Tape, it must be used, listened to, and compared with other tapes on the same recorder.

You will find that the only limitation to IRISH Green Band quality is the limitation of the tape recorder itself: it is the finest tape your recorder can use.

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is fast becoming the choice

of audio engineers in broadcast stations, recording studios and wherever sound quality is of paramount importance.

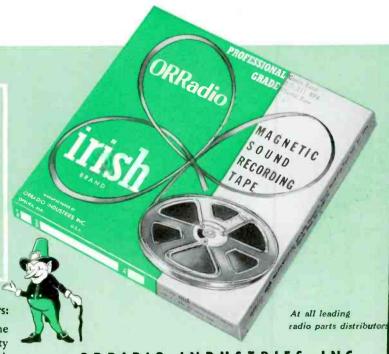
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IN ONE EAR

Continued from page 40

they fit the criteria of accessibility and nationalism. Within the boundaries of simplicity and tunefulness and social-conscious themes (which is to say Soviet-conscious themes) there are innumerable pitfalls for both composer and critic. Particularly when literary texts are involved there seems to be no sure way of predicting how the ball will bounce.

Take, as just one case in point, an opera called *From the Depths of the Heart*, which had its premiere about four years ago before a Bolshoi Theatre audience that included ever so many high Soviet officials, including Marshal Stalin himself.

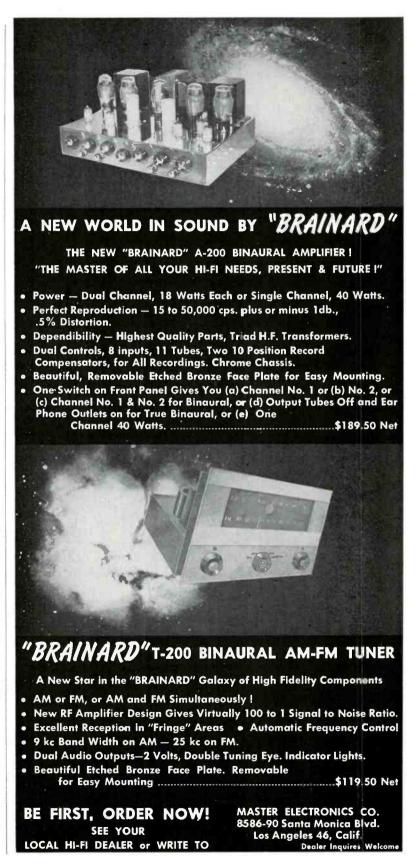
From the Depths of the Heart deals—or dealt, since it by this time is no doubt in the Oh-no-We-Never-Mention-Her-Name category—with life on a collective farm. It has (or had) tunes drawn from folk music.

The critics from Sovyetska Musyka and its sister artistic publications were there, looking up, no doubt, at the dignitaries in the boxes formerly occupied by Czars and Grand Dukes and Rasputin. They listened. They gazed. What they saw and what they heard fulfilled all requirements of the Party Line. If they criticized the opera unfavorably, what possible grounds could they find? They might be denounced for failing to appreciate a work that upper-level commissars would have every reason to find good and valuable.

So they went back to their desks and wrote favorably. Readers all over the Soviet Union were given to understand that *From the Depths of the Heart* was a fine work — worthy to hold the Bolshoi stage along with *Eugen Onegin*, *Boris Godounoff*, and other proven repertory operas.

Then the blow: An article in *Pravda* denounced not only the work but the critics who had praised it, the composer who had written the music, the librettist who had shaped the text the composer set to those folk tunes, the management of the Bolshoi Theatre for having decided to present it, the Board of Directors (nice capitalistic note, that) of the Union of Soviet Composers for having as a member of

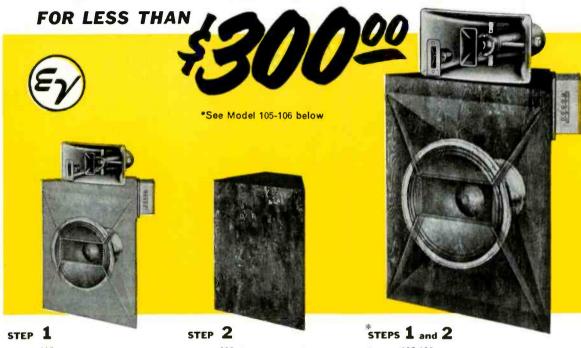
Continued on page 112



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> > Mahogany. List, \$333.00. Audiophile Net, \$199.80 List, \$366.33. Audiophile Net, \$219.80

> > Model 109 Georgian Cabinet Combination Consists of Models 106 and 107.

> > Mahogany, List, \$483.00. Audiophile Net, \$289.80 List, \$516.33. Audiophile Net, \$309.80

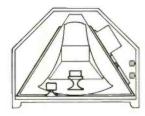


THE MAGNIFICENT

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THE LAST LINK

Continued from page 67

charges in response to frequencies in the immediate neighborhood of that to which it is tuned. This reflects a loss of selectivity in the movement of the membrane.

The nerve cells along the membrane give rise to two types of electrical activity. One type is that described above; its signal is best described as a pulse. Each pulse has the same shape and amplitude, so that the information conveyed to the brain is coded in terms of (1) which fiber and, therefore, which nerve-cell is responding, (2) the rapidity of successive discharges from any cell and (3) how many cells and fibers are responding. Also, the pulses are conducted to the brain at varying rates, so that the sequence of arrival of the pulses plays a part in the pattern of perception. The analogy with some modern computer systems is inescapable.

Another type of electrical activity, believed to arise in the nerve cells but not conducted to the brain as sensory information, are the so-called microphonic potentials. These potentials follow faithfully the form of the sound waves. It is believed that there is a passive transformation of the pressure waves in the cochlear fluid into electrical energy, in a manner which may be likened to the action of a crystal phonograph cartridge. In both cases, mechanical distortion results in an electrical potential. These potentials can be amplified and compared to the form of the sound waves used as a stimulus. The original discovery of microphonic potentials was dramatic. Potentials from the cat's ear were amplified and, over a loudspeaker, music, words and even the voice of a man speaking into the cat's ear could be recognized and identified.

Although the actual role of these microphonic potentials in the hearing process remains controversial, they have proved a valuable tool. Because the potentials arise from the nerve cells themselves, they can be used to measure hearing loss. For example, to confirm the theory that some point along the membrane of the cochlea is affected by a given frequency, the

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THE LAST LINK

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nerve cells of the cochlea of the guinea pig were damaged in selected regions by drilling the cochlea with a small dental drill, or by exposing the animal to continuous loud sounds of a given frequency. Following the damage, the microphonic potentials were recorded while testing the animal's ear with a wide range of frequencies. Some frequencies produced no microphonic potentials - the nerve cells responsible for generating them had been destroyed. The cochlea was then examined under the microscope and the distance along the membrane from its beginning at the stapes to the site of damage was measured. In this manner, a "pitch map" for the membrane was constructed. A similar "pitch map" for man has been worked out. using information from the ears of a number of animals but taking into account the differences in anatomy.

The "pitch map" for man is interesting. Low frequency waves apparently pass up one canal to the top before crossing over to the other; high-frequency waves cross the membrane down near the stapes. Low frequency waves cross the membrane at its widest, while the high-frequency transmission takes place at the narrowest point. Although the membrane is more heavily loaded with nerve cells in the low frequency response region, there appears to be no important difference in the tension of the membrane along its length.

However, man's extraordinary ability to discriminate pitch cannot be explained on the basis of mechanical factors alone. A trained individual can discriminate as many as 1,410 individual pitches. Pitch discrimination improves as the intensity of the sound is increased, so that for tones in the intensity range of a full symphonic orchestra, the skilled individual may discriminate two pitches differing by as little as 2 or 3 cycles. To try to explain this ability on the basis of a simple shift in the maximum displacement of the membrane would require an impossible selectivity of its response. A "sharpening up" process of some sort is required. It is generally be-

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THE LAST LINK

Continued from page 81

lieved that this must take place in the brain. But the exact process is still a mystery.

Because microphonic potentials follow faithfully the form of the sound waves falling on the ear, they can help measure distortion elsewhere in the human hearing system. If a pure tone is presented to a cat's ear, and the resulting potentials analyzed for harmonic content, the degree of distortion introduced by the drum, the bones and the cochlea is obtained. When absolutely pure tones, with intensity equivalent to that of a full symphonic orchestra (75-80 db above minimal intensity) are used, the harmonic content of the microphonic potentials introduced by the ear mechanism as a whole has been found to be around 6 percent in the case of the cat. This is probably the upper limit for distortion. By and large, the bulk of it arises in the cochlea itself, drum and bone transmission being for the most part distortion-free. At lower intensities the relation between the amplitude of the sound waves entering the ear and the amplitude of the microphonic potentials, for all practical purposes, is linear. As a result it can be stated, almost without qualification, that the transmission characteristics of the human ear for these intensities must also show real high fidelity and that the ear transmission mechanism cannot be considered a weak link in the audio sys-

Although we understand in large measure the characteristics of the sound transmission through the ear, this is not to say that we understand hearing. The important psychological factors which color our enjoyment and satisfaction with the listening experience are under constant study. The results thus far are interesting, but too extensive to be detailed here. However, the following references may be useful for those who wish to pursue this topic further:

Fletcher, H.: Speech and Hearing. Van Nostrand, N. Y., 1929.

Wever, E. G., and Lawrence, M.: Physiological Acoustics. Princeton University Press, Princeton, N. J., 1954.

TAPE RECORDERS

Continued from page 38

microphone-input channels and tape-recorder-output channels, the latter being taken off ahead of the volume control, so that changes in volume level, via speaker, do not change the level to the tape recorder. With such a front end, the only input connection necessary on a tape recorder would be for "radio" input, to which the front end's tape output would be connected. If the hi-fi rig's front end does not include a microphone channel, then that should appear on the tape recorder—as it should anyway if the recorder is to be used away from home.

TONE CONTROLS appear on all equipment below professional level and above absolute minimum-cost units. In all cases that I know of, the basstreble control is a single-knob affair, giving treble-boost in one position and swinging around to treble-cut and bass-boost at the other extreme. In most cases, the tone control is in the circuit only on playback, which is as it should be; in a few recorders, it is operative in one or more of the input channels. On professional recorders, no tone controls are provided.

OUTPUT CONNECTIONS on practically all package units include a minimum of an "external speaker" jack. This usually parallels the built-in speaker, which is disconnected and therefore silenced when an external speaker is connected. The voice coil impedance of most of the built-in speakers is 3.2 ohms. Since most speakers used in hi-fi systems have an impedance of 8 or 16 ohms, some mismatch will occur, but the consequences will not be serious. Best improvement over built-in speaker reproduction may be obtained by using a moderately good external speaker. Too good a speaker will expose the shortcomings of the recorder's little amplifier, sometimes painfully.

A few of the package units provide a "monitor" or "headphone" connection. Usually this is in parallel (again) to the speaker but the volume level is cut down to prevent damage to the earphones (and the ears!). Also, most recorders are arranged so that the speaker is disconnected when record-

Continued on page 84

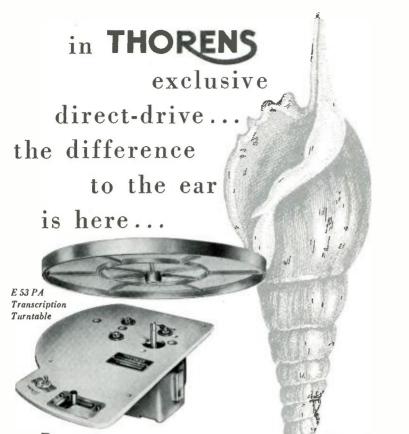
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For first installation or replacement, it is certainly worth your while to hear the quality of Thorens turntables, players and changers before you make your choice. You will agree, we know, that at last . . . the difference to the ear is here!

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THORENS COMPANY, DEPT. A, NEW HYDE PARK, N. Y.

TAPE RECORDERS

Continued from page 83

ing (to prevent feedback through the microphone). When a monitor or headphone connection is provided, it will be "live" even during recording.

Now - if your prime purpose in buying a tape recorder is to use it in conjunction with your hi-fi system note carefully that some tape recorders (in the under \$250* class) provide a sound take-off connection ahead of the output stage and are likely therefore to give better sound reproduction when played through your hi-fi amplifier and speaker system than if the connection must be made after the power output stage. If the tape unit you are considering has only an external speaker jack, you can be almost dead certain that this connection is made after the power amplifier stage.

In the professional class (or, stated differently but with the same effect: in the over-\$250 class) all tape recorders that I know of are designed for connection to an external amplifier and speaker system. And, as I have said, home-class recorders built for just such use are beginning to appear.

MISCELLANEOUS: there are lots of small features which appear on recorders; sometimes they can be deciding factors in making a choice. For example, some units include a counter which indicates the number of revolutions the supply reel has made. Thus you can go back, with surprising accuracy, to a given spot in a reel of tape. One of the inconveniences of tape is that of relocating a given selection. If you have recorded three musical items, for instance, on a 7-inch reel, the beginning of the second and third may be hard to find. The situation is worse with dual track recording; if you record one track only, you can insert a length of leader tape between selections, or put each selection on a smaller

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*— In classifying recorders by price, I am in danger of being old-fashioned. Time was when recording equipment could be classified with considerable precision into two classes: less than about \$300, and over \$300. The under-\$300 group included the package units, practically none of which would work satisfactorily in conjunction with a hi-fi amplifier and speaker system (unless modified after purchase). The over-\$300 category included semi-professional and professional equipment, all of which was designed to be used in conjunction with external power amplifiers and speakers, on which the fi could be as hi as you liked That price dividing line has now been shattered in several places; it appears that it will be disrupted completely before long.

TAPE RECORDERS

Continued from page 84

reel. Therefore the value of the counter. Note that since these counters count the number of revolutions of the supply reel, they do not measure length of tape, since 100 revolutions at the beginning of a recording represents more tape (and more time) than the same number of revolutions near the end when the diameter of tape on the supply reel is much smaller. Some counters reset easily, some not so easily; check this if it's important to

Check also loading convenience. For some reason, reels of tape always run out just as the broadcasting orchestra gets set to play the last movement of a symphony - and every second counts! It may be astute to note how quickly and easily tape can be threaded from supply to take-up reel.

Operating convenience must be considered carefully. Some units are controlled by push-buttons, others by knobs and levers. In examining a recorder, run back and forth through the various operating sequences. Do knobs and levers turn easily? Is their operation positive and, shall I say, conclusive? By that I mean, if you go slowly from one operation to another, is there a spot where everything "freewheels" - and tape spills out? And, while every recorder should have some sort of a locking-out mechanism to prevent your slipping into record-position inadvertently, is the device so arranged that it can be operated by the same hand which turns the lever (or pushes the button) that starts the recording process? This is not essential, but one-hand operation is convenient when your other hand must be busy holding onto a microphone or bringing up the record-level to fade-in a program.

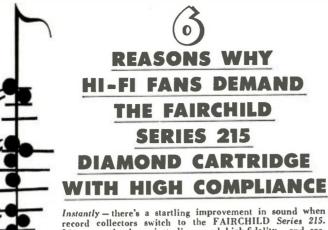
Also, there is ease of cleaning. Heads should be swabbed off from time to time with a pipe cleaner dampened with lighter fluid, carbon tetrachloride, or a similar cleaning agent. Can this be done easily?

RECORD LEVEL INDICATORS should be studied carefully. Three basic types are used: neon bulbs, tuning-eye tubes and meters. Meters appear almost ex-

Continued on page 86



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FAIRCHILD HI-FI ITEMS R. E. SHOW 1.

The new Fairchild Plug-in Type Transcription Arms received a great deal of enthusiastic attention at the recent I. R. E. Exhibition. Engineers and audiophiles praised the interesting plug-in feature which permits use of any standard cattridge including turn-over and turn-around types. Use of separate pre-cision gyroscope bearings for vertical and lateral movement also found favor with the engineers. These long life bearings are uniform in operation and cannot be fouled by dust and other particles. Easily mounted, these arms may be adjusted for use with the various types of turntables. A self-operating detent holds the arm when off the record and completely eliminates the need for an

The handsome styling of the new Fairchild Model 240 Preamplifier-Equalizer plus its

many features of operation and circuitry were hailed as outstanding advances in the art of high quality reproduction equipment for the home. Every control for the most avid enthusiast is combined with an air of simplicity of operation allowing either the audio engineer or the serious non-gadgetminded music lover to enjoy music reproduction of the finest degree. The exclusive Balanced-Bar Control, which can be made to automatically match the acoustical properties of the individual owner's room when in its unbroken horizontal position, adds greatly to the simplicity of operation of this unit. Seven inputs, tape recorder output, four dual-purpose trodes and self-contained power supply are only some of its many features.

– Advertisement –

TAPE RECORDERS

Continued from page 85

clusively on equipment in the professional class, since their cost is considerable. The tuning-eye type is used widely on the more expensive package units; the green "V" closes in reaction to increased recording level; tight shut indicates overload. Some of these eves vibrate rapidly with changes in sound level; others are "damped," i.e., electronic shock absorbers are used. Those which are damped are to be preferred, but shock absorbers cost

The third type uses one or two neon bulbs which glow when overloads occur. In the two-bulb system, one glowing indicates adequate level; both glowing indicates overload. When only one bulb is used, glowing indicates overload. These are (or can be) sufficiently accurate for home use; the most important thing is to work with the recorder until you know how much overload (as indicated by bulb, tube or meter) can be tolerated without audible distortion.

One of the important advantages of tape recording is the extended dynamic range (from softest to loudest sound) which can be accommodated, yet even this is well below the range encountered in live music. Therefore, either you must monitor and change recording level when extremely loud passages are about to occur, or you must expect to overload from time to time. Monitoring takes great skill and complete familiarity with what is about to occur in the musical passage; slight and occasional overload is preferable to obvious and unskillful monitoring.

SUMMARY: I cannot emphasize too strongly how important it is to decide what you intend to do with a tape recorder, particularly insofar as it relates to a hi-fi system. If you are going to build it in and connect it permanently into your hi-fi rig, then you should consider the professional type of recorder and some of the newer ones in the under-\$250 class which either do not provide a power amplifier stage or which have output connections ahead of this stage.

If portability as well as optimum fidelity (for "on location" recording)

Continued on page 87

TAPE RECORDERS

Continued from page 86

is desired, then consider the same two groups as mentioned in the paragraph above.

If you want something which you can play back, with satisfaction, through your hi-fi system but which you can also drop in the back of the car for an evening of low-fi fun at the neighbors (and which therefore must have a built-in power amplifier) . . well, that's the toughest order to fill, today. Shop carefully; try out the tape recorder thoroughly to be sure it will do what you want it to. Remember, too, progress is rapid in this field just

If you don't anticipate a need for the very highest fidelity, if you are looking primarily for maximum convenience and portability, for something you can set up in a minute and play back in the same minute, without fuss or bother - then you're in luck. Still, it's a good idea to scan the field carefully. There are small features which may be especially important to you. And, even among the most modest, self-contained packages, there are differences in the sound.

TONY SCHWARTZ

Continued from page 33

the old country; the Armenian grocer talking about the pitfalls of racial discrimination as he rings up sales on his cash register; an ancient New Yorker with cracked voice lovingly describing the pet cat she once owned.

Some of his best samples of this kind of thing have come to Tony's microphone by coincidence or accident. There was one occasion when he had been building up a Romanian collection, largely by remote-control. He was especially interested in reports of a girl in Pittsburgh, said to sing Romanian folk songs beautifully. She agreed to make some tapes and submit them.

A few weeks later, the songs arrived. Though his apartment was being painted and topsy-turvy, Tony had to

Continued on page 88

FINEST

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MODEL 2200B

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magnetic pickup with diamond stylus: net price \$30.60 with sapphire stylus: net price \$15.00

Discover for yourself the truly exciting difference a Clarkstan Magnetic Pickup gives to your music enjoyment—a difference you can hear. If your ear is tuned to the finest in sound, you'll want the vivid, life-like reproduction obtainable only with the Clarkstan RV 201 Variable Reluctance Pickup—over 15,000 cycles of low distortion, flat response is yours. Ask your hi-fi sound jobber to let you hear this difference. Then you, too, will join the growing thousands of discriminating music lovers who buy only the best in pickups—the Clarkstan RV 201.

a sound investment...

Type-Magnetic, variable reluctance with removable stylus.

Armature – Stylus is armature; weight 31 mg (.031 g)

Response-Flat to over 15,000 cps.

Stylus - with standard .003" radius ball point or .0012" as desired. Styli are interchangeable and replaceable. Other sizes available.

Needle Force – 5 to 7 g for LP microgroove; as low as 9 g for standard records.

Output – 60 mv at 1000 cps with lateral displacement of .001".

Recommended Termination - High impedance.

Electrical Characteristics — Inductance 350 milihenries at 1000 cps; 'Q' 1.05; DC Resistance 1450 ohms.

Mounting—Standard holes ½" between centers, 3-48 screws.
Weight—30 grams.

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TONY SCHWARTZ

Continued from page 87

hear the new tapes at once. As the haunting gypsy strains filled the little room, Tony noticed his painter had laid down his brush to listen. There were tears in his eyes.

"I am 78 years old," said the painter in wonder, "and I knew that song when I was a boy."

Tony responded sympathetically, keeping him talking as he turned on the tape recorder, to pick up the nostalgic monologue of an old man remembering his boyhood, long ago and far away.

A more amusing, though less productive coincidence occurred when a friend brought him from Italy a worn, scratched record.

"These are the most wonderful Italian folk songs I heard anywhere on my trip," announced the friend proudly. "The record is pretty beat up, but I couldn't find anything else that compared with it. If only there weren't so many scratches!"

Tony put the disk on his turntable. At the first strains, he grinned. "I can give you the music without the scratches," he said.

"You can?" his friend asked incredulously.

Tony searched his files, took out a reel, played the music. It was a tape he had made in New York City, years ago. He had made a copy and sent it to a fellow-enthusiast in Italy. Tony finds it a tight little world!

TALKING MACHINE

Continued from page 30

move gramophones as never before. At the end of 1898 the ledger books were pleasant to behold. National Gramophone claimed that its total sales topped the million-dollar mark. Eldridge Johnson alone showed a \$40,000 profit that year; by then Johnson's shop was already manufacturing complete gramophones, taking up overflow from the busy Berliner factory in Philadelphia.

The wax-cylinder companies viewed this activity with undisguised alarm.

Continued on page 89



TALKING MACHINE

Continued from page 88

In its advertisements Columbia began to make snide references to the gramophone. It referred to "other so-called talking machines" which would "reproduce only specially prepared cutand-dried subjects," and reminded readers that "the Gramophone [Columbia's trade term for its wax-cylinder phonograph] does much more; it repeats your voice; your friend's voice; songs sung to it or stories told to it." Along similar lines Columbia made it known that "makers of machines limited by their mechanism to imperfect reproductions of specially prepared records attempt to persuade intending purchasers that it is one of the merits of their invention that it will not make records of sound. Much of the pleasure, however, of a talking machine in the home is derived from its power of recording favorite musical selections, songs sung by loved ones, or the voices of friends." Even the Phonoscope, which was supposedly an unbiased periodical for the whole talking machine trade, took a virulently anti-gramophone stand in the fall of 1898. A gramophone record, it editorialized, "sounds first like escaping steam. You listen more attentively hoping for better things and you are next reminded of the rumbling of a horseless carriage. Finally, when the attempt to reproduce a voice is begun, you are forcibly compelled to liken the noise from the Gramophone to the braying of a wild ass." To add insult to injury the Phonoscope opined that the gramophone's "looks are not

Continued on page 90

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TALKING MACHINE

Continued from page 89

very inspiring" and that "its blasty, whang-doodle noises are not desired by citizens of culture."

Seaman was not the kind of man to let these aspersions go unchallenged. He rushed into print with large advertisements carrying the considered opinion of "the celebrated cornetist" W. Paris Chambers that "the Phonograph reproduces only one-fifth of the true tone quality of the Cornet, while the improved Gramophone reproduces practically all of the tone quality and volume of the instrument." Another advertisement gave a joint testimonial by five soloists from Sousa's Band: "We consider the Gramophone the only Talking Machine which perfectly reproduces the true tone qualities of our respective instruments." picking up Columbia's claim for homerecorded entertainment, Seaman fired right back with the assertion that the gramophone "has never brought discredit upon itself by amateur or fraudulent record." But these sallies in print were only a mild prelude to a far more explosive kind of warfare calculated to rock the gramophone industry to its very foundations.

(This is the one of a series of articles by Mr. Gelatt adapted from a forthcoming history of the phonograph to be published by Lippincott.)

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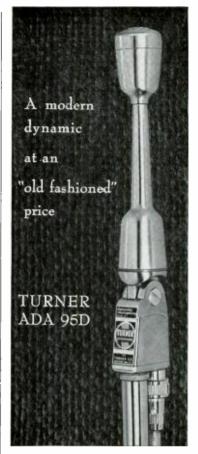
CAPTIVE CONCERTOS

Continued from page 27

chest or under a pile of dust, there must have been good reasons for leaving them there. But it wasn't true.

Even at a very early age, Mendelssohn was able to transmit unerringly through musical sounds his impressions, enthusiasms and lyric inspiration. Extraordinary examples of this are the two two-piano concertos, which show that he already clearly had in mind musical ideas which were to

Continued on page 91



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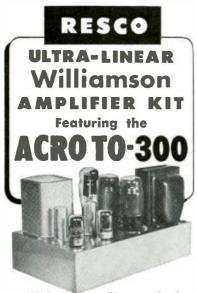
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CAPTIVE CONCERTOS

Continued from page 90

carry him a few years later to the heights of the violin concerto and the Midsummer Night's Dream music. The first concerto, in E-flat, follows lightly in the foot-steps of Mozart and Beethoven, yet definitely, especially in the last movement, there is structure characteristic of Mendelssohn's most mature writing. The second concerto, even better, written in the composer's sixteenth year, has moments of intense lyricism, always sustained and alternated with rapid, vivacious passages. There is none of the repetitious question-and-answer pattern conventional in two-piano concertos. In both works, the first piano part is brilliant and virtuosic, while the second piano presents music of a freely singing character. Mendelssohn himself played the concertos with his sister Fanny and, in 1824, performed the one in A-flat with Ignaz Moscheles in London.

After a century of silence, the A-flat concerto finally was revived in Geneva in 1951. I participated in the performance. By now I have played in both several times, and have recorded both for Vox (the E-flat was released last month). It was reassuring to find both very well received, even though I had expected them to be. The twopiano literature is not so extensive that the world could have afforded to lose these two gracious works, and possibly this risk existed — before our microfilms were made. I do not know that the Beethoven "conversation books" ever have come to light again since their disappearance - nor what else may have disappeared with them (except Dr. Krüger-Riebow). But I am glad we "rescued" the Mendelssohn scores when we did.

By a strange coincidence, about the time Orazio Frugoni was putting the pressure on Berlin for the two Mendelssohn two-piano concertos, in London violinist Yehudi Menuhin was turning up another almost unknown Mendelssohn concerto, for violin in D. He reintroduced it to concert halls and has recorded it for HMV and RCA Victor. It was written the year before the two-piano works, when the composer was only 14! - ED.

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Books in Review

Accents on Opera, by Boris Goldovsky (with vital statistics on operatic premieres by Mary Ellis Peltz). 306 pages. Photographs; musical examples. Half cloth, boards. Farrar, Straus & Young, New York, 1953. \$4.00.

This optimistically priced volume, published under the sponsorship of the Metropolitan Opera Guild, bears on its title page the explanatory legend "a series of brief essays stressing little-known facts and facets of a familiar art." Insofar as this subtitle serves as a modest disclaimer of comprehensiveness it is a useful guide to the contents; insofar as it implies a richness of materials and ideas not otherwise readily accessible it falls short of complete fulfillment

Brief the essays certainly are. Since they are revisions for publication of the scripts of selected examples of the intermission chats by Mr. Goldovsky that, under the label "Opera News on the Air," have for the past eight seasons been a continuing feature of Saturday afternoon broadcasts from the Metropolitan, their length is determined by the ten minutes or so of air time available. The unfamiliarity of the facts and facets chosen for discussion is more variable. So is the pertinence of the discussion to an understanding of the work under consideration

Some thirty-seven operas (all, naturally, works given at the Metropolitan during Mr. Goldovsky's tenure as commentator) are touched on. The best of the essays are neatly molded and about as nourishing as could justly be expected of capsules formulated necessarily for maximum palatability rather than maximum content. That on The Rake's Progress, for example, is a sensible and brief explanation of what Stravinsky was up to, how he went about it, and what the valid listening assumptions are. That on Carmen, centering around research done by the author on the original spoken-dialogue version of the work, is more special in its appeal but quite as stimulating in its implications. There are others. Uncomfortably many, however, offer little more than workaday recountings of plot details, retellings of the same familiar anecdotes that turn up in all opera books, and homiletic observations that, although no less true, are no less fascinating for having been made frequently before.

This material, marred in the telling mainly by a certain schoolroom coyness, is no doubt proper for occasional intermission talks to the great unseen audience. Its utility in book form is another question. Wagner, Hanslick, and Die Meistersinger; the initial fiasco of Madama Butterfly; Rossini's gourmandism; Donizetti's facility in writing music; the fact that Pagliacci contains a play within a play - these matters have hardly been neglected. But here they are once more. The free use of musical examples to il-

lustrate points made in the text may prove a positive hinderance to some who would otherwise read the book with pleasure. It is one thing - and a very useful one - to interrupt an oral discussion and let the music be heard; it is quite another to break off in the middle of a paragraph with "listen to this" and expect the average reader to take in three or four staves at a glance. If the text were always self-contained this might not matter so much, but it does seem dangerously naïve on the part of the publishers to assume that the majority of Mr. Goldovsky's potential public has sufficient technical background to follow even the simplest A-B-C exposition when so many statements are elliptical or downright meaningless without reference to printed music. Interest in such painless-appreciation books on music seldom goes hand in hand with the ability to sight-read Elektra of Peter Grimes.

At the end of each essay, Mary Ellis Peltz, editor of Opera News, provides data which frequently go beyond the bare statistical outline promised - concerning first and otherwise notable performances, casts, and circumstances of composition.

The sixteen pages of photographs, bound together in one section, are given over entirely to scenes from Rudolf Bing's new Metropolitan productions. All are the work of the house photographer, Sedge LeBlang. The choices are representative enough, but the reproduction is dull and fuzzy looking and sometimes badly flawed, and the captions do not identify singers or give any indication of dramatic contexts.

JAMES HINTON, JR.

Understanding Music, by William S. Newman. 302 pages; Cloth. Harpers; New York. 1953. \$5.00.

Most of the books on that dreadful subject, "music appreciation," concern themselves with a general historical survey, beginning with Gregorian Chant and progressing chronologically up to the twentieth century. Dr. Newman, who heads the piano department and teaches musicology at the University of North Carolina, takes a more fundamental view of the subject.

In this book, he begins with a general discussion of the arts, their interrelation and pattern of their respective styles in the course of historical development. Next he considers the "tools" of music - musical instruments, rhythm, pitch, harmony and tonality, texture and sonority. After these basic elements have been analyzed, the author then describes in detail how they are organized into various musical forms. The book then concludes with suggestions as to how all this basic musical knowledge may be applied to everyday listening or the professional pursuit of music as a career. An appendix lists recommended biographies of composers and examples of music to be

Continued on page 94



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BOOKS

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heard as illustrative of the material being discussed.

A lot of what Dr. Newman says makes sense With sufficient time and effort, someone who knows little or nothing about music can learn to read musical notation and gain a comprehensive view of Western art music, its components, its styles and its creators. But a large number of laymen will be frightened into forgetting the whole thing by the author's arbitrary use of psychological terms and his categorical pigeonholing. Since music is the least tangible of the arts, it is terribly difficult to describe in words; but there are many places whete Dr. Newman could have found simpler words or phrases with which to make his points.

There are a few places, too, where he has tended to make dangerous generalizations, though as the book progresses, he becomes more careful to qualify his statements. The book falls short in one important respect: it fails to describe the various orchestral instruments in sufficient detail, and the few photographs that are included do not bring these details to light.

On the whole, Dr. Newman has made a wise choice of musical examples to illustrate his text. Because the actual playing of these and other examples is so vital for the complete understanding of music, however, and because certain of the points have to be enlarged upon by an experienced musician, this book fulfills its purpose as a college

text much better than it does as a guide for casual reading in the home.

PAUL AFFELDER

The Legacy of Chopin, by Jan Holcman. 113 pages. Frontispiece; index. Cloth. Philosophical Library, New York, 1954. \$2.50.

In his brief prefatory note, Jan Holcman, a young Polish musician now making his home in New York, writes that the purpose of his book is to assemble the materials — including some from sources available only in Polish — that show Chopin's "views on all phases of music," supplemented by "comparative historical data" and "a few reflections" of his own. The publisher's advertisement on the dust jacket describes it, somewhat more accurately, as "an original interpretation of Chopin's thoughts on music and musicians, with special emphasis on his philosophical approach to music."

Neither statement, however, quite locates the book. What Mr. Holcman has actually produced is a set of eleven loosely related informal essays in which he takes the reader on a ramble through his own sometimes extraordinary opinions on a variety of musical topics, including, by the way, Chopin and Chopin's selected views on some of the same topics.

This is, to some extent, a necessary condition of the project he set himself. That Chopin had views—or thoughts—on music and musicians is undeniable. That his thinking covered "all phases" is questionable. And to imply that his observations

Continued on page 95

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BOOKS

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constitute anything that can be seriously regarded as "a philosophical approach to music" is misleading. Chopin was a composer, not an advocate or theoretician. His legacy is payable in music, not in words. Even when the inclusion, as here, of the debatably authentic letters to Delphine Potocka there is hardly enough really illuminating comment by Chopin on music to fill a pamphlet.

He is most interesting - and most fun when his claws are out and his vanity active. "You know," he writes, "Liszt takes an enema tube instead of a telescope to look at the stars . . . I still say he is a clever craftsman without a vestige of talent." And again, of the same rival: "Some day he will be a deputy, even a king, in Abyssinia or the Congo . . . ' This kind of bitchery is amusing, to be sure, but what of value does it tell? Chopin disliked Liszt. Mr. Holcman's comparative historical data shows that Liszt's feelings about Chopin were ambivalent. So?

Chopin in a serious mood and writing about music is less entertaining, as might be expected. "Bach will never grow old." "Every artist experiences moments when inspiration ebbs and only the brain does the work." "Music is more than skillful moving of the fingers." "I hate to perform in public." "Rhythm and tempo should never be violated." All these are admirable things for Chopin to have written, but they are neither new nor particularly striking.

Anyone who sets out to make more than a commonplace book from materials like the random fragments quoted obviously has to take responsibility for setting them in order, making an explanation here, amplifying a point there, so as to make the position of his subject as clear as possible. But Mr. Holcman has not accepted fully the correlative scholarly responsibility for staying out of the way, or at least keeping his own opinions separate from matters of fact and from opinions he is quoting.

A chapter on "Freedom of Interpretation" is hung on the single peg of Chopin's insistence that the performer regard the text of his compositions as inviolable. chapter itself is devoted not to clarification of Chopin's thinking on this subject, but to Mr. Holcman's disagreement. He is obliging enough to rate present-day pianists ("What secures Horowitz a higher place today than Lipatti, Solomon or Kapell, is precisely the additional measure of imagination . . . ") and to inform his readers that while Ignaz Friedman's playing of the mazurkas was so free as to be "unacceptable" pianists like Liszt and Rachmaninoff are entitled (by whom he is too modest to say) to change harmonies and add notes in Chopin's music — although not in Bach's. Chopin's legacy? I think not.

A chapter on "Transcriptions" takes off, straight up, from the simple fact that Chopin refused Liszt permission to make variations on his études. At that point Mr. Holcman loses interest in what Chopin thought. He states categorically that transcriptions are just dandy ("only ignorant critics" don't think so) if they are "good" —

Continued on page 96

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BOOKS

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like Godowsky's — and pays tribute again to Horowitz (whose Carmen fantasy allows one to "hear a combination of Bizet, Rachmaninoff and Prokofieff, and it is entirely in the spirit of the original;" the italics are mine). Conclusion: Liszt should have gone right ahead and composed his variations whether Chopin wanted him to or not and so on.

These examples are not at all extreme. Whether you agree or disagree is a matter of individual judgement. The plain fact is that Chopin's thoughts, such as they were, are buried under a disorderly mess of facts, fancies, and dogmatic assertions that have less to do with Chopin, leave alone his views, than with the author's apparently quite intense need for self-expression. What might have been a modestly revealing scholarly study ends by vitiating its necessary materials with irrelevant, opinionated twaddle.

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Sensation of the 1953 New York Audio Fair

Elimination of rubber idlers by a belt drive assures a permanently smooth drive system. Turntable assembly is suspended on coil springs equipped with felt shock absorbers to absorb vibration. This minimizes feedback from the loudspeaker, rumble from street traffic, oil burners, etc. Nylon bearing eliminates metal to metal contact — provides quiet operation with negligible lubrication. The bottom thrust ball rides in a special hardened and polished seat. The extremely low friction thus assures maximum benefit from the 25 lb. turntable in stabilizing speed.

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AUDIO FORUM

This department will be a regular feature, provided reader response is favorable; it is devoted to those who have minor or major technical problems with their hi-fi systems, to those who are just beginning to consider hi-fi installations, and to others simply on the lookout for new ideas. Material will consist primarily of suggestions and questions from readers, which are welcomed, and of suggestions, comments and answers from the editors. Letters should be addressed to The Audio Forum, High Fidelity Magazine, Publishing House, Great Barrington, Mass.

Sir

I have a venerable record-player, a wide-range speaker system, and little spare cash at this time. Eventually, I'll have to replace my changer, I know, but what can I do in the interim to get rid of the ear-deadening rumble without cutting off all the bass in the music, too? I don't want to invest in an elaborate commercial rumble filter or suppressor, which would be of little value when I do get a turntable.

Alfred Samson New York City

We don't know what other equipment there is in your audio system, Mr. Samson, but the chances are you have a low-impedance (cathode-follower) output device feeding an amplifier of high input impedance. Most preamp-control units and many tuners with built-in control sections have such low-impedance outputs. If this is true in your case, you can make a fairly effective rumble filter from two capacitors and a resistor wired as shown in the diagram. The shielded audio lead between the control unit and amplifier should be cut close to the amplifier and the circuit inserted at that

point. Cutoff frequency of the filter is 25 to 30 cycles, and attenuation rate below cutoff is 12 db per octave.

SIR:

Why not "build it yourself?" We did. We wanted the best music center possible but at the same time the budget had to be considered. One of my hobbies is high fidelity equipment and that hobby was put to use in the construction of what is, for us, an ideal installation. Unless otherwise indicated all the equipments to be described, including the TV and tape recorder, were built at home in spare time. Also, all the cabinet work is home constructed. We hope that others may be encouraged to undertake their own installations.

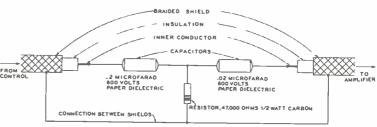
While we are by no means rabid TV fans we do enjoy a few of the shows, provided that they are live, with clean picture and sound, and we included a TV set in our plans. It was decided that a 21-inch picture tube would be adequate for our moderately large living room, and it was decided further that the TV sound should be fed through the master tone controls and power amplifier. Some of the radio programs we enjoy conflict with other activities, so we needed a tape recorder and a separate AM-FM radio controlled by a time clock. A five-position selector switch was installed in the radio unit; sound from AM radio, FM radio, TV, phonograph and tape playback were all run to this switch. With this arrangement, all sound in the system was channeled through the master tone controls, main amplifier and speakers. Likewise, the record amplifier of the tape recorder was arranged so that recordings could also be made from TV sound, should that ever be necessary, and from the phonograph, as well as from the separate AM-FM radio.

In addition to the installation in the living room, a good radio and amplifier system for the kitchen was desired, and a connection from the living room installation to the kitchen radio was made so that sound from the main system could be reproduced in the kitchen.

We were fortunate that a large casement window was located in the living room next to the fireplace. Because this window opened on the side of the house with no view, it was never used. Balancing the window frame, on the opposite side of the fireplace, is a bookcase. The window frame faced into the living room in such a manner as to be ideal for location of the equipment. Further investigation confirmed that all the equipment could be located on panels built into the window frame. A room with a floor measuring 6 by 6 feet was constructed outside the house, around the window frame; and access to the rear of the equipment was provided by a door to the room opening into the yard. Ventilation was furnished by means of two grilles located in opposite walls of the new room.

The speaker system is Altec-Lansing. Unfortunately, space limitations

Continued on page 100



A rumble filter that can be used with cathode-follower preamp.



AUDIO FORUM

Continued from page 99

prevented the use of rear-loaded bass horns so a compromise had to be made, and the 803 bass speaker was installed in a 10-cubic-foot bass-reflex box. This was constructed of 3/4-inch plywood with all edges except the back glued. Screw fastenings were used throughout, and the box was carefully braced. The inside was lined with Kimsul. An Altec 802B high-frequency unit and an 808B horn were also mounted inside the box but in a separate compartment. The finished box was then put at the top of the window frame, high enough in the room for excellent coverage of the high frequencies but low enough to avoid ceiling slap.

The main AM-FM radio is located just below the speaker; included in this unit are the master tone-controls designed to provide treble boost and droop and to follow the Fletcher-Munson curves on bass frequencies. An adjustable cutoff filter was included to limit the high-frequency re-

sponse when playing older phonograph records or when looking at TV films. Also included in this unit is a remote-controlled disabling device to mute the sound during objectionable TV and radio commercials. The phonograph preamplifier and equalizer is also located in the radio unit.

A Presto 15G-2 turntable is located in a sliding drawer just below the radio unit. The transcription arm and diamond-stylus cartridge, for LP records, is by Pickering, and a GE arm and cartridge are used for 78s. A small lamp and shade are located inside the turntable drawer to provide illumination.

The television set is located to the left of the radio and phonograph units; its location was planned to place the picture tube at eye level. The only pre-wired part of this set is the cascode tuner, built by Standard Coil Products, Inc. The rest of the set was built from scratch, using high-grade components.

At the bottom of the window frame is the tape recorder, its radio and a time

Continued on page 103





Just as a great artist transfers to canvas the real beauty of his subject, so does this unique speaker system re-create in your living room the true image of the original performance

The Cross-Coupled loudspeaker system, as described in High Fidelity (November-December 1953), produces the complete range of audible sound without boomy bass or shrieking highs. Employing a totally new concept of design, this 8-speaker assembly renders full living-room dispersion of middles and highs with a foundation of smooth, rich bass.

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WA-300 Preamp and Tone Control Five Position Selector Switch for radio or auxiliary inputs and for LP, AES and Foreign record com-

inputs and for st. As a second pensation.

Seven inputs—high and low gain radio, high and low gain auxiliary and three phono inputs for GE, Pickering and Audax pickups.

Calibrated Tane Centrols—Boss, +17 to -15 db. treble, +15 to -18 db.

Frequency Range—20:20,000 cps, ± 1 db Tubes—12.4X7, 12.AU7

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nsions—11% long, 5½ deep, 5½ high.

Here is an amplifier that looks as good as it sounds. The WA-325 combines the superb audio quality of the wellknown Ultra-linear Williamson Circuit with an attractiveness unequaled at any price. You wan't need a cabinet for this beautiful chassis, finished in metallic maroon, with white lettering and chrome plated transformers.

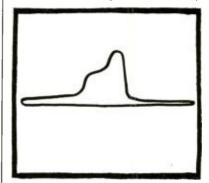
The perfect preamplifier for the WA-325, or any other amplifier, the WA-300- preamp and tone control unit with self-contained power supply. Compare its features, listed at the left, with similar, more expensive units. The WA-300 is only \$49.50 net.



These fine McGohan products were awarded the Medal of Merit for outstanding design and performance at the International Sight and Sound

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Too many records expect you to swallow muffled, lifeless sound. Next time, sample an Epic Record with Radial Sound. See what it's like to be "inside" the music.

You Can Hear The Difference...

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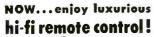
with LC 3014-Beethoven's "Emperor" Concerto with Cor de Groot at the piano and The Hague Philharmonic.

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Now you can have complete remote con-trol of your present High Fidelity Music System with the

LIBRETTO! This amazing control completely self-powered and capable of operation several hundred feet from the amplifier. Uniquely fashioned in the form of a luxuriously bound book (only 8¾ x 11 x 2" thick). Backbone lifts for easy access to controls. Operates in either horizontal or vertical position. Controls: 1. Crossover; 2. Roll-off; 3. Volume; 4. Bass; 5. Treble. Adapter available for simple connection to your present system. Gives you the ultimate in luxurious Hi-Fi.

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This truly superb unit is designed for optimum performance in the finest High Fidelity systems. Ideal for use with the LIBRETTO Remote Control (adapter not required). The specifications below speak for themselves, but the ultimate proof of quality is in the thrilling listening experience.

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Hormonic Distortion . . . less than 0.5% at rated output, less than 0.3% at 10 watts.

Intermed. Distortion... less than 0.4% at 1 watt (home level), 0.7% at rated output—measured at 60 and 7,000 cycles, 4 to 1 ratio.

Hum and Noise Level...80 db below rated output.

Output Impedance . . . 8 and 16 ohms. Input Selector . . . 4-position on 5-ft. ex-tension cord: No. 1, magnetic pickup; No. 2, crystal pickup; Nos. 3 & 4, auxiliary.

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PORT, NEW JERSE

GOOF BUSINESS AND AUDIEMA INC. NEW YORK CITY, N. Y.

AUDIO FORUM

Continued from page 100

clock. Since the recorder is used almost entirely for radio programs a high-frequency response limitation of 7,500 cycles was considered justified. If the time ever comes when we on the West Coast are fortunate enough to have the fine live FM programs that are available in the East, then the 7,500-cycle response limitation will have to be revised.

The appearance of the entire installation was greatly improved by the hand-turned brass knobs used for all controls. They were turned from solid



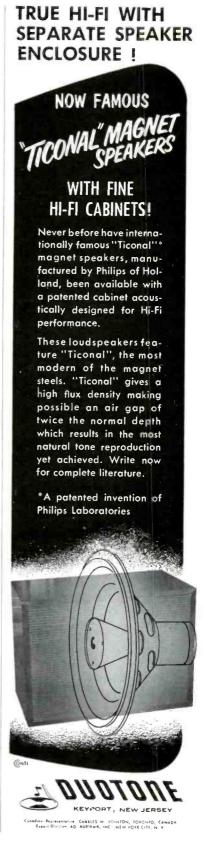
Kitchen control panel is flush with wall.

stock, given a satin polish, and then sprayed with clear lacquer to prevent oxidation. All paneling visible in the living room was painted to match existing woodwork, and small gold decalcomanias were used to designate the controls.

Selection of the speaker grille cloth was somewhat of a problem. We wanted a material that was so thin as to be almost diaphanous in order that performance of the high-frequency speaker would not be impaired, and at the same time the color and texture had to match the finish of the paneling. My wife finally found the material, but the black speaker cone and high-frequency horn showed through in such a manner as to be very objectionable. This problem was solved by painting the wood behind the cloth with a jet-black, non-gloss paint.

All power supplies and the Williamson amplifier are located in the small added room. Shielded cable is used for all power and low-level audio leads. Interconnecting cables are equipped with multi-contact plugs which facilitate removal of the units for maintenance purposes.

Continued on page 104





20 WATT HIGH FIDELITY AMPLIFIER

Also available with newly designed, continuously variable "loudness control" \$73.50. Control, fully described on page 54, Oct. Radio and Television News, compensates perfectly for hearing deficiencies at low volumes of sound reproduction.

Pre-Amplifier Stage Is Included In This FULLY GUARANTEED Unit.

Now you can enjoy both quality and economy in your high fidelity music system. This properly enjo genered, compact 20 Watt amplifier is specifically designed for fines custom installations. Four switchselected matched inputs for mag-netic pickup, crystal pickup, mi-

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With your order, please enclose check or money order. Shipped express only F.O.B. Benton Harbor.

Write for prices and all information on custom-construction of any amplifier, pre-amplifier or phonograph kit . . . assembled, tuned and tested by experts.

AVAILABLE ONLY IN THESE KIT COMBINATIONS

W-2 with Peerless transformer or W-3 with Acrosound transformer (be sure to specify) includes Williamson type amplifier, separate power supply and WA-P2 preamplifier kit. Shipping weight 39 pounds.

W-2M with Peerless transformer or W-3M with Acrosound transformer (be sure to specify) includes Williamson type amplifier and separate power supply. Shipping weight \$49.75

W-4 with Chicago "suber range" transformer includes single chassis, main amplifier and power supply with WA-P2 preampil- great Rt. Shipping weight 39 pounds \$59.50 Express only... Express only

W-4M with Chicago "super range" transformer. Single chassis, main amplifier and supply. Shipping weight 29 339.75 pounds. Express only.

WA-P2 preamplifier kit only. Shipping \$19.75 weight 8 pounds. Express or parcel \$19.75



here is the famous kit form William type high fidelity amplifier that has deservedly earned highest praise from every strata of Hi-fi music lovers. Virtually distortionless, clean musical reproduction, full range frequency response and more than adequate power reserve.

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NEW PREAMPLIFIER — The exciting new WA-P2 preamplifier provides full control through its 5 individually controlled input circuits, 4 position turnover and roll-off switches — separate bass and treble tone controls. Attractively styled, beautiful appearance, baked gold enamel finish, functional in design. Will operate with any Heathkit William type amplifier.

liamson type amplifier. Combined with brilliant performance of these units the amazingly modest investment required and the fun of building it yourself-trailed step-by-step construction manual complete with illustrations and pictorials sures success for even the most non-technical audio enthusiast.

Complete specification and schematic sheet available upon request

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AUDIO FORUM

Continued from page 103

The kitchen installation is unique in several respects. There was no space available on shelves or in cupboards for the equipment. An opening was cut in one wall of the kitchen, adjacent to the stove, and the unit extends beyond the opposite side of the wall into a stair well leading to the basement, high enough to be well above head height. An 8-inch Permoflux speaker was installed in another wall, above a

Many months of spare time have been consumed in this installation, but with its completion has come the satisfaction of having a fine sound system. While no two installations are ever alike, it is hoped that this description may give some help to others in solving their problems.

John Babcock Berkeley, Calif.

We don't recommend that everyone try to build tape recorders, TV sets, and the like, but there are some fine installation ideas in Mr. Bahcock's letter that many should find useful. Only - what was the grillecloth that Mrs. Babcock found?

I have just finished building myself a Junior Air-Coupler, using a University 6200 speaker with a 175-cycle crossover network, a Wharfedale W10/CSB carrying the middle and - for the time being - the highs. I have installed the coupler and the W10 in a large sturdy cabinet formerly used as an infinite baffle, with outside dimensions of 36 by 44 by 18 inches. The bass response is really stupendous!

However, there is one problem confronting me: how to adjust the size of the reflex port. I first tried the system with no port at all, but found the response improved when a port is used. I am wondering if there is some way to tune the port to the W10/CSB without the use of measuring instruments. I have cut a rectangular opening in the front of the cabinet in the space between the top of the coupler and the W10/CSB; but, of course, I don't know whether it is of the right

Continued on page 105



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*Ruin of Record Grooves by Ground-In Dust

Dust is the LP's greatest enemy -the major cause of record and needle wear. Commercial tests show a tenfold increase in record life where dust has been eliminated.

And the experts agree with thousands of satisfied users—Walco STATI-CLEAN is the record owner's best defense against dust! This miracle antistatic spray cleans the disc surface, stops static electricity that attracts dust, static created by handling and "dusting" discs. Stati-Clean lasts dozens of plays—no need to reapply each time. Tested by leading laboratories. Reports and user testimonials on request. Comes complete with new, self-impregnating applicator cloth.

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Trade Name of Electrovox Co., Inc. 60 Franklin St., East Orange, N.J.

AUDIO FORUM

Continued from page 104

size. Any other suggestions you may have concerning my speaker arrangement would also be appreciated.

> Robert Gates Providence, R. I.

Your enclosure design should give you very fine results, except for one unfortunate circumstance - the fact that the W10/CSB is not a coaxial speaker, and all the highs will be propagated by a cone that is in the same enclosure as the woofer. We've found that the Doppler distortion caused by operation of the mid-range cone in this manner is insignificant with speakers of good quality, but it is easily audible if the high-frequency cone is also in the woofer chamber. However, you seem to imply that this is a temporary arrangement. We're sure that you will find it well worth the extra cost to add a separate tweeter as soon as possible.

There is no way to adjust port-size precisely without measuring instruments, so far as we are aware. You can come reasonably close, though, with the following

First, cut a port hole that is obviously too large for the job. In your case, I suggest about 6 or 7 by 15 inches.

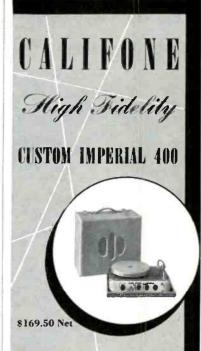
Then, drive some nails in the outer edges of a board that is appreciably larger than the hole, in such a way that some or all of the hole can be closed by the board.

Attach a pair of wires to the input terminals of the crossover network. Hold one of the wire ends to one terminal of a 11/2volt flashlight battery, and bring the other wire end into sudden contact with the other battery terminal. You should hear a muffled click - more like a bong than a click if the port hole is very far from the proper size.

Cover some of the port hole by nailing the board to the enclosure, and try the battery test again. Keep closing the hole gradually in small steps, until you find the position of the board at which the click is sharpest and sounds least like a bong.

Measure this hole size - attach a board permanently inside the chamber that will close the hole to the correct size.

I have enjoyed your contribution to Continued on page 106



For those who will no longer trust their treasured records to an automatic, the Custom Imperial 400 presents highest professional performance in a truly portable phonograph featuring:

- · Precision-made, cork-covered turntable .. wow, flutter and rumble held to an absolute minimum
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- Magnetic (variable reluctance) car-
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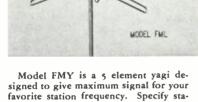


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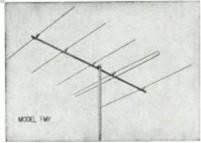
Includes - FML antenna 6 ft. aluminum mast 60 ft. coaxial cable mounting accessories instructions



tion and frequency when ordering. Price-FMY-antenna only-\$14.50

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-	glowing tubes, naked

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AUDIO FORUM

Continued from page 105

"The Little Living Room" so much that (like many another, I am sure) I am impelled to propose a suggestion or two - which I strongly suspect are far from original - in the interest of your further "bout" with the problem of speaker selection for your lowpriced system.

Your speaker limit is proposed as \$50. I have read and re-read everything about speakers and enclosures that I can understand; built, lagged, lined, tuned three enclosures with variously pleasing results; and am temporarily dismayed by that \$50 limit.

May I, therefore, suggest a bit of skullduggery, adding \$25 or so to the kitty by using a good \$50 amplifier, a GE external compensator (if you must), and postponing the luxury of a diamond needle?

Even a \$75 limit pinches, when one proposes that the end result - pleas-

Continued on page 107

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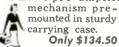
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AUDIO FORUM

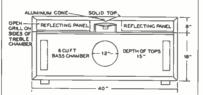
Continued from page 106

ing sound — is inevitably going to be a function largely of the speaker.

The little sketch attached is stimulated by your illustrations, by your requirement for optimum diffusion of treble frequencies; and pre-supposes kits of unfinished plywood, and the horizontal placement of a Wharfedale Super 8/CS/AL (or equivalent openframe type) speaker. If the 5-inch model faced upward worked so well for you, and the 8- and 10-inch models for Mr. Briggs, I am prepared to believe that results must be good.

Depending on production costs, this treble speaker might be mounted to bounce its tones off an aluminum diffuser, as discussed in your article, using the 5-inch tweeter. Or through an open grille work in the cabinet top and sides, utilizing a thin false top, leatherette covered (or other) to slide over the top grille when not in use.

If we optimistically budget our enclosure kit at \$25 (Cabinart offers a



Suggested bass reflex and tweeter cabinet.

comparable model at \$18), with 1000-cycle crossover at \$15 and treble speaker at \$21.50 (total: \$61.50), only \$13.50 of the adjusted \$75 top limit is left for a woofer, to be mounted in the 6 cubic foot bass reflex chamber below the treble speaker.

This is clearly cutting corners too finely, where one should assume new, latest-model stock; in fact, according to the catalogs, the least expensive 12-inch speaker specifically designed as a woofer sells at around \$30—\$16.50 over my proposed \$75 top.

At this stage, may I, with all due apologies, return that compensator for the \$8.79 it cost, until later on? Argument: a low cost system is primarily for beginners. Or recent graduates. To these, the purpose of a compensator is highly obscure, its end results

Continued on page 108



Unique "Roving Speaker" Adds New Dimension to Sound!

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413 L ST., N. W., WASHINGTON, D. C.

AUDIO FORUM

Continued from page 107

of doubtful perception. Treble and bass tone controls, already on the amplifier, are virtually self-explanatory. To many an audiophile, they double adequately for compensation.

I am now shy \$7.71, all in the cause of optimum faithfulness in the music reproduced, and don't even know how my combination would sound. But I believe it would be excellent, and well worth the adjustments proposed to get it.

C. Hawley Sumner Palo Alto, Calif.

There is no doubt whatever that such a speaker system would sound very much better than the \$50 system described in the article (p. 58, Nov.-Dec. 1953); on the other hand, it would be substantially more expensive. (For one thing, we doubt that an enclosure kit of this size and of heavy enough wood could be had for \$25.) And whatever other corners are cut in the system to allow more dollars for the speaker, we couldn't bring ourselves to recommend anything but a diamond stylus for LPs. Sapphires or precious metal stylii are economically unwise as well as dangerous, because 1) a worn stylus can ruin a \$6 LP in one playing, and 2) longterm replacement cost for diamond stylii is less by far than for any other type.

There are many who will agree about economizing on the compensation facilities—it depends on the point of view. Still, the saving would not be nearly enough to pay for the increased cost of the speaker system, even though properly built (with a rugged enclosure) it would be far superior to a \$50 model. Perhaps the original price limit was too low.

SIR

I believe that I have looked through all your issues and do not recall seeing anything regarding hi-fidelity radios for automobiles. I wonder if you have any information on this subject and if not, whether you might be interested in investigating the matter. Do you have any idea whether it is possible to install hi-fi components in an automobile?

James Compton
San Jose, Calif.
Continued on page 109





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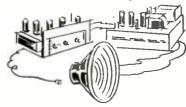
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PERMO, Inc.
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AUDIO FORUM

Continued from page 108

We are scheduled to receive soon what is, to our knowledge, the first hi-fi FM tuner designed for automobile use. Reader Compton as well as many others who have expressed interest in mobile FM can be sure that we are awaiting it eagerly too, and will publish a Tested-in-the-Home report as soon as we can.

SIR:

As a fellow devotee of that superb ratio station, WQXR, I can heartily sympathize with Mr. Don Basilio (Readers' Forum, Nov.-Dec. 1953), who receives his classical music from there along with steady, sullen whistles from nearby TV receivers. If he thinks he's in trouble with one offending TV, what of apartment dwellers like myself, surrounded by a hundred flickerboxes going full blast? I've heard more whistles than Marilyn. And I wonder if he's had the awful experience of trying to hear a program on a portable, with someone else watching TV in the same room?

The problem of radiation by TV

Continued on page 110

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Here's the place to buy, swap, or sell audio equipment. Rates are only 20c a word (including address), and your advertisement will reach 35,000 to 70,000 music listeners. Remittance must accompany copy and insertion instructions.

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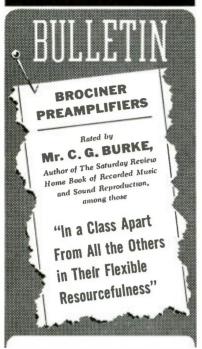
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AUDIO FORUM

Continued from page 109

receivers has certainly not received the attention it deserves from radio and TV manufacturers, because of the strange idea that radio is doomed. Personally, while not an avowed foe of TV, I expect to listen to WQXR's fine programs on AM as long as I can pull them in, or until we get some decent music in Pittsburgh.

I'd recommend first, the best possible location for an outdoor antenna, using a shielded lead-in, with the greatest possible distance between antenna and villainous TV. As an alternative, try a loop antenna beamed toward WQXR, in the attic or on the roof, again with a suitable transmission line. This I've been planning to try myself, but I've not become that desperate. Since the null point of a loop is critical and orientation for maximum signal is not, possibly the loop should be adjusted to tune out the TV squeal rather than to tune in the highbrow ether waves.

Borrowing an idea from the enemy, try an RF booster stage at the antenna. Possibly one or more wave traps would help; why not write to Meissner Mfg. Co. (Maguire Industries, Mt. Carmel, Ill.) for help?

If the landlord has not yet been challenged to a duel or otherwise alienated, making it possible to attack the TV set directly, then that is the way to do it. I suggest the book, "Television and FM Receiver Servicing," 3rd Edition, by Milton S. Kiver. Without violating the copyright law too seriously, perhaps I can intimate that Kiver's essential suggestions involve 1) a good ground on the TV chassis, and 2) shielding the chassis, particularly shielding and filtering the power lines to and within it.

I hope these remarks may help to solve, attack, or at least approach, a difficult and exasperating problem.

> Harry Wynn Pittsburgh, Pa.

These are the best suggestions we've yet received concerning the TV radiation problem. Thank you, Mr. Wynn. Any other cures for this all-too-common malady, anyone?



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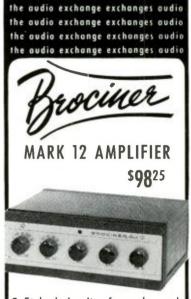
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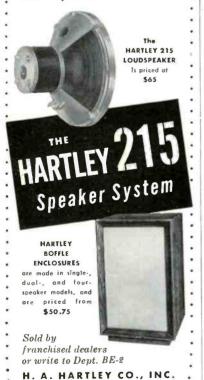
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IN ONE EAR

Continued from page 77

their organization a composer who could write such an opera, and the Soviet Committee on Art, presumably for not having sent everyone concerned to Siberia before this horror could have been perpetrated. Why?

The libretto was dull, unrealistic, and stagey, for one thing. "The play," spoke the oracular voice out of the *Pravda* printing presses, "shows the life of the collective farms in a false light. The Soviet people in it are deprived (that's what it said) of life and human characteristics. Their spiritual world is impoverished." The singing and dancing were criticized as being "unrealistic" and the whole performance as being full of "big mistakes" and "serious defects."

At this distance, it is impossible to tell what *Pravda* meant. But, then, it seems very likely that neither could anyone concerned.

Apparently the work just didn't please somebody — maybe Marshal Stalin. The one detail cited is fascinat-

ing, though, because of the light it throws on Soviet creative art in general.

The language, said Pravda, was full of "operatic and salon clichés." And in case you want to know what sort of language constitutes cliché in the salons and opera houses of Moscow, the example given was an aria: Now I dream of realizing my project—giving electric current to fields and setting machinery running; it will be easier for us to work and easier to live. Somebody must have said it before, God forbid.

Anyhow, you see what you are missing by not being in the thick of Soviet creative activity. I'll take my decadent formalism straight, with water on the side, thank you.

Charivariety

→ With Mario Lanza fallen from favor, apparently the next Hollywood tenor is to be Orest Kirkop, a young — and unrecorded — Maltese who during the last two seasons has achieved leading-role status in London. Rumored first production: a remake of The Vagabond King





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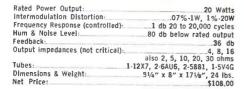
The Linear Standard amplifier climaxes a project assigned to our audio engineering group a year ago. The problem was, why does a Williamson circuit amplifier which tests beautifully in the laboratory seem to have considerable distortion in actual use? It took a year to fully determine the nature and cause of these distortions and the positive corrective measures. This new amplifier not only provides for full frequency response over the audio range but, in addition, sets a new standard for minimum transient distortion.

An inherent weakness of the Williamson circuit lies in the fact that its negative feedback becomes positive at subsonic frequencies. The resultant instability in use lends to parasitic oscillation at the high end and large subaudio cone excursions both of which produce substantial dis-tortions. The Linear Standard Amplifier uses Multiple Loop Feedback and network stabilization to completely eliminate these instabilities. The oscillagrams below show comparative performance. The flat frequency response and extremely low intermodulation distortion provided by 36 db feedback, are self evident from the curves shown.

In addition to providing an ideal amplifier electrically, considerable thought was given to its physical form. A number of points were considered extremely important: (1) Size should be minimum (power and audio on one chassis). (2) Each kit must have identical characteristics to lab model. (3) Rugged, reliable, structure is essential.

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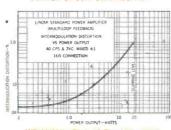
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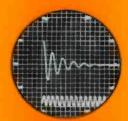
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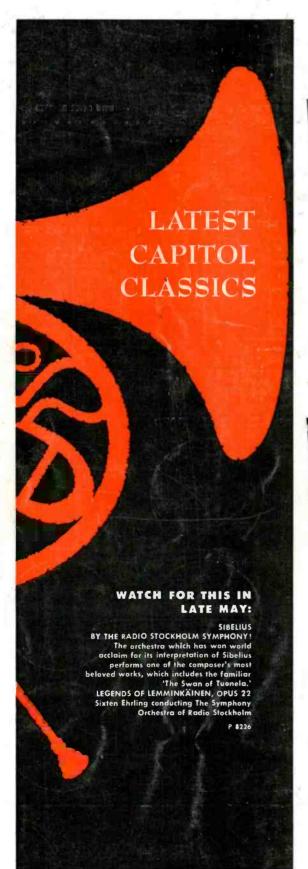






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