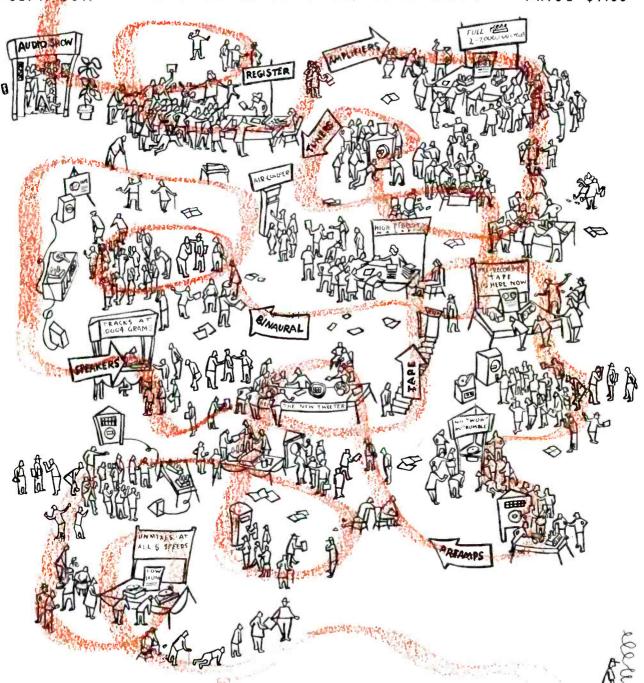
High Fidelity

SEPT BCT. MILTON B. SLEEPER, P.

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for the FINEST in recorded sound







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High Fidelity

THE MAGAZINE FOR MUSIC LISTENERS

This Issue. More people than ever, it appears, will mob this Fall's two great Eastern audio shows, gently lampooned in Roy Lindstrom's cover-drawing. In fact, something



like a national hi-fi boom is afoot. Advertisers have forced us up to 160 pages. High fidelity articles are scheduled soon in such magazines as Good Housekeeping, Esquire, Look and American Home, not to mention the old faithfuls, Atlantic Monthly and Saturday Review. All God's chillun, apparently, got Golden Ears.

Next Issue. Behind the Pilgrim Father, braving the wilderness in search of proteins on the wing, stood the moral support of the dauntless Pilgrim Mother. Today's heroine, too long unsung, is the great-heatted lady who masks her horror with a gay smile as her spouse vanishes, inch by inch, in the cavernous recesses of a Patrician or a Klipschorn. And she has other tribulations, too. Read about them, next issue, in Eleanor Edwards' stark, chilling recountal: 1 Am A 11i-Fi Wife.

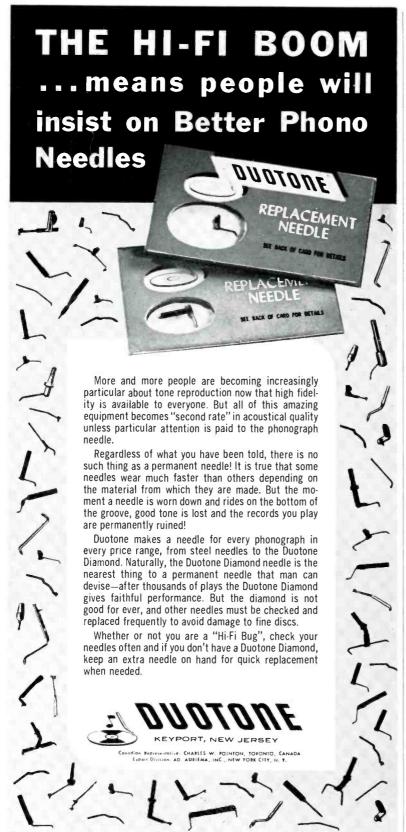
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AUTHORitatively Speaking

Hollis Alpert, whose critique of Tri-D movie sound begins on page 42, gives us full permission to inform his vast and idolatrous public that he is a dashing bachelor glamor-boy, often mistaken on the street for Sir Laurence Olivier. Now that we have relayed this information, it probably behooves us to add that there isn't a stitch of truth in it. Mr. Alpert is, in point of fact, a thoroughly-matried, well-domesticated young man who does most of his dashing to and from the offices of The New Yorker, where he is a staff member. He also writes movie reviews for the Saturday Review, hence his Hollywood lore.

James G. Deane, a contributing editor, known to HIGH FIDELITY readers for his Birth of an LP (November 1952), is records editor of the Washington Evening Star. He undertook to investigate the Navy's ventures into shipboard music systems (see page 45) partly in the hope that doing so might involve a sea-junket, away from the D.C. heat and humidity. It didn't, but the indomitable Deane brought a good yarn aboard, anyway. Incidentally, this is his second nautico-musical scoop. His first, for the Star, was a picture-text coverage of a triple canoe-capsizing among Potomacside listeners to a Washington Watergate summer concert.

Everyone else who went to London last summer went to look at the Queen, but not Roland Gelatt. He went to look at the plant and other facilities of Electrical and Musical Industries, Ltd., historic English record factory. Gelatt, who is feature editor of the Saturday Review, is writing a history of the phonograph from 1877 to now (Lippincott will publish it next year). In effect, his article on EMI (page 63) is a partial preview. No squanderer of time, he has but recently turned out another book, Music Makers. By a strange coincidence, it is reviewed in this issue. See "New Books."

Presumably Richard N. Boulton has a fulltime job as assistant sales-promotion manager of Phoenix Mutual Life Insurance, but it doesn't seem to take quite all the hours in his day. During the others, he writes a weekly column on the arts for the West Hartford (Conn.) News and book-reviews for the Hartford Courant. Last year he served weekly as a panel member on a WTHT book-discussion program; this year he is a weekly commentator on WTIC-FM's "Symphony Hall" program. It was the latter, of course, that suggested him as the man to write up the "good music" history of the latter sta-tion. He accepted the assignment without hesitation, despite the fact that WTIC's musical activities are supported by another (i.e., not Phoenix) insurance company.

G. A. Briggs is back, matching speakers and enclosures on page 98. Ed Wallace is back, profiling Peter Bartok in Adventurers in Sound, page 56. And so is H. S. Rummell, revealing what he does when he isn't tailoring Yagi antennae—he listens, willy-nilly, to Perry Como, some of the time, at least (see page 48).

FACTS

you want to know ABOUT HIGH FIDELITY REPRODUCTION

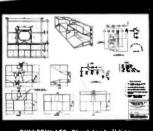
Here for the asking is valuable information for everyone—for the hi-fi enthusiast, music lover or professional expert. Includes important facts about the foremost selection of high fidelity reproducers to suit every taste and budget. Send now for the Bulletins you want.



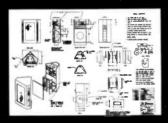
BULLETIN 189. Tells how to add octave of bass (and better highs) with E-V ARISTOCRAT Klipsch licensed folded horn corner enclosure and 12" complementary speaker systems. Includes complete data on PEERAGE sound equipment console.



BULLETIN 185. Tells about E-V REGENCY folded horn enclosure with built-in corner for 15" coaxial speakers or separate 2- and 3-way speaker systems. Has full data on E-V BARONET corner enclosure for 8" speakers.



BULLETIN 172. Chart for bullding complete high fidelity Residence Entertainment Center, with ideal reproducer system. Includes space for all audio components, radio-phonograph, television receiver, etc.



BULLETIN 173. Construction drawing details and mounting information on how to build the famous E-V PATRICIAN folded horn corner enclosure for today's outstanding 4-way reproducer system.



BULLETIN 174. How to build BARONET corner enclosure for 8" speaker.
BULLETIN 175. Construction drawing on E-V ARISTOCRAT corner enclosure for 12" speaker systems.
BULLETIN 176. Building E-V REGENCY enclosure for 2-way and 3-way systems.



BULLETIN 195. Explains about E-V PATRICIAN 4-way audio reproducer in custom-crafted corner enclosure —HI-Fi experts say; "finest of all." BULLETIN 199. Tells about the magnificent new GEORGIAN 4-way reproducer in folded horn enclosure.



CULLETIN 197. Gives full information about the revolutionary CDP compound diffraction projector for outdoor full-range high fidelity reproduction. Used also as pressure type mid-range driver for hi-fi multi-way systems.

BULLETIN 198. New ultra-linear, wide range, constant amplitude ceramic phonograph cartridge described in full detail.



BULLETIN 194. Tells how you can enjoy at least one more octave of silky highs by adding 1-35 Super Sonax very high frequency driver to your extended range single speaker for a 2-way system, to your coaxial for 3-way, or to separate multiple 2-way for super 3-way.





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In the News

There certainly is not much doubt that high fidelity made the news this Summer. All of you have seen the feature article which appeared in Life (June 15th). Certainly, high fidelity enthusiasts had reason to rejoice over this article because, while we all try to spread the gospel as far and wide as possible, a single feature in a magazine such as Life, with its multi-million circulation (the article also appeared in Life's International English and Spanish Editions), can do more to make the public at large conscious of the wonders of hi-fi than months of individual effort.

Readers of the Saturday Evening Post may have caught the short fiction story by Joseph Marshall called The Irresistable Repairman in their June 20 copies. The plot was simple: Mr. Big's TV set needed fixing, but the serviceman introduced the daughter of the house to hi-fi. It was love at first hearing, and Mr. Marshall is to be commended for a cute story.

Into the News

The stories in Life and the Post are one end of the line, so to speak. At the other is the Editor's mailbag, which has been overflowing steadily with publicity releases from companies around the world. Summer is always the time when important announcements are made - logically enough, because in May there is the big parts show in Chicago, at which equipment manufacturers announce to their jobbers and retailers the equipment which will be ready in the fall for selling throughout the winter. Then come the mighty sales conventions more than 1,000 dealers are reported to have attended one convention! During the past months, the publicity release mail has been especially heavy, because several of the hig commercial set manufacturers have come up with new radio-phonograph combinations, record players, and whatnot.

With the thought that readers might be interested—and well advised—to know what manufacturers are saying about their own equipment, here are some direct quotes from the publicity releases:

Magnavox: "A new high-fidelity, four-speaker phonograph — described by its originators as revolutionary, because it reproduces the full musical range of the symphony orchestra and costs less than \$200, or less than half the price of its present-day equivalent — was unveiled here today.

"The Magnavox product 'will faithfully reproduce sound comparable to the range of the human ear or 12,000 sound waves per

Continued on page 9

HIGH FIDELITY MAGAZINE



lakes pleasure in announcing an advancement in the art of FM RECEPTION and TUNER DESIGN

The PRECEDENT

- A noble successor to the famous line of REL FM receivers Model 517 in 1939, Model 646 in 1946 and Model 646B in 1951 this long awaited professional tuner offers reception never before attainable.
- Use the PRECEDENT with your Hi-Fi System and *enjoy* the brilliance of the reception, the beauty of the design and the smoothness of its operation.
- See and hear the *matchless* PRECEDENT, the most talked-about tuner in Hi-Fi history, at the Audio Fair, Hotel New Yorker, October 14, 15, 16, 17 Room 720.

RADIO ENGINEERING LABORATORIES - INC

REL Products are Backed by 30 Years of Research and Design Experience

Hmerica's Finest Home Music Amplifiers





Model A-15



Model A-104R



Model A-104



Model AM-10R



Model AM-10



Music lovers are discovering a new world of musical enjoyment, actually hearing whole octaves more music from their own favorite recordings, with custom home music systems built around these remarkable new amplifiers. Exclusive new developments make them sound better, simpler to operate and easier to install.

THE CLASSIC 25. There is nothing, short of live music itself, to compare with the brilliant, clear, full-bodied tones of this latest 25-watt amplifier. Distortian has been reduced to the practical limits of measurement to make it the lowest distortion producing element in the entire process of reproduction from original recording to your speaker, yet reserve power has not been sacrificed. Unique tone curves insure utmost realism and true bass. "Audi-balance" feature balances output tubes in seconds to insure a consistency of performance previously impossible. "Adjusta-panel" device ex-tends control shafts instantly for cabinet mounting. There are 6 inputs for radio, TV, tape, crystal and magnetic (2) pick-ups. "Fletcher-Munson" compensated volume control maintains perfect aural balance. Crossover selector simplifies attainment of correct playback response, includes foreign and domestic frequencies as well as the new A.E.S. standard, provides automatic microgroove level correction. 5 position record condition compensator controls surface noise. The beautifully finished, complete remote control permits substantial installation savings. The savings in cabinetry and labor can easily amount to more than the cost of this superb amplifier.

THE CLASSIC 15. This 15-watt model permits the same installation economies as the Classic 25 with many of its luxury features, including "Adjusta-panel," "Audi-balance," crossover selector, and the beautiful, complete remote

control. 6 inputs. ±1 db 10 ta 25,000 cycles. 15 watts at less than 1% distortion.

MODEL A-15. 15 watts. Similar to Classic 15 in most particulars without remote control. "Adjusta-panel" feature extends control shafts up to 3/4" for convenience in cabinet mounting.

MODEL A-104R. A value packed 12-watt (2%), 10 watts (1%) amplifier ± 1 db 20 to 20,000 cycles. Features response to 100 kc, remote control for easier installation, record crossover selector with A.E.S. position, built in pre-amp, Fletcher-Munson compensation, separate bass and treble controls, "Adjusta-panel" mount-

MODEL A-104. Identical to A-104R without remote. Has "Adjusta-panel" for easy installation.

MODEL AM-10R. A low cost 10-watt remote control amplifier. ± 1 db 20 to 20,000 cycles. Built in pre-amp. or standard playback curves. "Adiustapanel" mounting. Dual tone controls. New "Interlocked" circuit. Extremely easy to install.

MODEL AM-10. Identical to AM-10R without remote. Has "Adjusta-panel" feature for easy installation.

MODEL A-10. Essentially similar to AM-10 without pre-amp. Designed for crystal pickups. Includes "Adjusta-panel."

Write for catalog of all 8 completely new amplifiers priced from \$39.50 to \$269.50 audiophile net.

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NOTED WITH INTEREST

Continued from page 6

second,' he [Frank Freimann, president of Magnavox] explained. 'This makes it possible for the average consumer to receive the full recording range of high-fidelity records and compares with the range of 5,000 cycles pet second reproduced by mass-market commercial sets... We subjected our Magnasonic model to some of the most critical ears in the world of music and sound before we released it for public use, and we believe even the most entrenched hi-fi fans will respect its ability to reproduce all the sound on the modern record.' "

Philco: "Feature of the new Philco radio line was the 'Phonorama' — a radio-phonograph combination embodying high fidelity reproduction with full dimension sound. The instrument is the result of five years of top secret research within Philco laboratories and marks the first successful design of a high fidelity system in a single cabinet with an acoustically-designed sound chamber to reproduce the full range of high and low tones... Leaders in classical and popular music who have heard the Phonorama assert that it is the finest and fullest reproduction of their music that they have heard."

Motorola: "Introduced at the convention: , the first combination radio and record player with high fidelity sound system priced in the economy range below \$100 The 53F2 'Sonata', priced at \$99.95, is a table model radio-phonograph incorporating a three-speed record changer with the new and revolutionary Golden Tone Arm. The arm employs a newly-developed capacitive type of pickup cartridge. This unit represents the first 'complete package' ever built using the capacitive system. The record player makes use of the entire radio circuit and a new giant 6 x 9 [What, feet?] inverted speaker to reproduce high-fidelity tone . . . A new, one-piece monel stylus with an osmium tip provides long-life record playing."

Grayline: "The 'Phono-Gard' is said to

be the greatest phonographic development in decades, because it once and for all overcomes the problems of record scratch and tone arm damage. Its principles of safeguarding the tone arm and playing records are so completely different that basic patents have been granted . . . A tamper-proof canopy acts as a constant barrier between the tone arm and the person playing the record . . . The high-fidelity reproduction of the 'Phono-Gard' results from the fact that it is precision built. It is specifically engineered for high-fidelity reproduction some models are furnished with a newly designed 10-watt, high-fidelity amplifier, which is capable of reproduction of 20-20,000 cps.

More About Nunn

We have been leaving E. D. Nunn of Saukville, Wisconsin, in peace and quiet for several months, and just as well, too. Readers of early issues of HIGH FIDELITY will recall that we discovered Mr. Nunn calmly making records, of remarkable fidelity, for his own amusement. In those days, such a state of affairs could not be

Continued on page 10



THE KELTON COMPANY ANNOUNCES WITH PRIDE ITS NEW HIGH FIDELITY PHONOGRAPH

"The Kelton Cambridge"

Incorporating the amazing Kelton Acoustical System* with the newly developed wide range 15 watt amplifier including three position record equalizer and English made Collaro intermix record changer. The "Cambridge" since its introduction to New England music lovers three months ago has met with wide and enthusiastic reception! Featuring a cabinet of simple classic design in mahogany or Swedish blond birch, this startling phonograph is the answer for those who want good quality wide range sound in a single attractive packaged unit. This combination of quality components gives the record collector 40-12,000 cycles of undistorted sound at a full 15 watt output and includes the added advantage of selection of three positions on its equalization circuit (Victor, Columbia, and London).

The original Kelton acoustical system introduced at the Audio Fair last year is now pleasing music lovers in 48 states, Cuba, France, South America, and Alaska.



The Kelton Policy of manufacturing a low cost high fidelity sound system has realized tremendous popularity. In conjunction with this policy Kelton announces a TEN-DAY, MONEY-BACK GUAR-ANTEE on its cabineted speaker line (Ambassador*69.75 and Diplomat *\$49.50\$). Simply make out your check to The Kelton Company, Inc., and on receipt your Kelton will be shipped prepaid. If within tendays you are not completely satisfied with our product your money will be refunded without question. Our complete confidence in our sound system, reported upon by Charles Fowler in High Fidelity Magazine, May-June issue (page 85) led to this offer. Mail your check today, and be thrilled by hours of listening enjoyment with a Kelton speaker.

Inquiries concerning the "KELTON CAMBRIDGE" phonograph should be addressed to: Mutual Distributors, Inc.

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Crestwood engineering makes tape recorder history! Matches the finest professional equipment in hi-fi performance—frequency response of 30 to 13,000 cycles at 7½" per second tape-speed. Even slow-speed performance is excellent. Yet costs only \$199.50 to \$299.50 (taxes not included).*

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NOTED WITH INTEREST

Continued from page 9

permitted . . . so we wrote up Mr. Nunn and promptly swamped him with correspondence. He was practically forced into the record business. He set up "Audiophile Records" in Saukville, marketed those recordings which he had already made, and then went ahead to make more. Since recording is still a hobby primarily (Mr. Nunn is president of a large and important manufacturing organization), he can insist on quality and not compromise because of economic influences. Thus his catalogue will tell you that AP-1 is "Grade A" whereas AP-2 is "Grade B" (with the comment that AP-2 "cannot be fairly graded high-fidelity material") and go onto explain that "AP-3 presents much of the program of AP-2, with considerably better quality.

Mr. Nunn's fame has now spread 'round the world. He has an active market in England. Thousands of audiophiles have heard his records - perhaps unknowingly - because they are regularly used for demonstration purposes at audio shows.

All of which seems to prove the old saying about better mousetraps, though we imagine that Mr. Nunn has moments when he wonders how he ever got involved in mousetraps, of the hi-fi kind. However, he still seems to think kindly of HIGH FI-DELITY Magazine, and we think kindly of him - particularly when he comes up with disks like his last three (AP-7, 8, and 10) which are out of this world jazz. They really make hi-fi systems sizzle.

Desperate Situation

Some of our readers are practically committing murder to obtain copies of HIGH FIDELITY Nos. 4 and 5 (Vol. I, No. 4, and Vol. II, No. 1). They will go to almost any length for even a chance to read through these issues. They are, as you know, completely out of print.

We've been helping out as best we could through an elaborate procedure: a reader writes in with a desperate plea, we then look up in our subscription files for other long-term readers in that area, and write these people telling them the situation. Then they can, if they wish, call up the person who wrote in in the first place. We're not too much surprised to find that members of the hi-fi fraternity are very understanding, and this system has worked well. But it's complicated all around.

However, there does seem to be a possibility that some of our readers have extra copies of the missing issues which they would be willing to dispose of. So, if they will drop us a card, telling us which of the two (or both) issues they have available, we'll simply publish their names and addresses so other readers can write them to finalize arrangements.

Desperate Situation Impending

Though the situation has not yet reached the crisis point, we do know that there are not many copies left of the World Encyclo-

Continued on page 13

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25th Anniversary "Trophy" Models

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In commemoration of twenty-five years' experience in the manufacture and development of high-fidelity audio equipment, Espey is proud to present its distinguished "Trophy" models. Renowned for beauty of styling and excellence of performance, the new Espey models are so reasonably priced that for the first time magnificent listening pleasure is within the means of all lovers of fine audio reproduction.

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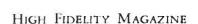
Because Soundcraft has everything you could ask for in recording tape: superior quality and fidelity — uniformity — sensitive high frequency response — resistance to temperature and humidity changes — smooth, curl-free operation.

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NOTED WITH INTEREST

Continued from page 10

pedia of Recorded Music. As far as we are able to find out, it will not be reprinted - too much of an undertaking. Supplements will be issued, to keep the material up to date but they are not much good without the original, huge volume.

Since there is no other work in any way comparable to the World Encyclopedia, we are passing the warning along to readers: if they want a copy (and every serious musicologist and student of recorded music should), they had better order now. Our Book Department has a small supply on hand, but it is not at all certain of being able to obtain any more.

Novel Service

There are a good many audio equipment kits on the market which offer considerable savings, but there are also a good many people for whom the thought of schematics and soldering irons is either terrifying or distasreful. For these, the Universal Service Co., P. O. Box 221, Benton Harbor, Mich., offers a novel service: you pick the kit (within reason!), and they'll wire it together for you at a nominal charge. It will be most interesting to see how the idea catches on: it's a new one.

Up-coming Hi-Fi Events

Once the summer is over, hi-fi enthusiasts can look forward to shows of their own. The first in the series will be in Chicago: the Sight and Sound Exposition, to be held the first three days in Seprember.

In New York, the Audio Fair will be held for four days, October 14, 15, 16, and 17. Hours open to the public are: 11 to 9, 10 to 6, 10 to 10, and 10 to 5, respectively. Fair will be held, as usual, at the Hotel New Yorker, corner of 34th Street and Eighth Avenue. HIGH FIDELITY will have an exhibit in Rooms 552 and 553, on the 5th Floor. We'll be featuring two hi-fi systems keynoting small size - for the apartment dweller. It's too early to give complete information, but we shall describe the systems in detail in our November issue.

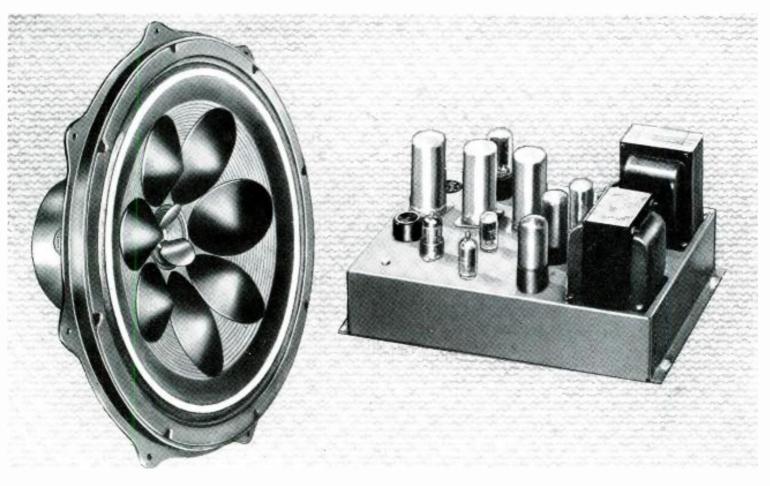
In Philadelphia, there will be a big audio show - the Third Annual High Fidelity Conference - at the Benjamin Franklin Hotel, November 3 and 4. Plans call for a large display area as well as a floor of suites and separate rooms for demonstrations by manufacturers and dealers. About 5,000 people attended the Philadelphia show last year and an even larger attendance is expected this year. Isadore Waber is show manager.

Exit Correspondence (con't.)

Two issues ago we noted the emergence of a tape correspondence club. We promptly had called to our attention the Global Talkawire Club (Box 630, Mar Vista 3, California) which performs similar functions, according

Continued on page 16





THE FAMED LC-1A SPEAKER for years the measure of perfection among users of professionalquality equipment. Now, more brilliant than ever with RCA's

INTERMATCHED High-Fidelity—cleaner than ever with ACOUSTIC DOMES on low-frequency cone and DISPERSION VANES on high-frequency speaker.

DE LUXE AMPLIFIER—designed and built to RCA's highest engineering standards— "power-proportioned" to the exact requirements of RCA

INTERMATCHED High-Fidelity equipment. An unusual combination of power and balance for the most discerning high-fidelity enthusiast.

RCA Intermatched A new idea in Extended-Range Sound

Now HEAR high-fidelity as you've never heard it before—the thrilling extended-range reproduction of RCA's new INTERMATCHED High-Fidelity Systems.

Here is truly fine reproduction at every price level. Here is a complete line of equipment designed all the way through to offer the finest in high-fidelity sound.

INTERMATCHED RCA High-Fidelity equipment offers you—for the first time ever—a wide selection of units designed to meet the music lover's needs. Intermatching lets you buy a fine—but reasonably priced—RCA system NOW, and progress to the finest—without fear of mismatching at

any stage. Or you can buy the finest now with the assurance that all components are engineered to work as a system.

RCA—with its great background in all phases of professional-quality sound—has built into its intermatched line a combination of thorough engineering and thorough understanding of good-music reproduction. Only RCA can offer you equipment so thoroughly intermatched that you can interconnect any RCA components you choose—merely by plugging one unit into another.

Now, ask your local RCA Electronics Distributor to let you hear true, high-fidelity through RCA's INTERMATCHED High-Fidelity Systems.

HIGH FIDELITY MAGAZINE



FULL-FUNCTION PRE-AMPLIFIER—carefully engineered to match RCA's DeLuxe 10- and 20-watt amplifiers—wide-range pre-amplification plus all controls

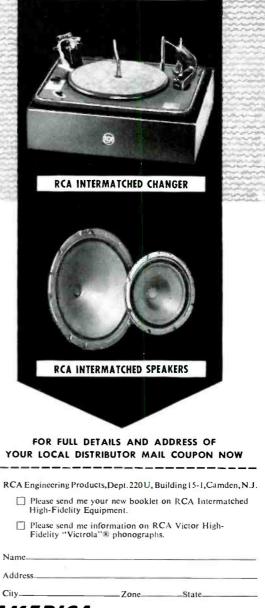
including equalization for four types of recording characteristics—four input selector positions—volume control—bass and treble controls

High-Fidelity



RCA INTERMATCHED CABINETS

Fine furniture—fine, high-fidelity units—styled to the requirements of RCA INTERMATCHED High-Fidelity Systems.



RCA INTERMATCHED AM-FM TUNERS



RADIO CORPORATION OF AMERICA
ENGINEERING PRODUCTS DEPARTMENT, CAMDEN, N.J.

SEPTEMBER-OCTOBER, 1953



"Of the very best!"

-HIGH FIDELITY MAGAZINE

SERIES "50"

■ It is only natural that more than one manufacturer will claim his product is the best. For that reason it remains for you to be the judge. We say—demand the specs. Then check workmanship, performance and beauty of appearance. If you do all these things, the answer will inevitably be . . . THE FISHER SERIES "50." There is no finer made.

FISHER Master Audio Control MODEL 50-C

■ "One of the finest units yet offered to the enthusiast or audio engineer."

—Radio and TV News. Can be used with any amplifier. IM distortion virtually unmeasurable. Complete, professional equalization settings and tone controls; genuine F-M loudness control; five inputs, five independent input level controls, two cathode follower outputs. Self-powered.

Chassis, \$89.50 · With blonde or dark cabinet, \$97.50

FISHER FM-AM Tuner MODEL 50-R

■ Features extreme sensitivity (1.5 my for 20 db of quieting); low distortion (less than 0.04% for I volt output); low hum (more than 100 db below 2 volts output.) Armstrong system, adjustable AFC with switch, adjustable AM selectivity, separate FM and AM front ends (shock-mounted), cathode follower output, fully shielded, aluminum chassis, self-powered. \$164.50

FISHER 50-Watt Amplifier MODEL

Truly the world's finest all-triode amplifier, yet moderately priced. A man's size unit! Less than 1% distortion at 50 watts (.08% at 10 watts.) IM distortion below 2% at 50 watts. Uniform response within .1 db from 20 to 20.000 cycles; 1 db, 5 to 100,000 cycles. Hum and noise more than 96 db below full output. Quality components throughout. \$159.50 96 db below full output. Quality components throughout.

Prices slightly higher west of the Rockies

WRITE TODAY FOR COMPLETE SPECIFICATIONS

FISHER RADIO CORPORATION · 45 EAST 47th STREET · N. Y.

NOTED WITH INTEREST

Continued from page 13

to their report, but serves those who use wire instead of tape.

While we think these clubs are wonderful, we have not decided whether to look upon them with approval or disapproval. It depends on the children of the nation. The modern child no longer needs the 'rithmetic part of the three R's; mechanical gadgets will do it quicker and better. Talking books threaten another R. Wire and tape correspondence clubs may threaten the final R. If the kids are smart, they'll promote organizations such as the Global Talkawire Club for all they're worth!

Better Slogan?

After 18 months of work and a consideration of 2,000 different slogans, the RIAA (Record Industry Association of America) settled on this slogan to recommend to its members:

"Make Friends With Records," For what it's worth, we'd like to suggest another one:

Make Better Friends with Hi-Fi.

More Binaural

We had a letter recently from Phil Richman, of the Harshe-Rotman advertising agency in Chicago, telling us about the stereophonic or binaural broadcasts which had started over WMAQ-FM-AM. Wonder how many stations are now broadcasting binaurally on a regular schedule? We keep hearing about tests, from all parts of the Country.

Actually, Richman wrote us about a proposed "Tested in the Home" report on the new Ampro tape recorder; we're looking forward to receiving one early this fall for a report.

Obstreperous Secretaries

Tis rumored around that a good many of our readers are mad at us for having published the article about the General Radio Sound Survey Meter. We warned readers that secretaries would borrow the meter to prove their working conditions were dangerous, etc. Which, it seems, some did - and now the bosses are having their hands filled to overflowing.

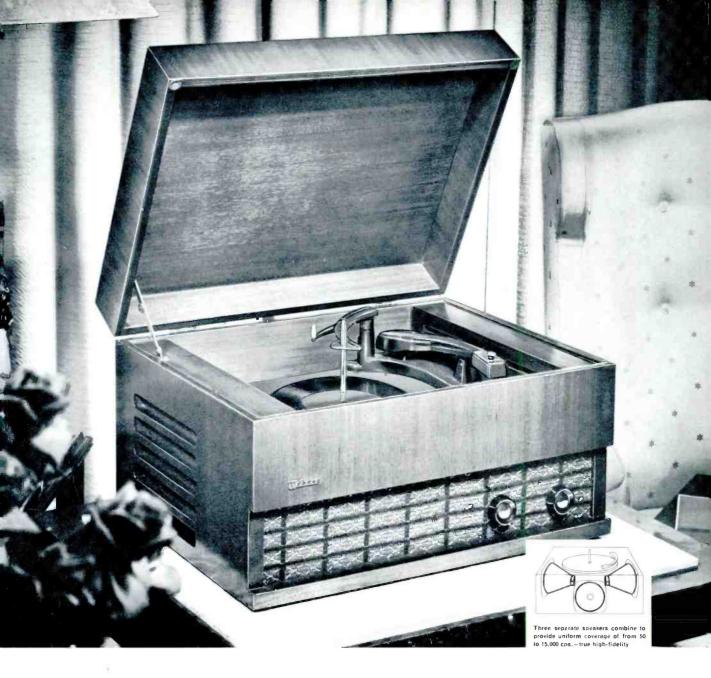
However, a few other readers have written saying, "You started something. Now in saying, "You started something. Now finish it. My office is noisy: let's be serious about it." All right, we'll start by suggesting that they write the General Radio Co. (Cambridge, Mass.) for a copy of their Experimenter, June 1953 issue. There's an interesting article in it by Jerome R. Cox, Jr., of the Liberty Mutual Insurance Company's loss prevention department, on making noise level measurements related to working conditions.

New Lead-in Wire

Anaconda Wire & Copper has developed a new type of lead-in wire which looks extremely interesting. It's designed to have

Continued on page 19

HIGH FIDELITY MAGAZINE



PRESENTING AN ALL-NEW CONCEPTION IN RECORD REPRODUCING INSTRUMENTS

THE WEBCOR Musicale

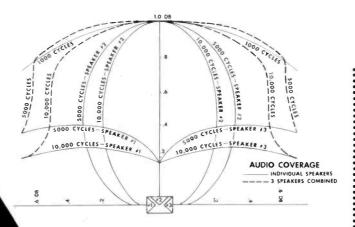
Here, for the first time, is an entirely new method of transferring sound from a recording to the human ear—with full high-fidelity.

Here is the Webcor Musicale, a fine record playing instrument whose THREE speakers bring into the

American home true high-fidelity—from 50 to 15,000 cycles—at a price all can afford.

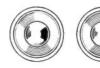
Now the famed Webcor name, which for decades has stood for the finest in sound, is on an instrument truly worthy of its superior performance.

TURN THE PAGE FOR EXCITING DETAILS OF THE NEW WEBCOR MUSICALE





The Musicale audio system has a uniform response of from 50 to 15,000 cycles. A total of THREE speakers are used to cover the entire audio range with evenly distributed sound without distortion.



AUDIO LEVEL CONTROL

The conventional volume control is eliminated and in its place is the Audio Level Control which varies or sets the audio level without changing the frequency response.

RESPONSE CONTROL

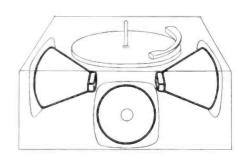
A new sensitive Response Control provides critical adjustments in frequency ranges to accentuate the treble or bass.

The inside story of the Webcor High-Fidelity

THREE SPEAKERS!

A total of three separate speakers are utilized in the Webcor Musicale to cover the entire audio range with uniform response. This wide range coverage fills the entire area with sound without distortion.

When placed against a wall, the Musicale uses this surface as an additional sounding board. However, audio coverage charts show complete response from any direction of the Musicale.





AMPLIFIER

A five-tube (Including rectifier) AC amplifier using pushpull 6V6 output tubes in a negative feed-back circuit. This provides five watts of audio power with negligible distortion.



RECORD CHANGER

The famous Webcor type 121 automatic three-speed record changer, spring-mounted to eliminate rumble and vibration. Automatic shut-off after last record.



PICKUP

The General Electric wide range, triple-play magnetlc cartridge is used in the Musicale. The cartridge is matched to the amplifier by an especially compensated preamplifier.

THE CABINET...The Webcor Musicale cabinet was acoustically designed to balance the basic components. With the lid closed, the Musicale is a bass reflect cabinet.

Available in the natural (blonde) and mahogany (dark) finishes, each unit is hand rubbed by furniture craftsmen for a long-lasting finish. Imported Ribbon Stripe African mahogany and Korina woods are used exclusively in cabinet construction.

The Webcor Musicale gives you the "living presence" of high-fidelity music

FOR CERTAIN Special PEOPLE









A VERY Special INSTRUMENT

For music reproduction, there is one best — the AMPEX MAGNETIC TAPE RECORDER. If you were to visit the studios of a major record manufacturing company, you would find that Ampex is the recorder that makes and plays master tapes of priceless performances. If you could have such a master tape, and could play it on an Ampex, it would be like having a symphony, an ensemble or a great soloist perform right in your living room.

And you can. With an Ampex Tape Recorder in your home, you can make your own master tapes from live performances on F-M radio. These reach your home with a quality and brilliance similar to that which reaches a professional recording studio. You record these performances while you listen to them. They become your "musical library." You can replay them any conceivable number of times. Their extraordinary fidelity is completely permanent.

The Ampex Magnetic Tape Recorder can fit your home as a logical part of a high fidelity custom music system. The Ampex and the music system are complimentary, each uses the quality of the other. Both compliment your taste in fine things, well placed.

Recorders priced from \$975.00 For further information write Department F-1278



934 CHARTER STREET, REDWOOD CITY, CALIFORNIA

Distributors in principal cities; Distribution in Canada by Canadian General Electric Corporation



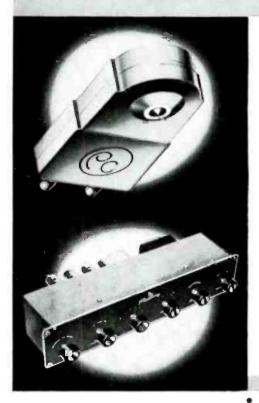
An Ampex in a typical custombuilt cabinet containing FM and AM radio, recorder, and disc record changer.



PROFESSIONAL **AUDIO** EQUIPMENT

BALANCED COMPONENTS

MAXIMIZE PLAYBACK PERFORMANCE



PICKERING CARTRIDGES . . .

are the choice of audio engineers throughout the world. They are universally acclaimed because of their high output, wide range performance and low distortion. They are used wherever a fine cartridge is required in radio stations, recording studias and for purposes of quality control by leading record manufacturers.

MODEL 410 AUDIO INPUT SYSTEM . .

is designed to provide a complete audio control center. Model 410 may be used in any high quality playback system. Three input channels are provided—one for magnetic cartridges and 2 "flat" channels for other audio circuits. A 3-position equalizer network is built into the magnetic cartridge channel and provides accurate equalization for LP, AES and 78 rpm recording characteristics. Separate bass and treble controls are also provided. These are of the step-type and permit bass and treble adjustments in 2 db increments. The tone control circuits are intended to compensate for record characteristics and for listener-environment occustical conditions. They are not intended to compensate for amplifier and/or loudspeaker deficiencies. Model 410 is intended for use with the highest quality professional type playback equipment. The output of the Model 410 is fed from a cathode-follower circuit and will work into any high quality audio or line amplifier having a high impedance input. It may also be used with a transformer for the purpose of feeding a 500 ohm line. Because of its flexibility, low noise and low distartian level, it is ideally suited for bridging and monitoring purposes and for critical listening applications.



THE MODEL 190 ARM ...

is designed primarily for use with microgroove records. Its design has been recognized by leading audio engineers as that which incorporates all of the desirable tracking characteristics. Analysis has shown that for maximum performance with LP records the vertical mass of the moving arm element must be held to a minimum and further, that the arm must be counterbalanced about the vertical axis. This permits minimum stylus or tracking force and provides maximum record life. The Model 190 Arm embodies these all important features necessary for proper microgroove record playback.



MODEL 230H EQUALIZER-PREAMPLIFIER . .

- Is unique in its accuracy of equalization and
- frequency response. The intermodulation
- distortion is .2 per cent at normal output level. It is intended for use with high quality
- amplifiers having gain and tone controls.
- When used with the Pickering Model 132F
- Record Compensator the 230H is Ideal for
- radio station and recording studio use and for
 - applications requiring accurate low noise
- and distortion free playback.



MODEL 132E RECORD COMPENSATOR . . .

is designed to be used in conjunction with a magnetic cartridge preamplifier such as the Pickering 230H or any preamplifier which provides 6 db per octave bass boost. Six playback positions are incorporated:

- 1—European 78 rpm Records
 2—Victor 45 rpm and Decca 78 rpm Records
 3—No high frequency roll-off,
 500 cycle turnover
 4—All Capitol Records, new Victor 331/3,
 Audio Englneering Society Curve
 5—Columbla, London and most LP Records
 6—To remove the hiss from old noisy records

- Precision elements are used in its construction to give accurate compensation. The 132E is inherently a low distortion R-C device.

PICKERING PROFESSIONAL AUDIO EQUIPMENT

For those who can hear the difference

...Demonstrated and sold by Leading Radio Parts Distributors everywhere. For the one nearest you and for detailed literature, write Dept. 11-2



PICKERING and company incorporated • Oceanside, L. I., New York

NOTED WITH INTEREST

Continued from page 16

very low loss (1.5 db per 100 feet at 100 mc) and to withstand the weather better than other types. Atmospheric conditions (dampness, high humidity, sea air, smoke and gases) are serious matters in many-localities. Anaconda's ATV-270 FOAM leadin consists of two wires imbedded in foamed polyethylene which, it is claimed, virtually eliminates the problem of internal moisture condensation. Impedance is 270 ohms.

New Phonograph

Webster-Chicago announced in July a new phonograph player which has some interesting features. It uses three speakers in a table model design — a speaker at each side and one at the front, which should give excellent sound dispersion. Other features include: 5-tube, 5-watt amplifier; GE triple-play cartridge; 3-speed changer; uniform audio response from 50 to 12,500 cycles; and a loudness control instead of a volume control. Price around \$150.

New Amplifier

Announced in mid-June was the Rauland model 1826 amplifier and remote control unit. Specifications are excellent . . . an unusual stunt is to design the case of the remote control unit to look like a book. It's a true remote control unit — equipment such as phonograph cartridges are plugged into the amplifier chassis, which may be "up to several hundred feet" from the remote control unit.

Components into Cabinets

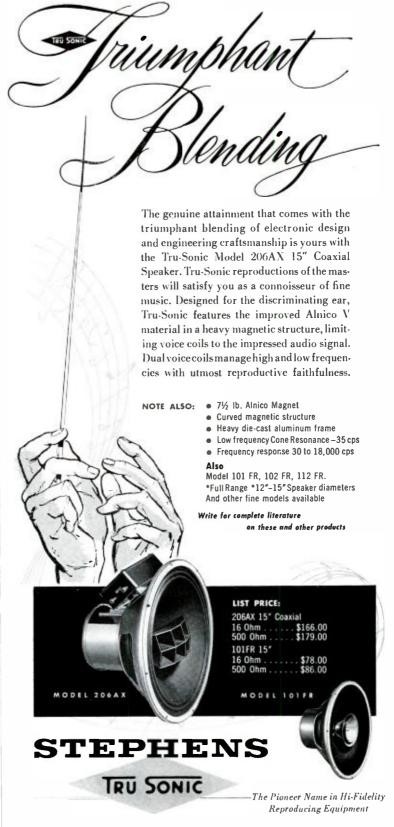
Stromberg-Carlson for some time has made, among other things, radios and public address equipment. It added its now well-known Custom 400 hi-fi components (which, by the way, will probably be reviewed in the November-December "Tested in the Home" section). The Custom 400 line included cabinets. So now, Stromberg has put its hi-fi components (including FM-AM tuner, Gartard changer, 12-inch coax speaker in acoustical labyrinth) into a cabinet, for the convenience of the "many who are unwilling to take the time or trouble to assemble their own units or build them into existing space". Prices are just under \$600; two cabinet styles are available.

I Do . . . on Tape

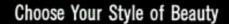
Warren Syer, our Promotion Manager, takes a dim view of the increasing divorce rate. So when his sister-in-law was about to walk up the aisle, he decided to try a new wrinkle to insure permanency. He borrowed the Ampex, which we had for a report in this issue, and our Altec mike, and taped the whole proceeding. Everything went smoothly, and no one was nervous, except Warren, of course, and — believe it or not and perhaps for the first time in history — the minister, who got a bad case of mike fright!

The tape is marvelous . . . wonderful

Continued on page 23



STEPHENS MANUFACTURING CORPORATION • 8538 WARNER DRIVE • CULVER CITY, CALIFORNIA

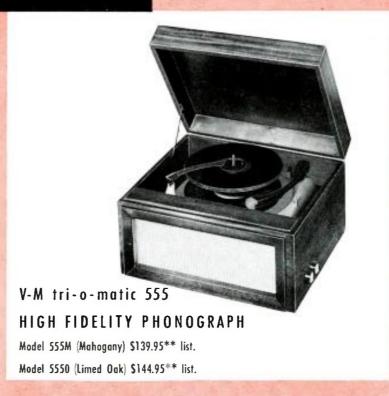


Just plug in and play



tri O matic

555HF HIGH FIDELITY PHONOGRAPH



V-M OFFERS TWO SUPERB

with Three matched 5" ultra-wide range speakers! Choice of two furniture finishes

Ready to play, ready to please lovers of high fidelity music, the new Model 555 high fidelity phonograph combines the ultimate in life-like tone with richly beautiful furniture styling. It offers unsurpassed convenience too, for those whose homes or apartments are not suitable for built-in high fidelity systems.

Check these Significant Features

Three 5" ultra-wide range speakers with heavy duty Alnico 5 magnets. All three face the front to assure full, balanced tone even when phonograph is placed between high pieces of furniture.

- 5 tube performance from powerful 4 tube (plus electronic rectifier) amplifier with push-pull out-put stage and dual purpose tube.
- Die-cast tone arm of aluminum is rigid and resonance-free, counter balanced.
- 20 to 15,000 c.p.s. tonal reproduction! Special weather-proof ceramic "flip-under" cartridge with new type sapphire needles.
- Intermodulation distortion eliminated by negative cathode feed back in audio circuit.
- Conveniently located controls for tone and volume provide full range control.
- Choice of two furniture finishes! V-M Model 555 available in gleaming Mahogany or handsome Limed Oak cabinets. Huge golden grille of expanded metal covers and protects the three 5" speakers. Inside the cabinet is the massive V-M Model 951, with contoured

gold base plate, maroon 2-needle tone arm and record support arm. This is the changer found in the leading radio-phono and TVphono combinations. The 555 is styled throughout to add true beauty to any home.

- Siesta Switch shuts off everything (amplifier too) after last record plays . . , no jumping up to turn off the 555!
- Tri-o-motic Spindle protects records. Records are gently lowered (not dropped) to spindle shelf, held flat for silent air-cushion drop to turntable.
- Automatic Tone Arm Setdown for 7", 10" and 12" records.
- Plays Intermixed 10" and 12" records (of same speed) automatically.
- Absolutely Jamproof Mechanism! ANY moving part may be held without causing damage.

WORLD'S LARGEST
MANUFACTURER OF PHONOGRAPHS
ANO RECORD CHANGERS
EXCLUSIVELY

V-M CORPORATION

BENTON HARBOR, MICHIGAN

20 High Fidelity Magazine

Choose Your Style of Beauty



V-M 935HF
RECORD CHANGER \$59.95**
"all the music is all you hear"

Install and enjoy



triamatic

935HF HIGH FIDELITY RECORD CHANGER

HIGH FIDELITY INSTRUMENTS!

First record changer specifically designed for high fidelity performance!

All the music is all you hear, with this precision-built instrument in your high fidelity music installation. Every part of the handsome gold and burgundy V-M 935HF is fashioned with meticulous care to give you full enjoyment of faithful record reproduction through the entire audio range. In addition

you receive unequalled record protection and record playing convenience.

These Features Are Proof of Quality!

Exclusive aluminum die cast tone arm that is absolutely resonance-free! Two precision-made plug-in tone arm heads (1 red, 1 gold) adaptable to most cartridges.*

Laminated turntable and exclusive

4-pole, 4-COIL motor assure constant, exact speed operation. Flutter, wow, hum and rumble are eliminated! Muting switch provides silent change cycle. Gentle triomatic spindle eliminates record holders that grip the grooves. It lowers records to spindle shelf, holds them flat for silent, air-cushion drop to turntable. The automatic V-M 45 Spindle is included.

*Pre-amplification stage required with electronic type pickups.

** Slightly higher in the west.

VISIT THE V-M DISPLAY! INTERNATIONAL SIGHT AND SOUND EXPOSITION room 765

Palmer House, Chicago, September 1st, 2nd, 3rd

ALSO AT THE AUDIO FAIR NEW YORK CITY IN OCTOBER

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V-M Corporation, Benton Harbor 1, Michigan Please send me complete information on:

Address State

SEPTEMBER-OCTOBER, 1953

S HERE TO STAY IT ALL ADDS UP

The cost of the arm alone is \$35.00. items by both musical and the naural" records cost no more where. New recording sessions record companies. Others ing recorded after careful screening of talent and materof "3-D" has passed, they will still be outstanding collector's Binaural" records are now available at jobbers every-Cook, and in at least two other plan to augment this steadily growing library. Both classical and popular selections are beial so that when the newness most exacting audiophile's recording standards. Yet "Biare under way at Livingston,

one else to do it, Livingston now releases a complete stereophonic sources currently available. Conhi-fi channels from cartridge to loudspeaker, 3 twin inputs have tone-controls for highs and lows After waiting patiently for sometwin-channel amplifier designed specifically to take full advantage of the many 3-D sound sisting of two complete 10 watt been provided for disc, tape, and on both channels mean that exeven with a conventional monno earth-shaking claims for this citing effects can be obtained, aural program source. We make unit. It's just a darned fine 2channel amplifier, good enough binaural broadcasts. Costs only \$149.50. cially available-the new Fairchild diamond stylus markable part of this new arrangement is the savings passed on to the user. Over twenty dollars! Thus Livingston has made available the finest luxury type equipment at less than the cost of a compromise. The and realism available from this cartridge. There was no sense in our supplying high fidelity recordings if the material recorded couldn't be taken "off the record!" he Fairchild Cartridge is the guarantee of minimum record wear and maximum fidelity to the amplifier "3-D" fans will be delighted to learn that the Living-ston Binaural arm is now available, optionally, with Fairchild cartridge has impressed us with its remarkand hum, and of course above all, the refreshing purity what we consider to be the finest cartridges commer-Model 215's. These cartridges are carefully matched, before shipment. This means that only the final adjustments, after installation, are necessary. The reably high compliance, its freedom from needle talk The combination of the Livingston Binaural Arm and installed, and tested in each arm by our laboratory nput. This combination is available for only \$89.50.

As to speakers—even two dollar units sound better with 3-D but the ultimate choice of your speaker system is primarily a matter of your own tastes and requirements. The additional speaker required for the second channel might be considered an auxiliary unit. It need not be a cost factor until the rich advantages of this medium have sold themselves

We're stumped! Call it what you will: "3-D," "Stereo," "Binaural"—it's just a word until it's heard. It's impossible to convey any kind of picture that will prepare you for the pleasant shock of your first good 3-D playback. For example, its hard to accept the fact that a few binaural watts seem fuller than a tremendous blast of monaural power. We give up! You'll just have to hear it.

Prove it to yourself in your jobber's sound room that a complete, fine 3-D system can cost less than a compromise

* Products Manufactured by

CORPORATION ELECTRONIC LIVINGSTON

Livingston, New Jersey

NOTED WITH INTEREST

Continued from page 19

rolling organ, tremulous-voiced bride, people in the church clearing their throats noisily ... the whole "works". We're going to have a story on it in a forthcoming issue.

In the Good Old Summertime

The summer will be over when this issue reaches readers. For some, that will mean the end of live music concerts, for others—the beginning. Summertime music has become an enormous social factor in the U.S.A. perhaps we are unduly aware of it because of our proximity to the Tanglewood activities. From the first part of July until the end of August, there is something musical going on almost every day of the week.

Yet we are not alone in being blessed with summer festivals. The June issue of Music Journal did a round-up of summer music which brought out forcefully the throughout-the-Nation character of these activities.

California Audio Show

Last minute word has arrived at the Editor's desk that Northern California will have an audio show all of its own. It's to be called the Northern California Audio Show and will be held September 25, 26, and 27 at the Palace Hotel in San Francisco. More than sixty manufacturers of equipment and records will exhibit.

New Tape Recorder

Wilcox-Gay has announced a new tape recorder which they house in a drawer at the top of a 30-inch high cabinet. It features a 6-watt amplifier and 12-inch speaker in a bass reflex enclosure. Speeds are 3¼ and 7½ ips. There are push-button controls, fast forward and reverse speed, many another feature that deserves attention. Tape recording is becoming more and more interesting.

In Passing . . .

In closing, we'd like to borrow and transcribe into our own language an idea we found in Geoffrey Sharp's Music Review. We'd put it:

If you find HIGH FIDELITY interesting and helpful, tell your friends—

If not, tell me. Charles Fowler

H. H. SCOTT

still setting the standards



the new H. H. Scott 121" DYNAURAL Equalizer Preamplifier

We believe the new "121" control unit to be the finest ever offered. For the connoisseur, the "121" affords complete control and compensation for any record and record condition, past, present and future. Rolloff frequency and both turnover frequency and extent of boost are continuously adjustable for any equalization curve. The amazing Dynaural. Noise Suppressor gives you actual concert presence by virtually eliminating turntable rumble and record scratch or hiss. The improved rumble suppression is essential if you are to enjoy fully the range possible with new extended-bass speaker systems, Self-powered, finished in durable hand-tooled leather, the new "121" Dynaural control unit offers every refinement possible at this state of the art.





220-A Power Amplifier 120-A Equalizer

210-B DYNAURAL Amplifier

Preamplifier

214-A Remote Control Amplifier

From earliest days of high fidelity, H. H. Scott amplifiers have consistently set design and performance standards. Rated "first choice" by C. G. Burke in the "Saturday Réview Home Book," they have been commended as linest on the market by experts such as Harold Weiler author of "High Fidelity Simplified". In 1951, the John H. Potts Memorial Medal of the Audio Engineering Society was awarded to H. H. Scott for important contributions to audio science. One of the world's leading manufacturers of laboratory-standard sound measuring and analyzing instruments, H. H. Scott, Inc. received the 1949 "Electrical Manufacturing" Award for outstanding instrument design.

The patented Dynaural. Noise Suppressor is unique. So are many fundamental features sometimes difficult to rate in specifications. But these contribute to that essential difference separating the superb from other units. Listener-designed loudness compensation, lovest beat-tone intermodulation, 3-channel tone controls, the self-balancing phase inverter which automatically balances output tubes (standard on all H. H. Scott amplifiers for 6 years) — these are but a few of the reasons for the pre-eminence of H. H. Scott amplifiers.

FREE BOOKLET HF953



HERMON SCOTT, INC.

"PACKAGED ENGINEERING"

385 PUTNAM AVE. . CAMBRIDGE 39, MASS.

SPECIALIZATION

MAKES THE DIFFERENCE

Specialization may be defined as the concentration of all effort to a special or specific course of action

Even a mechanical device concerned with the function of record reproduction should possess all the advantages of such specialization.

Most units undertake to do much more. They change records, mix records, flip records, reject records, and assume a multitude of other functions. This is 'generalization' as distinguished from 'specialization'.

The REK-O-KUT turntable, on the other hand, is devoted entirely to playing records. And every design feature, every fragment of engineering know-how has been devoted and restricted to the all-important job of playing records... to provide the constant, steady, unwavering record motion necessary for the faithful reproduction of records free of mechanical distortion.

Specialization makes that difference. And all of the efforts and facilities of the manufacturer shall continue to be intensively devoted to that one objective... that one aim: To make the finest turntables in the world.

There is a REK-O-KUT Turntable for your specific discriminating requirement. Seven models are available at prices ranging from \$59.50.

At Leading Radio Parts Distributors and at Sound and Music Dealers.

Write for Descriptive Literature

VISIT ROOM 636 at the AUDIO FAIR in NEW YORK

RECO-KUT

TURNTABLES

REK-O-KUT COMPANY, 38-03M Queens Boulevard, Long Island City 1, New York Export Division: 458 Broadway, New York 13, U. S. A. Cables—Morhanex In Caffada: Atlas Radio Corp., Ltd., 560 King Street, W., Toronto 2B



Lexicon of Musical Invective, by Nicolas Slonimksy. 296 pages, 6 x 9. No illus. Index. Cloth. Coleman-Ross Co., New York, 1953. \$6.

The composer worked and worked and worked. Finally he produced a piece of music he liked and which he thought would communicate something to an audience. It was played . . . and then what happened? A critic sat down sourly at his writing desk and dashed off a few well-chosen words:

. . . As hideous a thing as we have ever heard . . . an orgy of ugliness and an abomination. May we never hear it again!'

This particular critic, luckily, didn't have his wish. That was in 1898, and A Night on The Bare Mountain, by Modeste Mousorg. sky, is still very popular concert fare 55 years larer. Nor does anyone regard it as an abomination.

The critics blast at Moussorgksy was one of hundreds which Nicolas Slonimsky has collected in this unusual book, a lexicon of abusive music reviewing since Beethoven's time. Beerhoven himself drew only mild abuse, mostly evidence of puzzlement, though a writer for The Harmonicon (London) furnished some sort of answer to "How wrong can you ger?" when he said of the *Eroica* in 1829: "If this symphony is not by some means abridged, it will soon fall into disuse." At that, he hardly bears out the Parisian critic who told his readers: "Rigoletto lacks melody . . opera has hardly any chance to be kept in the repertory.

Mosr of the comments do not even stir righteous wrath on behalf of the ill-rreated composers, when read years later. They simply sound preposterous. Who was the savage monster whose music a critic described as: ". . . A symphony to welcome the headhunters with their ghastly spoils of war." No, ir was not Igor Stravinsky. It was Claude Debussy. Just the same, even when the reviews are silly and unjust, some of them are funny. Read this one, from Keynote (New York), 1884: "In the finale, 'Bacchanale of the Brigands', in Berlioz's symphony, Harold in Italy, the brigands seem to be holding a church sociable... and the way that the percussion section is let loose adds much to the percussedness of the proceedings."

Philharmonic, by Thomas Russell. 208 pages; 41/4 x 7. Paper bound. Penguin Books, Baltimore, Md. 1953 (First published in 1942). 50 cents.

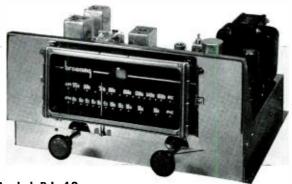
"Such a unity of time, place and intent," (Thomas Russell's apr description of a performance by a symphony orchestra) is

Continued on page 28

HERE'S THE NEWEST

Browning FM/AM Tuner

The ideal mate to the modern, full-control amplifier.



Model RJ-42

Only two controls are used with the RJ-42 FM/AM Tuner - one for tuning, the other for switching. The latter has four positions: OFF -AM - FM with AFC - FM without AFC. Duplicating none of the controls of the audio amplifier, this new tuner is particularly suited to use in custom installations. A feature of convenience for such installations is a pre-settable output-level control, at the rear of the chassis, to adjust tuner output to amplifier input requirements.

The FM section of the RJ-42 gives you

- New, all-triode RF section, for extremely low noise level.
- Higher sensitivity—3 microvolts for 20 db. quietingdesirable in fringe areas and noisy urban locations.

. . . and, of course, the standard Browning features: true Armstrong circuit, selectable AFC, compensation for drift-free operation, and sensitive tuning eye for fast, precise tuning. Audio response, flat ± 1/2 db. from 20 to 20,000 cycles, satisfies the most critical high-fidelity

In the AM section, covering 540 to 1650 kilocycles

- · Superhet circuit with triple-tuned IF's and separate AVC detector to minimize distortion.
- Sensitivity 1 to 2 microvolts with audio output flat within 3 db. from 20 to 5500 cycles, down 6 db. at 6800 cycles.
- Effective 10-kilocycle whistle filter that does not affect AM fidelity.

For remote installations, a cathode-follower output stage is provided to feed any high-fidelity amplifier, at low impedance, from either the FM or the AM section. This minimizes hum difficulty and high-frequency loss through cable capacitance.

With all these advantages, the RJ-42 Tuner is only $14\frac{1}{2} \times 11\frac{1}{2}$

For detailed specifications, write us for Bulletin HF-4.

For FM reception only—the Browning Model RV-31 Tuner . . . with the same exceptional FM circuitry as the Model RJ-42. Brochure on request.





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Research and Development Division

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INCREASED FIDELITY

INCREASED LIFE CYCLE

INCREASED UTILITY

INCREASED FREQUENCY RANGE

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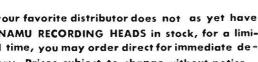
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If your favorite distributor does not as yet have DYNAMU RECORDING HEADS in stock, for a limited time, you may order direct for immediate delivery. Prices subject to change without notice.

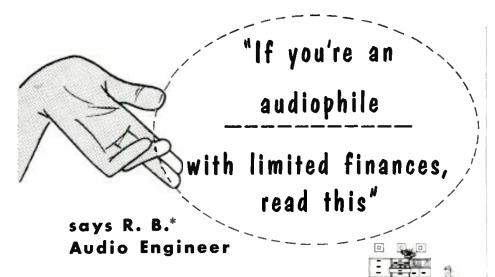




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WRITE FOR INFORMATION

2140 RAND TOWER MINNEAPOLIS 2, MINNESOTA



Chances are, you're a hi-fi fan. Otherwise you wouldn't be reading this magazine. No need to sell you on the advantage of high fidelity sound. More likely your audio purchases are governed by limited funds. That's why Pentron's high fidelity equipment is specially designed for notwealthy folks like you and me.

Pentron's tape recorder mechanism and matching pre-amplifier bring you the full tonal range between 50 and 11,500 cps. This range is enough to satisfy hi-fi bugs, since probably 99% of all recorded sounds fall within this span. It gives you every ounce of fidelity that can be achieved without disproportionate cost. You'll hear exciting "room presence" music, faithful to the live performance.

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But don't take my word. See and hear the professional Pentron yourself. There's no obligation. Send the coupon!



Professional features at a price you can afford

- Push-pull speed change 3.75" and 7.5" ips.
- Up to 2 hours recording and playback. Wind or rewind 1200 ft. in 40 seconds.
- Flutter 0.3% at 7.5", 0.5% at 3.75".
- Frequency response: \pm 3db, 50 to 11,500 cps at 7.5 ips; \pm 3 db, 50 to 6,500 cps at 3.75 ips.
- Inputs: radio, phonograph, microphone. Outputs: audio omplifier, headphones.
- Industry's most complete line of accessories.

SEE PENTRON'S COMPLETE LINE

New York Audio Fair, Room 711 Chicago Sight Sound Fair, Room 787



BOOKS

Continued from page 25

no small achievement, and "if you think it is easy to create such an orchestra," as J. B. Priestly says in the Introduction to this fascinating little book, "just try creating

Although Mr. Russell did not create a symphony orchestra, he was manager of one, the London Philharmonic, from 1940 to 1952. He also played the viola in the LPO from 1935 to 1939 and, while Manager, founded and edited the LPO's magazine, Philharmonic Post. He is eminently qualified to discourse on the organization and administration of a symphony orchestra as well as the personnel, programming and financial problems which beset one.

Probably the most important thing Philbarmonic does is to explain the need for all that money you have doubtlessly contributed, from time to time, to symphony orchestra funds. Seldom has a symphony orchestra supported itself and, Mr. Russell assures us, it is just as difficult to raise pounds in support of British orchestras as it is to raise dollars in support of American orchestras.

Should there be a Ministry of Fine Arts, to organize and support a country's music? Russell says absolutely not. "Its name alone betrays it," he says. "It connotes a Minister, a gentleman moved by political exigencies, liable to be changed and replaced at any time for reasons not always connected with his abilities." As in this country, the most satisfactory solution to the problem of financing seems to be Municipal sponsorship, a method which was illegal in Britain until permitted by a 1948 Act of Parlia-R. H. H., Jr. ment.

The Story of the Metropolitan Opera, by Irving Kolodin. 607 pages, 61/2 by 91/2. Illustrations and index. Cloth. Alfred A. Knopf, New York. \$7.50.

Here are, in effect, two separate books. The first comprises two sections, "Patrons and Purposes," and "House and Home." and deals with the social and financial fortunes of the Met from its birth (1883) to the present. The second is titled "Operas and Artists," and consists chiefly of a massive listing of singers and works presented at the Met over the years. The first is readable and of general appeal. The second is hardly easy reading, but it probably isn't supposed to be. Mr. Kolodin, music editor of the Saturday Review, is an authority on Met history, and this book is intended, at least in part, as a reference work.

Just the same, it has some very lively bits, notably where Mr. Kolodin deals, not kindly, with the behavior of the Morgan-Vanderbilt group which virtually ran the Met in its early days. Most readers may well share his feelings as they read of Henry Clews' and Elbridge T. Gerry's reaction to protests by music-lovers in orchestra seats against excessive chatter among boxholders during performances. Gerry and Clews announced (in the New York Times) that the stockholders were tired of being rebuked by the ticket-buyers and would conduct themselves as they pleased. Furthermore,

Continued on page 31



RRIDAL NEWS



Tuner-Amplifier Wedding arouses Hi-Fi interest



An event of country-wide interest occurs with Stromberg Carlson's announcement of the "wedding" of two popular components in its "Custom 400" line.

The already-accepted features of the High Fidelity "SR-401" Radio Tuner and the "AR-410" 10-watt Amplifier are now available in one chassis-at a price considerably below the cost of the separate com-

An interesting advantage of the new "SR-405" receiver-amplifier combination is its easy application to the modernization of existing Radio-Phonographs. Fine old players-with cherished cabinetry but lacking true high fidelity-can be brought to top performance by substituting, for the old tuner and amplifier, this compact 131/4 x 8 x 12-inch unit.

Further information and the name of your nearest dealer gladly furnished on request.

SPECIFICATIONS

Audio Power Output

10 watts at less than 1% total harmonic content.

Frequency Response

FM-20 to 20,000 cps. ± 1.5 db.

AM-20 to 7,500 cps. ±3 db. Interstation whistle filter; Microphone, Television, Crystal Phono and Magnetic Recorder inputs 20-20,000 cps. ±1 db.

Meets RTMA specification REC-129-C for minimum radiation

Base Control

Control provides	12	db.	boost
Loudness control at 10% rotation	10	db.	boost
Maximum Bass Basst	22	dh	

Control provides 20 db. droop at 10,000 cps. Loudness control provides 6 db. boost Maximum Treble Boost 18 db.

Radio Sensitivity

FM-3 microvolt signal produces 20 db. quieting. AM-5 microvolt signal produces 1 watt output using low-impedance antenna terminals; 15 microvolt signal using high-impedance

Input Sensitivity for Rated Output

Magnetic phono input-low level .008 volt, high level .08 volt: Microphone .008 volt: Magnetic Recorder, Television and crystal phono input .1 volt. Crystal phono input and Magnetic Recorder input sensitivity easily changed to 2.0 volts.

Output Impedances

4, 8, 16, 120 and 600 ohms. All 600 ohms at +8 VU level.

Output Voltage Regulation

FM-72 to 300-ohm for use with dipole antenna. AM-High impedance for short antennas, low impedance for low impedance loop or long antenna with coaxial cable lead-in.

Power Supply

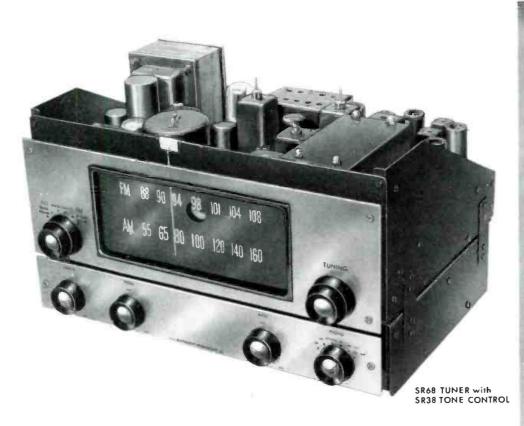
117 volts, 50 to 60 cps., 138 watts. Tube compliment-16

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Like Sargent-Rayment professional equipment, SR Tuners, Amplifiers and Tone Controls offer you clear-cut superiority in design, construction, endurance, and — most important — performance. For example, here are typical points of superiority you'll find in SR units.

- Over 300% less harmonic distortion in AM detector
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- AFC-controlled FM terminating in Foster-Seely limiter discriminator
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- Ultra-linear circuit in amplifier; 0.1% distortion at 18 watts output

Discover for yourself the difference between ordinary and quality high fidelity equipment. See and hear SR tuners, amplifiers and tone controls at your local jobber or sound dealer's. Then note the moderate prices. Actually—the best costs so little more!



"The New High in High Fidelity" gives full details of the unique Sargent-Rayment circuit approach; the many unusual plus features of SR equipment, the exclusive "building-block" construction of SR units. Complete specs, data on all SR home equipment.

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BOOKS

Continued from page 28

continued the two cultural arbiters, "all persons who hiss the licensed conversationalists should be put out." Equally edifying is the account of Miss Georgine Iselin's box-deal in the 1920-21 season. Miss Iselin, a multi-millionairess, sublet her box (for which she had been assessed the usual \$4,500) for 47 performances for \$9,525. Thus she made a profit of \$5,025 and had the use of the box free for the other 80 performances. In other words, she got \$33.77 per opera for each of six seats that had cost her \$8.72 a piece, plus a reputation for patronizing the arts.

It is made clear by Mr. Kolodin that, in its first 50 years, the most important folk around the Metropolitan were the social lions in the boxes, not the singers on the stage. This aspect of the Golden Age, we may be thankful, has vanished.

The lengthy (497 pages) second section, dealing with operas and arrists, is not very entertaining reading, any more than its source materials might be, for any but the enthusiast in matters Metropolitan. It is as if an enormous stack of Met programs, leavened by a few newspaper criticisms, (mostly by W. J. Henderson) were thrown at your head. The sum total of information is awesome, but the critical comments seem to me too brief (and too often W. J. Henderson's) and illustrative anecdotes about the artists are almost entirely lacking. Apart from these reservations, Mr. Kolodin is to be congratulated on what may have been a labor of love but was certainly a real labor. The result is impressive. W. B. S.

Audio Amplifiers and Associated Equipment. A Howard Sams Photofact Publication. About 350 pages, $8\frac{1}{2} \times 11$. Paper. Howard W. Sams & Co., Indianapolis. 1953. \$3.05.

This is the fourth volume in a series dealing with audio amplifiers, tuners, and some public address equipment. The format is similat to that of previous Fotofact compilations. For each unit reported, photographs give overall as well as detailed under-chassis views, with all parts clearly numbered and identified. A complete parts list and a wiring diagram are also provided.

The Howard Sams Fotofact folders are essential working tools for the serviceman and are of great help to the experimenter or home hobbyist who wants more technical information about specific equipment.

The four volumes together constitute a complete library providing information on practically all audio equipment introduced since World War II.

A detailed index, by manufacturer and equipment type number, refer not only to the latest volume but to the three preceding issues.

Included in this volume are reports on the following amplifiers: Altec-Lansing, Amplifier Corp. of America, Arthur Ansley, Bell, Bogen, Brook, DuKane, Grommes, Leak, Masco, Radio Craftsmen, Rauland, H. H. Scott, Steelman, Stromberg Carlson, Webster-Chicago, Webster Electric; and on

Continued on page 114



All in One Complete Unit!

A cabinet . . . styled by MAURICE that will complement and grace your decore—excite the envy and admiration of your friends.

In addition to its startling beauty—the new Utah Brillante marks an epoch in the design and engineering of a high fidelity sound enclosure—because the name Utah—a pioneer in the field of sound reproduction—assures you the finest in design, engineering, production and performance. It is right because it is made right by Utah.

Glowing with the splendor and lustre of fine woods—hand rubbed to a rich patina of fine furniture—the new Brillante sound enclosure—is either genuine honduras mahogany or blond korina—is a master achievement in the art of woodworkina.

A high fidelity speaker system . . . designed by UTAH to produce clean, sparkling, brilliant tone covering the entire audio spectrum with minimum phase distortion clean, smooth fundamental bass and bright, clean highs.

In the new Brillante speaker system are incorporated all the latest developments and improvements in the field of high fidelity sound reproduction—all the engineering knowledge acquired by Utah's expert sound engineers over a period of 30 years of outstanding achievement in the field—a knowledge backed up by production know-how.

Design, engineering, quality and performance are built right in the new Brillante speaker system.

See the Brillante at your local Hi Fi Headquarters or write for the Brillante brochure High Fidelity Dept.



IQUE in physical and electronic design, the Regency High Fidelity Ensemble has been developed and built without regard to cost for the ultimate in performance and maximum in "concert hall presence." The ensemble consists of three separate units: the pre-amp equalizer, the power amplifier and the power supply. All units are non-hygroscopic-providing complete protection against all adverse effects of moisture. Each unit is individually calibrated and each has an individual response curve which is supplied with the ensemble. The equipment is guaranteed forever against defects in material and workmanship (tubes-standard RTMA 90 day guarantee). Exceptional care and research have gone into locating and testing the most advanced, precise and long lasting components. All transformers and chokes are hermetically sealed for life-time operation. Precision low noise 1% carbon film resistors assure permanent accurately balanced circuits. Non deteriorating oil filled capacitors are used in all high voltage circuits. This selection of components assures a lifetime of optimum performance.

An outstanding innovation is the variable crossover compensator which provides much closer matching to crossover characteristics of the better loudspeaker systems.

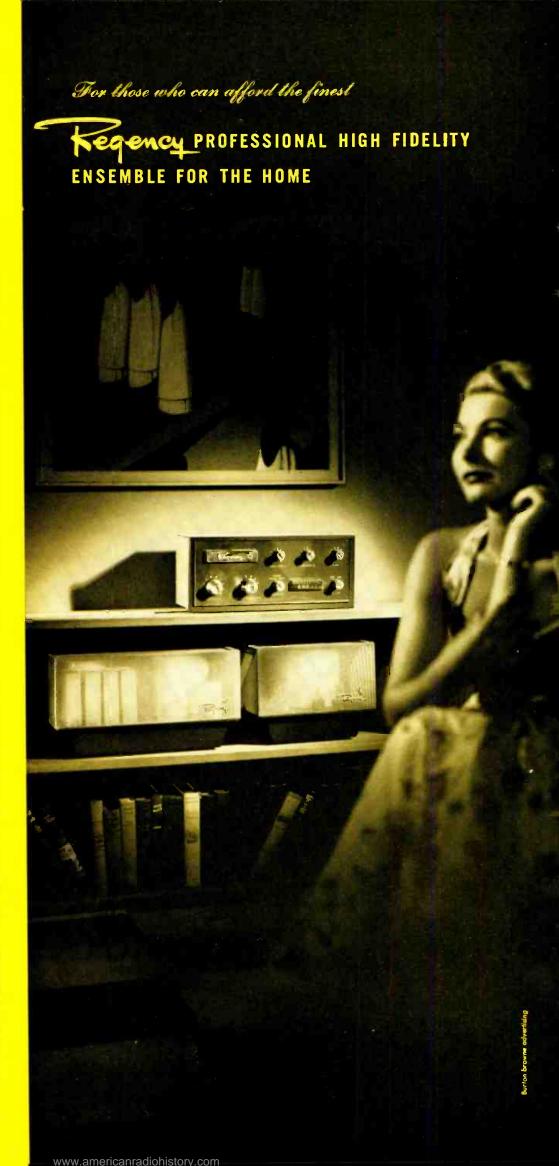
One low impedance and two high impedance inputs are provided, each with a continuously variable level compensator.

Equivalent noise input level 10 microvolts.

In addition to a flat response across a range both ends of which are far beyond the limits of audibility, the equipment has an unusual characteristic flexibility which allows precise adjust-ments not only for the source of the sound but for the particular room acoustic and individual psycho-acoustics. This is achieved by an extraordinary range of controls which are: a continuous variable loudness control which selects proper Fletcher-Munson curve to a particular listening level; gain control (which is a recording level compensator); six position cross-over selector for adjustment to various recording characteristics; low frequency response equalizer (step control—each position provides approximately 1.2 db per octave compensation), high frequency response equalizer (step control-each position provides approximately 1.2 db per octave compensation). The flexibility assured by these controls makes each Regency owner his own impressario.

An utterly new concept in appearance, Regency's Professional High Fidelity Ensemble is designed with such striking simplicity that it need not be housed in a cabinet. The gold and black units are show pieces worthy of display in modern or traditional surroundings. Regency designed the set to be functional as well as beautiful with handsome perforated gold shields to protect the unit...protective plate glass tops reveal the impressive component assembly.

by the makers of the Regency VHF TV booster and UHF TV converter egency 7900 Pendleton Pike, Indianapolis 26





SIR:

On page 38 of the Winter, 1951, issue of HIGH FIDELITY is a picture of Mr. C. G. Burke's charming living room. Have you thought of selling prints suitable for framing?

Edgar R. Jones Schenectady, N.Y.

Mr. Burke's living room, a fantastic maze of amplifiers, tuners, turntables and assorted audio equipment, has often been cited hy hi-fi wives as proof that our favorite cultural phenomena is a menace to the American home. As our part in frustrating this sinister libel, we will refrain from reprinting the picture of Mr. Burke's living room. — Ed.

SIR:

I've been thinking of a means of producing a perfect-fidelity speaker system. Know of anybody who wants to do some experimental work toward producing one? The idea I have in mind is a basically new approach, and one that would yield a speaker system that would be non-resonant throughout the total audio range, and would have equal efficiency of transduction from 1 cps to 20 kcps. It's going to take some research to achieve practical mechanism, but the basic idea allows of such development.

Proposition is this: No diaphragm can reproduce transients and low frequencies both. But it must. Reason: An abruptly terminated low-frequency cannot be abruptly terminated without a high-frequency transient. An organ playing a deep bass note terminates that note in a large-size hurry; it just stops when the air-jet is cut off.

The system of woofer-tweeter can not handle this, because the woofer is still vibrating. If a 200 cps note is terminated in 0.1 millisecond, the speaker, to follow it, must stop vibrating with an abruptness that represents 10,000 cps minimum response rate. The woofer-tweeter system cannot do this, and, in fact, will do a poorer job on it than a one-cone speaker. At least the one-cone speaker will apply the 10 kcps damping signal to the correct cone! With a woofer-tweeter, the 0.1 millisecond damping signal is applied solely to the tweeter — which doesn't need it!

The only way it can be done mechanically is to imagine a diaphragm of zero mass, infinite rigidity and very large diameter. This diaphragm could transfer energy at low or high frequency, and could be damped perfectly.

That can't be done, so let's forget diaphragm methods entirely.

Instead, let's set up two crystal drivers.

Continued on page 35







 Home-monic Distortion is a problem caused by exposed wires, bare speakers and assorted Hi Fi equipment in your living room. Solving it is easy — Angle Genesee Custom Cabinets. Angle Genesee Hi Fi cabinets are designed for any combination of equipment.

Order in one of these ways.

- Let us make a custom design for you from your list of equipment. We will send you drawings free.
- 2. Order to your specifications by designing your own cabinets from our instruction sheet.
- 3. Save time and money by ordering from our variety of Standard cabinets.

Angle Genesee speaker cabinets are available with the famous Stromberg Carlson Acoustical Labyrinth.

Send for illustrated brochure and complete information.

Especially for you Custom Built by

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107 Norris Drive . Rochester 10, New York

HIGH FIDELITY MAGAZINE

READERS' FORUM

Continued from page 33

operating at about 1 megacycle, and delivering about 30 to 50 watts of energy to the air. They're designed so that they nearly produce cavitation due to the steepness of the wavefront.

Under these conditions, air becomes a completely non-linear medium for sound waves!

Now we modulate one of the two crystal drivers and the result is that we have a beat-frequency detector system, with the atmosphere itself acting as the detector.

Power is cheap. If our detection system were only 20% efficient, we'd be able to get plenty of audio sound power out, and not pay much. For one thing, we could use a pair of tubes running Class C, so we could get 75 watts or so out of ordinary 616's.

One megacycle supersound won't travel more than a few feet in air anyway; by projecting it inward, away from the room, anything that wasn't used in producing the hetrodyne beat sound would be consumed readily in the lining of the speaker cavity.

Obviously, with no audio-frequency diaphragm present, it can't have resonances in the audio range.

Cutting off our 0.1 millisecond termination is now easy indeed — it represents 100 cycles of our megacycle driver.

I'd genuinely like to find someone interested in doing experimental work on the idea.

John W. Campbell, Jr. Mountainside, New Jersey

SIR:

I have read with interest your article on building an apartment size air-coupler. What I am interested in particularly is the proper speaker enclosure for concealing the open rear of the speaker so that the unit can be placed in a corner and not affect in any way the response.

Edward E. Feinstein Jackson Heights, N. Y.

Such an enclosure has been designed by the article's author, Roy F. Allison, and will be on display in the HIGH FIDELITY exhibits at the Chicago and New York Audio shows.— Ed.

SIR:

I wish to relate a most curious prophecy come true regarding my air-coupler. Ph.D. friend of mine, whose primary interests are Oriental and Hittite literature, muttered something about how "It'll come to no good" when he first saw my air-coupler. He asked me caustically what the by-product was and said it would one day run amok. I laughed then, but that was before I reduced the cross-over frequency from 350 cycles to some lower value by adding capacitances here and there. Yesterday evening, about midnight - we were all asleep my wife and I heard a growling and creaking noise in the living room. I felt around under the bed for a stray tweeter (one of those hard-hitting University jobs - I always keep one under the bed) and I went out to do battle.

The thing seized me as soon as I entered Continued on page 37 It's true! Itec Fidelitu

actually

costs less!



The A-433A/A-333A Amplifier Combination has EVERYTHING...

Record Cross-Over Control, more power "with lower distortion," wider frequency...priced amazingly low at \$198.00



The 601A Altec Duplex Speaker.

Unconditionally guaranteed, when mounted in a properly designed cabinet, to reproduce all of the tones from 30 cycles to 22,000 cycles. Only Altec makes this quality guarantee. The cost, \$99.00

This famous Altec Lansing combination gives you the superb quality of world-famous ALTEC Fidelity at a price you can afford, a price actually lower than many ordinary sound systems. Ask your dealer for a demonstration of Altec Fidelity. Let your ear decide and your pocketbook approve.

SEE YOUR DEALER
OR WRITE TODAY!





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CREATED TO REPRODUCE THE REALISM, CLARITY AND EXTENDED RANGE OF

THE NEW COLUMBIA 360*

The smallest, lowest priced high fidelity instrument ever developed!

Plays all records, all speeds, automatically. Reproduces 50-12,000 cycles without distortion. Engineered and built by CBS Laboratories and Columbia Records. Available in limited quantity. \$139.50 in mahogany. other finishes a little more. (Price slightly higher west of the Mississippi.)



Enjoy the full magnificence of these new Masterworks releases on the Columbia 360:



*EXCLUSIVE DEVELOPMENT OF COLUMBIA RECORDS

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PICTURES AT AN EXHIBITION -FIREBIRD SUITE

Infinitely superior to any other recorded versions of these works! The Philadelphia Orchestra conducted by Eugene Ormandy in Columbia's greatest hi-fi achievement. ML 4700



MOZART-SYMPHONY NO. 40 AND SYMPHONY NO. 35

Two symphonic favorites on one high fidelity recording! Bruno Walter conducting the Philharmonic-Symphony Orchestra of New York. ML 4693.

READERS' FORUM

Continued from page 35

the room. I struck out at the monster, but was buffeted by strong air-currents and finally thrown right out of the room. I locked the bedroom door and decided to stay where I was. Next morning I discovered the living room a shambles. One corner of the rug and undercover had been eaten, and I finally found pieces of hastily chewed Axminster way back inside one of the air-coupler tubes. I think it must have been hungry for a little baffling. Do you think the cross-over is too low? I don't know what to do now. I think it's asleep.

Robert Newcomb Professor of English Bridgewater College, Va.

SIR:

The type cabinet Mrs. Bruce Burns describes in the May-June issue can be obtained from Freedman Artcraft of Charleroix, Mich. Units appear (from magazine ad) to be standard filing cabinets, but enlarged specifically to hold LP records. Single units may be stacked one on top the other or used with legs as end tables, lamp tables, etc. Quoted prices per drawer unit vary from \$49.95 to \$52.70 depending on finish.

R. E. Nicholson, M.D. Hartford, Conn.

SIR:

Through an early issue, I obtained the name of a cabinet maker in San Francisco who made excellent hi-fi cabinets. I have since met the man and he has built two cabinets for me—an equipment console and a speaker cabinet—that my better half regards as her two best pieces of furniture. So I have High Fidelity and Permastyle Furniture Co., 950 Columbus Ave., San Francisco, to thank.

[Your] binders are excellent for my copies of HIGH FIDELITY as my subscription is read by one complete submarine crew. Through this magazine and a little hi-fi pride on my part, we have about 12 converts. However, the words "high fidelity" still mean "squeaks" to the uneducated.

Lt. Robert L. Brown U.S.S. Pomodon FPO San Francisco

SIR:

Step up and shake hands with the country's foremost Low-Fidelity Fan. Where others design their sound systems to go TING, I have designed mine to PLUFF. I have replaced the tweeter with a fluffer, a cathode follower with a cathode leaver, and have a cross-under network that pipes all frequencies over 8,000 into a sound-proof box in the basement.

I was unaware of the entire hi-fi business until I bought my first copy of your most excellent magazine. Soon I began to find fault with my system which consists of a 20-year-old RCA radio with the 12-inch speaker built into a nice bass-reflex housing fed exclusively by a Revere tape recorder. I developed Listener Fatigue, an allergy to the distortion I suddenly began to hear, and other symptoms.

So I took me to the local Hi-Fi Hangout and returned loaded with amplifiers, co-axial speakers and the like.

Continued on page 30



DID YOU KNOW that buried away in your own phonograph records there's a treasure of beautiful music you probably bare never heard? It's true! Today's High Fidelity recording (and broadcasting) techniques bring you music with a clarity and tonal range never before possible outside the concert hall.

To enjoy this full measure of realism, you need an instrument capable of reproducing all the music without distortion—a High Fidelity home music system.

Now, in one package, the world's most respected name in High Fidelity brings you a complete system of perfectly matched units—the Ctaftsmen "ASSEMBLY."

You get the performance-proved Craftsmen FM-AM Tuner and Amplifier ... two new Craftsmen speakers coaxially mounted and 3-speed record player with dual sapphire magnetic pick-up . . . many accessories, too.

The Craftsmen "ASSEMBLY" is waiting for your critical ear in the sound rooms of a Radio Parts Supplier near you. Drop in today for a demonstration of distinctly better listening.

Send for this booklet on High Fidelity by DEEMS TAYLOR

Ask your Supplier for a copy of this 24-page booklet by Deems Taylor—or write to us, enclosing 10¢ to cover hondling and mailing.



high fidelity by craftsmen means distinctly better listening

The Radio Craftsmen, Inc., Dept. HA, 4401 N. Ravenswood Ave., Chicoge 40, Illinois

Marian Anderson

chooses Revere Tape Recorder



"An unusually pleasant experience awaits anyone who will become acquainted with the Revere Tape Recorder."

Marian Anderson

One of the world's most honored artists, MARIAN ANDERSON, has been granted awards and degrees from universities, societies, governments, and cities, including the \$10,000 Bok Award from her native Philadelphia. This famed contralto has performed in 400 cities on four continents—and this year adds the Far East to her crowded schedule. In the words of a New York critic, Marion Anderson provides "solace to the ear and to the spirit, too."

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

The New REVERE
"Balanced-Tone" RECORDER

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

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

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

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

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

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

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





REVERE CAMERA COMPANY . CHICAGO 16, ILLINOIS

Model T-700—Complete with microphone, radio attachment cord, 2 reets (one with tape) and carrying case......\$225.00

Model TR-800—Same as above with built-in radio.....\$277.50

Model T-10—Studio Model, Speed 7.50.\$235.00

Model T-20—Same with built-in Radio.\$287.50

Model T-100—Standard, 1-hour play...\$169.50

Model T-500—Deluxe, 2-hour play....\$179.50

READERS' FORUM

Continued from page 37

I first installed the speaker, and listening to the assorted scratches and shrieks that came from it persuaded myself that I was really living! But wait until I get that flat-to-50,000 amplifier in! Then you'll see the fur fly! This was done in short order and putting one of my best tapes on I sat back prepared to swoon.

Fast applications of a cold compress and a pair of Flent Ear Stopples soon remedied most of the damage, and a broom disposed of the family of bats that had suddenly appeared and were clustered about the speaker, listening intenrly. As soon as I had answered the last phone call from an irate local dog owner I packed up the gear and returned to the Sound Shoppe.

Wondering if it was the equipment or just me, I had the boy rig up a Hallicrafter FM tuner, a Jensen Tri-Axial Speaker and a McIntosh amplifier. I listened shudderingly until suddenly it sounded fine! "Ah, now that's more like it!" I said. Then I saw that the lad has his hand over the little tweeter; really a handy little device. Why, all you have to do is cover the 11/2-inch opening and all the nasty scratch and rasp plum disappear!

I am having a custom-built amplifier made using 71-A and 201-A tubes that I have purchased from the Smithsonian Institute and will be happy to send a report when com-

And now to speak of your publication, One, I am delighted by the air of humor that pervades all your writings. The light tone is fine, and I hope you keep it. Two, I am pleased that even a layman can understand your articles. Three, your furniture and custom articles are a delight to my wife who likes this sort of thing. It is unfortunate that she has such a poor mechanical aptitude that she cannot operate my combination radio-tape recorder-phonographwire recorder and telephone-answering machine which has 18 switches, 16 push-buttons, eight dials, and about 10 lights of various colors and requires that six switches be manipulated simply to turn the damn thing on. I am planning a built-in aptitude tester that will check the mechanical ability of the person attempting to operate it, and issue an automatic \$10,000 life-insurance policy to anyone scoring below 160.

John Goldston St. Louis, Missouri

SIR

Here is a short saga that is revealing and, to not a few, may be vital.

We have just come to the successful conclusion of a trying day.

To a good Hallicrafters receiver (tuner and amplifier) and Jensen speaker we added a Garrard changer, GE diamond pickup cartridge, GE pre-amplifier and GE record com-

When the new system was completely installed we found that many of our records lacked the lustre they had had on the old, cheap manual player, and were so poor that they were impossible to take.

Trial and error finally gave way to the idea that if the records were originally Continued on page 110



by UNIVERSITY

Now you can have good "looking" with good listening! Each University MUSICORNER design is authentic in every detail, and reflects the traditions of the old masters of fine furniture. All genuine woods-hand rubbed! Designed to flatter the decor with stylings that smartly blend with any existing interior.

University Musicorner gives you wide angle coverage, crarity and brilliance with its full front radiation. High power handling ability and distortion control, with an internal and extended horn. And, boosted low frequency response with high efficiency, from its unique integral bass reflex system.

the Traditional Model UR-311. in Cherry or Cordovan Mahogany User Net: \$ 64.50

THE HEART OF THE Musicorner

coaxial dual range system, with woofer, and driver type tweeter, built-in crossover network, and "balance" control. Finest to be had! User Net: \$ 45.00

Model 6201, 12" coaxial speaker system. A TRUE

The exclusive University Diffusicone-12 speaker is acclaimed by experts everywhere! Here, In the economy of one speaker you get dual-horn loading, radial projection, and diffraction-to give unsurpassed fidelity, range, and uniform sound distribution. User Net: \$ 27.00

> Model 6200, 12" extended range speaker. Gives highly efficient full-bodied response throughout the operating spectrum. User Net: \$ 21,00



describing these ondertul enclasures in greater detail.



The Magic of Ceramic

high fidelity systems

the Revolutionary, **NEW** ultra·linear €√ PHONO•CARTRIDGE

Out of the sound laboratories of EV now comes a contribution to high fidelity that is revolutionary in every respect. Yes, the "magic of ceramic" brings you the very ultimate in listening pleasure—providing ultra-linear response to the Audio Engineering Society reproducing characteristic. At the same time its feather touch virtually eliminates all record wear.

The new EV cartridge is interchangeable with all existing types. Because of its high output, it can be used WITHOUT pre-amplifiers. For use with pre-amplifiers, a special adaptor is available, or minor modifications can be made to the amplifier in minutes.

> Write for bulletin or drop in at your dealer. See and hear the great auditory advance these EV phono-cartridges bring to Hi-Fidelity reproduction and enjoyment.

Electro Voice

Buchanan, Michigan

Export: 13 E. 40th St., New York 16, U.S.A. Cables: Arlab

features

FLAT RESPONSE

HIGH OUTPUT

 \pm 2.5 DB from 20 to 15,000 CPS. Well within high professional standards of AES. .5 Volts working into recommended 3-megohm load. No preamps, NO microphonic problems.

NO HUM

Inductive pickup from motors or stray fields is eliminated.

HIGH COMPLIANCE

Greater than unity! 1.2 x 10-6 dynes/cm. Practically NO record wear, tracking problems minimized.

NO EQUALIZATION REQUIRED

The Ultra-Linear cartridge is INHERENTLY

ULTRA-LINEAR, FEATHER-TOUCH MODELS

AS THE EDITOR SEES IT

E NOW wish to make what posterity may come to recognize as our greatest single contribution to mankind and civilization: a pair of simple words which, we predict, will eventually find their way into the daily language of every home in the country. The words are: filithe bidgy.

Filithe hidgy is sweeping the country. It is being written about in the best magazines. Tremendous advertising campaigns are being loosed to take advantage of the new popularity of filithe hidgy. It is changing the character of whole industries.

The trouble so far has been that no one has been able to describe this national craze, this phenomenon, in one or two simple words. You can understand, therefore, how really tremendous is the contribution which we are making.

Since in essence filithe hidgy means nothing and is nothing, anything can have it. Any product, from soap suds to corn plasters, can claim that it is (or has) filithe hidgy.

Now, for the sense behind the nonsense-syllables: As you have no doubt discovered, by a simple twist of the alphabet, we can make our subject a very serious one indeed. A bit of letter-shifting, and we are discussing high fidelity. The serious part is the danger that the words "high fidelity" may become as meaningless as filithe hidgy.

For, during the summer months, high fidelity has burst upon the public at large. It has been described in detail in a mass-circulation magazine; it played an important role in a fiction short which ran in another multi-million-reader publication. Which is splendid. The more people aware of hi-fi reproduction of music, the better. We would be delighted, as would every other hi-fi enthusiast, to have the whole world asking, "What, exactly, is high fidelity?".

Unfortunately, the sudden popularization of high fidelity may well encourage hundreds of entrepreneurs to appropriate these magic words and to use them to help sell products that haven't the slightest relation to high fidelity. Can't you see it: "high fidelity corn plasters fit the toe!"

Of course, high fidelity corn plasters are silly. But it is not the least bit funny when a New York newspaper runs an advertisement which says, in part, "But did you know that high-fidelity usually means a frequency response of 50-15,000 cycles? With 'X', you get 10-watt pushpull output and a frequency response of 20-20,000 without distortion. That means 'X' is a higher Hi-Fi." (At a price of \$149.95!).

This advertisement is misleading and contrary to fact, as we know it. It will mislead the hundreds of thousands who may be wanting to join the tens of thousands for whom "high fidelity" has a specific and known meaning.

To those tens of thousands we address this editorial. First, we would call their attention to a situation with which many are probably already familiar. Second, we would charge them with the responsibility of propagandizing as widely as possible the true meaning of high fidelity as they know it. Third, we suggest that before the gospel can be spread, it must be stated. We must have something specific to talk about.

It seems to us that it is of first importance to define, as soon as possible and as specifically as possible, exactly what high fidelity means. It should be defined in technical terms, in the language of engineering specifications. It should also be defined in what we would like to call literary or plain English terms.

There are a good many qualifications which have come to be accepted as external indications of hi fi or low fi. For instance, speaker enclosures separated from the main body of the equipment, or the assembly of diverse components, are both currently considered characteristic of hi-fi rigs. Such criteria are inadequate. There is no technical reason why a manufacturer could not assemble a series of components into a single cabinet and still keep the fidelity high.

Wide frequency range, smooth response over that range, and low distortion at reasonable output power are important technical qualifications. But how wide should the range be? How smooth? How low must distortion be? Those are difficult questions, particularly since the technique of what has been called psycho-acoustic appraisal has not been advanced to a point where the correlation between technical specifications and listening pleasure has been determined with certainty.

Nevertheless, and difficult though it may be to arrive at one, a definition of high fidelity is needed.

Therefore we ask readers to consider the problem and to give us their thoughts and their definitions. We ask manufacturers and dealers to do likewise. We will publish whatever looks to us like good ammunition for the battles to come. Because — make no mistake about it — we must drive home the fact that fine music reproduction requires far more than a tag on which are printed the words "high fidelity". — C. F.

It's colossal!

It's stupendous!!

... IT'S ERINAURALIVI

by Hollis Alpert

Moviedom's new wide screens and 3-D pictures almost require the kind of sound Walt Disney once demanded of sound engineers — he wanted them to make a buzz follow a bee's picture across the screen! Here is a report on the "stereophonic" progress screen-sound men have made so far.

A MAN whose line of work is movie reviewing — as mine happens to be — has been hard put to it in the past year or so attempting to keep up with all the technical innovations from Hollywood. If I hadn't already been assured that producers pay little, if any, attention to reviews (unless they're all-out raves), I might have suspected this whole bother about 3-D and wide, curved and paneled screens, was a means of keeping the reviewers' minds off the story content. One tends to forget how bad a picture is when worrying about the latest type of wide screen and something called its aspect ratio, along with its comparative curvature. But it appears that the current Hollywood frenzy is not the reviewer's fault at all. It's that vast abstraction — the public — that is to blame.

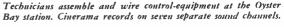
It seems that extraordinary numbers of people went to see one of the worst pictures ever perpetrated, one called *Buana Devil*, because it had been photographed in a 3-D process called Natural Vision. It was also noticed that

long lines formed at the box-office of a theatre showing something called Cinerama, even though not quite all the bugs — to put it kindly — had been ironed out of its projection process. With this spreading interest in new technical developments, there was nothing for the reviewer to do but to learn a whole new vocabulary, especially since terms like "panoramic screens" and "peripheral vision" are rapidly going into household usage.

Now, to further complicate a reviewer's life, we have movies coming along that offer us stereophonic sound, added to a wide screen added to 3-D. I suppose I ought to make a frank admission, at this point: I never realized that I was missing very much when movies failed to provide, all these years, that extra sound dimension. I got along fine somehow, and my ears seem to have automatically adjusted themselves to the unstereophonic nature of the dialogue in movies.

If Clark Gable spoke over to the left of the screen

Checking volume levels on recording-and-mixing amplifiers at sound laboratory maintained by Cinerama at Oyster Bay, N. Y.







radiohistory com

that's where my untutored ears heard him. Yet, if I had taken the trouble to go behind the screen I would have noticed that all voices could only be emerging from a loudspeaker placed at the center of the screen. One's ears seem to have a way of providing their own stereophonic illusion, just as one's eyes provide the illusion of distinct curvature to the body of Marilyn Monroe, even when seen on a small, 2-D screen.

But the innovations are upon us, and during a necessary period of experimentation the public is going to be given the opportunity of deciding what it wants. Will it be Paravision, Naturalama, Cinerama, Natural-Vision, Cinemascope, or something yet to be unveiled? There seems to be some agreement that one type or another of the widescreen systems (with or without true depth) will prevail, and that automatically means that directional sound is here to stay. The normal-size screen hardly made it necessary to have sound placement, but when Jane Russell and Bob Hope engage in a conversation separated by a distance of thirty yards or more, some directional sound is going to be necessary to give the scene a semblance of realism. Hollywood is virtually being forced to take an interest in new types of sound systems.

As of the moment, exactly what is the public getting when a picture opens at the "stereophonically equipped" Loew's State in New York City? Strictly speaking, none of the early pictures of this new age are using true stereophonic sound. That would imply that multiple-channel pickups were being used while the sound was being recorded, with a resulting life-like aural perspective. It is safe to say that Hollywood is still lagging in that direction. What has happened is that a single sound track used for recording the picture has been re-recorded to form three tracks on a 35mm magnetic film strip. These tracks are then channeled into one or another of three horns placed at right center and left behind the screens.

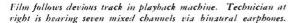
Thus, when John Gielgud speaks at the left of the screen in *Julius Caesar*, you hear his voice from the horn at the left, and when James Mason, off at the right, answers him, it is from the horn at that side of the screen



Mobile recording unit, by Reeves for Cinerama. Only real multiple recording, so far, has yielded convincing stereophonic results.

that you hear him. What you get, then, is a relatively primitive form of sound placement and one that, I might add, is often highly unsatisfactory. Then there is another problem: the farther back one sits in the theatre, the less the illusion of directional sound. This, at the present stage of development, is a help to the customer, rather than a hindrance.

Just as *Julius Caesar* was not photographed for widescreen showing in the first place (the subsequent enlargement of the image destroyed some of the black and white sharpness), neither was it recorded for sound placement





Picture-prints are inspected in Cinerama rewind room. Multiple sound tracks later are inspected awally at playback sessions.



purposes. The dialogue gives a distinct impression of jumping from horn to horn. There are discernible gaps, in other words. This detracts from realism, it doesn't add to it. The same thing has happened in the case of *Melba*, originally scored and photographed for normal-screen use. In Hollywood's much-touted effort to lure people back into the theatres, this weirdly distracting sound must be accounted a liability.

I have no doubt that new movies coming along will offer straight, credible stereophonic sound instead of tricky re-recording jobs. At present, it is pretty much a makeshift effort, and one wonders just when Hollywood will wake up to the undeniably fascinating potential of new recording techniques.

We must make a noteworthy exception, however, in the case of Cinerama. Here we have the first example of stereophonic recording adapted for general theatre use. Western Electric is known to have done some experimentation in this direction back around 1940, but there is some doubt as to whether Walt Disney's Fantasia, for instance, utilized multiple-channel pickups. It's more likely that re-recording was done for sound placement purposes, and while Fantasia's sound was impressive at the time, it hardly would bear comparison with the sound that Hazard E. Reeves, of Reeves Soundcraft, has achieved for Cinerama. Cinerama's sound is distinctly stereophonic in effect; that is, one is conscious, aurally, of both depth and direction.

The inventor of Cinerama, Fred Waller, was working on his new process, one using three cameras linked together, in 1940, and Reeves was invited to one of the early demonstrations. Reeves offered to do the sound job for Cinerama (still called Viterama at that time) but the war intervened, and Waller shelved his plans for the new type of cinema entertainment and adapted Viterama into the famous Gunnery Trainer used by the Air Forces. At the conclusion of the war, Reeves joined Waller on Cinerama and began the devising of a multiple-channel sound recording process.

Reeves decided to go all out for high fidelity, ignoring Motion Picture Academy standards. MPA requires a frequency range of only 8,000 cps. The sound in Cinerama at present goes up to 12,000 cps, but the equipment is capable of a range of 20-15,000 cps. Reeves also concluded that five loudspeakers behind the giant three-panel screen were the minimum for a good stereophonic effect. However, it probably would take seven or eight behind the screen to get the effect Walt Disney once asked for the sound following the flight of a bee across the screen. For the multiple-channel pickup, Reeves used a 35-mm magnetic film with seven tracks on it - five to feed the speakers behind the screen, two others to feed additional horns placed strategically throughout the theatre. For its Broadway presentation, Cinerama uses a total of nine horns. Five are behind the screen, one in front of it, one at each side of the house, and another in the balcony. The extra horns are largely for off-stage and special effects.

In producing a Cinerama film, five microphones are placed about the scene to cover all the action within range of the camera. Other mikes are sometimes placed off to the sides, to the rear, or anywhere

Continued on page 156

Studio orchestra plays into five-channel microphone system for "This Is Cinerama." Outdoor recording produced better results.



HIGH FIDELITY MAGAZINE

Britain's Navy had grog rations; U. S. seamen hadn't. That was had enough. But when word came out that Royal Navy ships were getting higher-fi built-in music, the challenge became irresistible . . .

TURNTABLES AWEIGH!

by James G. Deane

A LANDLUBBER would probably never think to relate the morale of the United States Navy to a phonograph needle.

One day two years ago two civilian Navy electrical engineers from Washington boarded a trim destroyer in Norfolk, Va. The destroyer put out to sea. For that day and the two following, as their vessel bounded over the main, the two passengers moved from one part of the ship to another, carting an assortment of equipment as they went. At the end of the third day they debarked and headed back toward Washington.

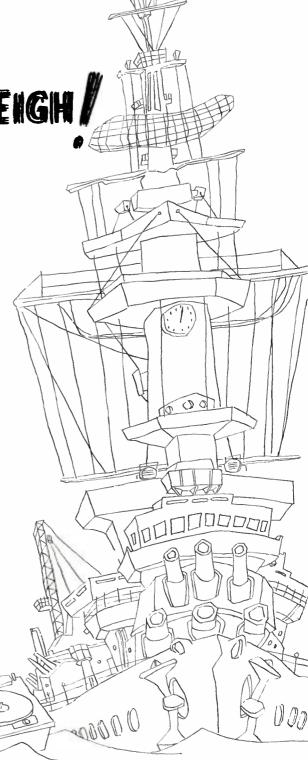
The Navy treated them to the free voyage because it had a problem. In John Paul Jones' day sailors entertained themselves with horn-pipes and chanties. In the atomic age shipboard entertainment isn't so simple. Sailors, like other people, have grown accustomed to hearing Bing Crosby, Benny Goodman and the Dodgers. Warships have acquired radio-loudspeaker systems to cater to this habit.

Radio on the high seas, though, isn't very dependable. Sometimes reception is bad, sometimes the time is bad — a baseball game at 7 p.m. at Ebbets Field arrives at 2 a.m. a few thousand miles away. For these reasons many morale officers have hooked up record players to fill in when radio fails.

But, at best, such setups have been improvised. The speakers are pretty raucous, the phonographs—where they exist—of no standard design or reliability.

Not too long ago the Navy got a bright idea: Why not design a really good radio-phonograph-loudspeaker system and try it as standard equipment for all ships?

This was the project that sent the two engineers to Norfolk. And now the Navy is about to take the wraps off the result — a brand-new,



custom-designed ship's entertainment system, which the Navy believes will give American sailors better seaborne radio and record diversion than they have ever known.

The morale-conscious chaplains' corps and a trio of high-fidelity sound enthusiasts, Paul Weber, Bruce K. Bray and Everett L. Martin, probably deserve the major credit for this enterprising development.

Weber, until he took a new post recently, was supervising engineer of the acoustical section in the Bureau of Ships. Martin now holds that job, and Bray is an engineer in the section.

When Weber, fresh from Cooper Union Institute, joined the bureau as a junior electrical engineer in 1939, the Navy had hardly heard of sound engineers. Weber himself

had little specific knowledge of the subject (it wasn't in Cooper Union's curriculum). He did his home listening then on a low-fi console acquired the year before as a wedding present. (He still uses the cabinet.)

But the Navy was beginning to need sound badly for operational purposes. One of Weber's first big projects was the provision, in 1941, of the first modern warship electrical inter-communication system. Later came special systems for gun batteries and announcing systems for carrier flight decks (most spectacular carrier development: World War II's 1,000-watt multiple unit "God Almighty Horn" with an audibility range of two miles). And gradually, as he became an expert on the business end of acoustics, Weber began thinking about the neglected entertainment side.

It was during the war that loudspeakers for entertainment made their appearance on the Navy's ships. But the development was Topsy-type.

"The entertainment system," Weber recalls, "was designed by radio people, and they gave no thought to the quality of the sound. The sound usually came out at a high level, which overloaded all the speakers, so no matter what you did with the volume control at the speaker it came out distorted. And if it was transmitted at a low level, the system picked up all kinds of ship's noises."

Crews weren't allowed to have their own radios aboard, of course, both because of their weight and the interference they would have caused with the ship's radio and radar. So they had no choice, although no doubt they were grateful for what they got. The fact was, though, according to Weber, that the systems usually were a source of more irritation than entertainment.

Every system operated on an all-or-nothing basis. If there was reason for shutting it off in one part of the ship, it went off everywhere. When one area listened in, so did everybody else, willy-nilly. And there were, of course, no facilities for transcribing radio programs when they came at inconvenient hours, consequently, many were missed.

Lately, a few ships have begun experimenting with tape recorders installed for other purposes, but no such luxuries have been provided to date specifically for entertainment.

Through the war nothing much could be done about these problems. But, one day when the shooting had died away, Engineer Weber read some interesting news. A British warship was acquiring a high-quality speaker and

recording system.

"That triggered us off," he says. He went into some huddles with the chaplains, the chaplains in turn made inquiries in the fleet, and the answer came back enthusiastically. Everybody was for improvement. There was a minor tussle with the radio people, who suddenly felt a little jealousy about their proprietorship of the entertainment channels. But eventually the project got the green light, and the

acoustical enthusiasts went to work.

That was when Engineer Bray set out for Norfolk.

Any phonograph owner who has ever seen his needle jump can appreciate the urgency of that destroyer voyage. Just how much roll and pitch will a phonograph pickup take?

At the outset the acoustical men weren't certain microgroove records were seaworthy at all.

With conventional arms, they weren't. That meant rejecting record changers. But three other types of arms worked.

One was a balanced kind which has become well-known in sales demonstrations for its spectacular ease in playing at a tilt. The second was viscous-damped, resisting motion because of its sticky cushioning material. The third was a surprise — the lowly, abbreviated arm on a 45 rpm player!

All of these did adequately up to an angle of 35 degrees or more.

The speed of the motion actually proved more significant than the angle, according to Bray. The standard decided on was this: that the arm must withstand simultaneously as much as a 25-degree roll in the space of 10 seconds, and an eight-degree pitch in the space of 15 seconds. Under more extreme conditions, say the engineers, nobody will care. There will be other things to worry about.

(Note to landlubbers: Roll is sidewise motion; pitch is the slower movement occurring lengthwise, from bow to stern.)

Because of its simplicity, the balanced arm was the one selected.

The next big problem (leaving aside for the moment

the simpler ones of turntable and pickup) was speakers.

Bulkheads allow scant room. The investigators decided a one-cubic-foot enclosure was the maximum permissible. Eight inches was established as the favored speaker diameter. (Larger speakers proved less effective in the cramped space.)

Then the research switched to the Brooklyn Navy Yard, which has one of the country's biggest sound laboratories.

A jury of twenty persons was recruited from employees of the yard. Twenty-four makes of speaker were marshalled. Then the speakers were tested in this manner:

One was made a reference speaker. Then each of the other twenty-three was compared with it, in turn, on an A-B basis. Jurors had these choices: much better, better, same, poorer, much poorer. Sound-source was a tape recording of a speaking voice, which the investigators felt was more trustworthy than music. The jury was asked to judge the voice's naturalness.

The tests were repeated with three more juries. Then the votes were handed over to a statistician for analysis.

The engineers decided the top six — or any equal to them — would be acceptable. Then the whole batch of speakers was put through a series of electrical and acoustical tests to try to find out why the six were better. In some cases comparative tests were made on 10 speakers from the manufacturer's same production run.

After this was all done, a set of specifications was drawn up. The hope was that any manufacturer, meeting these specifications, would produce a speaker equal to the top six tested. Actually the spec's aren't yet precise enough to guarantee this, but they were good enough to get started with. The laboratory is continuing its tests with the aim of refining the specifications still further.

The speaker now being bought is a good one, according to Bray. The specified frequency response is 100 to 7,500 cycles — compared to a top in the old systems of around 5,000 or 6,000 and only limited bass. The frequency range is limited by the size of the speaker enclosure, Bray points out. Bass much under 100 cycles isn't, in his view, obtainable in a cubic-foot box, and without more bass it's undesirable to push the treble any higher.

One other point is worth mentioning: complete with enclosure the new speakers cost only about \$30, whereas those now in use—each with its own amplifier—cost more like \$300 or \$400. Bray thinks the use of central power amplifiers is a very worthwhile economy.

The next major problem was the system's brain center—the controls. Here the chaplains had a suggestion: keep it simple. Anybody on shipboard might have to take a turn at knob-twirling, they said, so the fewer knobs the better.

What the future twirlers will think can only be conjectured at this stage, but on paper at least the control unit seems quite a neat accomplishment — which it should be, since about \$2,000 worth of labor and equipment is going into it.

It is 40 inches high, 22 wide and 18 deep, built to be bolted to the bulkhead and to contain everything except two 50-watt amplifiers, the radio receivers and, of course, the speakers. Here is how it is laid out:

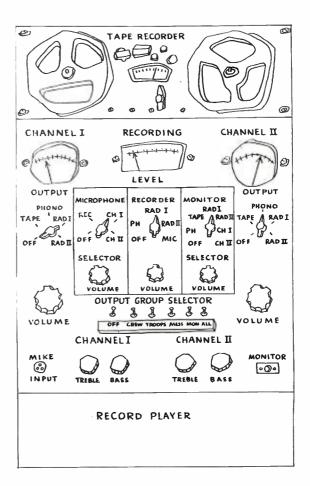
At the top is a standard commercial two-speed tape recorder (worth commercially about \$450). At the bottom, in a drawer that will lock either open or shut, is the record player — a three-speed turntable driven by a four-pole induction motor, plus pickup arm. The turntable has an innovation — a retractable, spring-mounted disk or wafer in the center to accommodate the large center holes of 45 rpm records. Bigger records push the center wafer into a recess. (Main purpose of this design: to eliminate easily-lost loose wafers.)

Between recorder and record-player is the control panel. It is arranged like this:

On the extreme right and extreme left are controls for the two output channels respectively. The two can operate simultaneously; each speaker on the ship will have a selector switch to choose between them. Each channel control includes a volume indicator, a selector knob for the program source, a volume control and separate bass and treble knobs.

Between the two channel control sections are three other sets of knobs. The first is for feeding into the recorder or either channel from a

Continued on page 153



Control panel for ship-wide sound-and-music system. Sailors' fare will range from Mozart to radio-taped Dodgers' games.

TO CO-EXIST WITH COMO, YOU NEED A

Junior-Fi

by H. S. RUMMELL

Maybe you never could learn to love some of your youngster's favorite "pop" records — but there is, at least, a way to make them endurable.



EARLY teen-agers don't demand much in the way of fidelity when playing their curious records. They are inclined to sit on the floor in front of the player — anything that makes a noise will do nicely — turn up the volume and let 'er squawk. Bare intelligibility seems to meet requirements. If others trying to live under the same roof happen to have different standards, a fairly painful situation can develop. It's not always feasible to leave the house. It is sometimes even irritating, especially when it is one's own house.

Long since convinced that there's little he can do about his daughter's taste in music (except rejoice that she has a taste for music and wait hopefully for time's refinement), the writer has taken steps to make the next few years as painless as possible. In the process he's learned a thing or two himself. Believe it or not, Mr. Perry Como does sound worse when distorted than when clean. Further than that I will not commit myself.

The record player pictured was contrived as a Christ-

mas present, and represents a good many evenings of topsecret work in the basement shop. The cabinet began life as a bedside table. It was strictly "borax" (technical term in the furniture trade for flashy junk), but it came close to meeting dimensional requirements. The lower front, the part now covered with grille-cloth, was open, presumably for books, sleeping pills or what have you. The upper panel, where the control knobs protrude, was the drawer front. A sheet of cardboard covered the back of the cabinet.

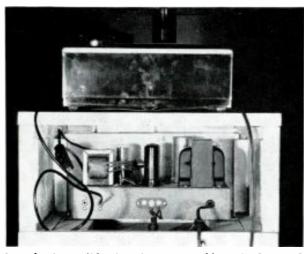
I knew about the back when I bought the piece; I learned about the sides shortly after I sneaked it into the house. Upon tearing into the thing, I found that the side walls, which had looked so thick and sturdy in the poor light of the store loft, were hollow — mere eighth-inch panels of plywood, separated by an inch of air!

After resisting a strong impulse to drag the confounded thing out to the trash pile, I recalled that our friends the British like to build speaker cabinets of cast iron, bricks, masonry and double-walled plywood filled with sand. Deciding that if I couldn't do anything else with my piece of borax, I could at least make it heavier, I borrowed a bucket of sand from my small son's sandpile (after a solemn promise to replace every single grain, come spring). Then I chopped two holes in the inner walls, near the top, and dumped about twenty pounds of sand in each wall cavity. This did indeed add weight, and certainly decreased the tendency of the walls to flap.

Actually, the result is not bad. The side walls now

vibrate less, it seems to me, than others I've built of solid plywood. To complete the job, a plywood panel was fitted to the back, another on the bottom, which was also hollow originally, and a third to serve as a shelf for the amplifier to sit on and as roof for the speaker chamber. It came out a tight little box of two cubic-foot capacity, about right for an eight-inch speaker.

The speaker is a Wharfedale Super 8/CS/AL. This is a beautiful little instrument mechanically. It sounds better than any \$20 speaker Continued on page 154



Daughter's amplifier is a six-watt Heathkit, wired by fond, ear-weary father. It yields "distinctly listenable" sound.

HIGH FIDELITY MAGAZINE





... But Is It Music?

OBODY really knows what the first musical instrument was. It might have been a hollow log pounded with a stick; it might have been a reed in which a column of air was set vibrating, millions of years ago, by the breath of some ancestor of man.

Nobody knows, either, when the first composer invented the first musical composition. Whenever it was, it was not long after that some other composer made a piece of music that was not like what had been heard before. And when the first composer and his friends heard it, they said, there can be no doubt, "That is not music!"

This process has been repeated in every age; composers have never been satisfied with the laws laid down by earlier composers, or with the sounds available to them. Always they have sought for new effects, new instruments, new compositional procedures. Critical hazards seem never to bother them.

Sometimes they find the sounds they want by imposing mutations on existing instruments; sometimes they invent, or, by criticizing, help invent new instruments; sometimes they are presented with a new sound source through accident; sometimes they just go out to the junk heap and rummage around until they find a resonating body that suits their purposes. Twentieth-century composers have frequently adapted to their musical uses objects that were never intended for such combat — brake drums, engines, boards, sirens, Mason jars, wash tubs, whips, vacuum tubes, and so on.

Some of these have been simple, with the simplicity of genius. Arnold Schönberg merely acquired a quantity of chains, whose clank and crash admirably enhanced the super-Wagnerian orchestra of his *Gürrelieder*. Other deviations have led further afield, some ignoring even the limitations of sound.

Alexander Scriabin, a man with a mystical cast of thought, became interested in the theories that tone-colors have correlative visual colors, and he composed his *Prometheus* with a line in the score for what was called a light-

keyboard. This instrument was tuned to a scale of hues rather than pitches, said to be a series of fifths of the spectrum — whatever categorization is possible of intervals between shades. The lights projected from this machine were cast on a screen before the audience. And only his death prevented Scriabin from producing a "mystery" in which a keyboard for odors was to have been played along with the music and the lights. In fact, 'odor concerts" had actually been given during the 1860's in both Paris and New York. Neither idea caught on, perhaps fortunately; fancy going to a performance of Virgil Thomson's Louisiana Story Suite and being greeted by the odors of the swamp, or for that matter, imagine sitting through Benjamin Britten's Billy Budd while an odor-organ faithfully reproduced the smell of the 'tweendecks of an eighteenth-century man-'o-war.

However, most inventive composers concerned themselves with the ear alone. Between the two World Wars, all kinds of sounds — and noises — made themselves heard, and sometimes felt, from the concert platform. Before the Communist Party line veered to exclude everything but the folksy simplicity of "people's music," a Soviet composer named Alexander Mossoloff wrote a piece called The Iron Foundry. It came very close indeed to sounding like its title. It represented, oddly enough, the operating sound of an iron foundry, in terms as literal as can well be imagined; it was program music par excellence, but without a real program. It could only be called "representational" music. Its novelty lay in the fact that it offered nothing else. Earlier, Ottorino Respighi had used the recorded sound of a nightingale in Pini di Roma, as composers before him had used the representational effects of bird-calls played by instruments of the orchestra; but the rest of Respighi's music was evocative, depicting what Respighi felt while thinking about pine trees and Rome as he sat composing. In Aaron Copland's Rodeo, a barn dance can represent, in individually harmonized terms, a barn dance. Continued on page 148



Left to right: Fred Plaut, Howard Scott, David Oppenheim, Blanche Thebom, Igor Stravinsky, Hilde Gueden. Photo by Dennis Stock.

We have long suspected that a strong spiritual kinship exists between photographyaddicts and high-fidelity enthusiasts. Although we still can't prove this, we can present, as evidence, this sampling of superb photography by an expert sound-man.

A VISITOR to Columbia Records' studio control room during a session will find the usual battery of recording paraphernalia—tape machines, elaborate arrays of levers and knobs, assorted engineers and, of course, musicians. The visitor will also see very prominently displayed next to the recording console a rather unusual piece of studio equipment—a Contax II camera, with an assortment of

Zino Francescatti, in one of Plaut's rare action shots, takes a last-minute practice-lick at some tricky Bach.

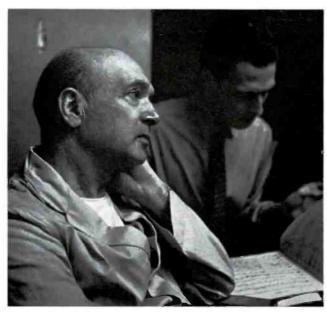
lenses for same. The Contax and its owner are as familiar to Columbia recording artists as the microphone.

Proprietor of the Contax, now in its sixteenth year of recording-session service, is engineer Fred Plaut, a lavishly-mustached gentleman who bears a striking resemblance to his fellow Frenchman, the late actor Raimu. When he's not occupied as maestro of the microphones and

Hearing himself play the Mendelssohn concerto, violinist Nathan Milstein neglects his hetween-movements sandwich







Joseph Szigeti, sometimes called a philosopher of the fiddle, looks the part as he judges his own playing.



Violinist Isaac Stern, in tennis pullover, appears to approve of the way he has played a Prokofieff sonata.

overseer of the circuits, Fred is busy taking pictures. His subjects are composers, conductors, singers, instrumentalists and even lady poets, all (or nearly all) completely absorbed in listening to playbacks of their recordings and completely unaware of the photographer.

Fred has taken 15,000 pictures of members of the world's most critical audience — musicians listening to themselves. His photographs have appeared on record-album covers

and in three exhibits at the New York Museum of Modern Art, as well as in numerous national magazines and newspapers. Primarily, though, he takes pictures for his own edification and amusement.

His dual career began more than 20 years ago in Paris, when he found himself torn between two intense interests — recording and photographing. Plaut resolved the dilemma by opening a recording studio and acquiring

Lanky cellist Gregor Piatigorsky falls into the contemplative mood of an andante as he hears it played back to him.





Harpsichordist Wanda Landowska, RCA-Victor artist, snapped by Plant in her country home.



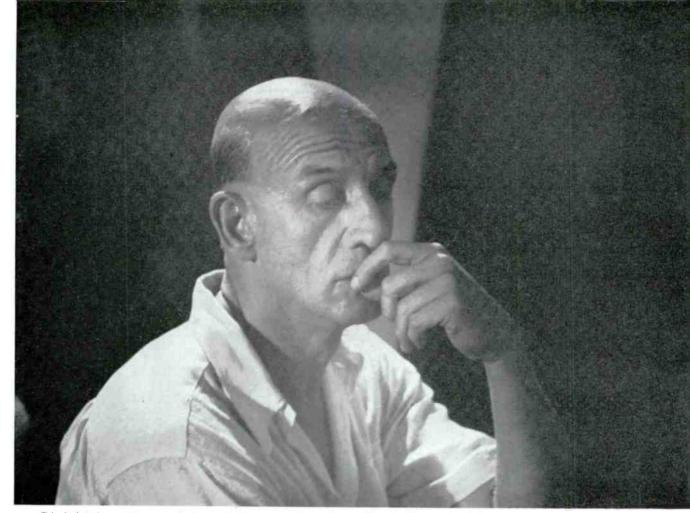
Gaby and Robert Casadesus react to their rendering of a Ravel two-piano work.



Plant left the control-room to catch Rise Stevens before recording began.

Rudolf Serkin pays close attention as Beethoven is played back to him.

www.americanradiohistory.com



Dimitri Mitropoulos, one of the most photogenic of conductors, lost in the sounds of the New York Philharmonic.

the well-tempered Contax.

Plaut began to make recordings in his own home, principally of singing by his wife. The recording equipment was Plaut-developed and home-built. Then he acquired a studio in a music school. It was there that he began to view recording artists as photographic subjects. He was impressed by the artistic agonies they went through, and wanted to capture on film their tense absorption—which was almost invariably coupled with a rare, relaxed indifference to the camera.

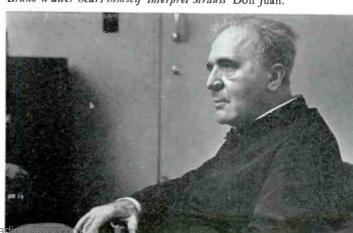
Sir Thomas Beecham conducts all over again as he listens.



His phonographic and photographic efforts progressed apace. Officials of Polydor heard some of the Plaut recordings, asked him to build equipment for them. One of the earliest test records made on Plaut's Polydor equipment was with Conductor Charles Munch, whose picture was duly taken. Years later, Plaut photographed Munch again — this time in Columbia's recording studio, when the French maestro was guest conductor of the New York Philharmonic-Symphony Orchestra.

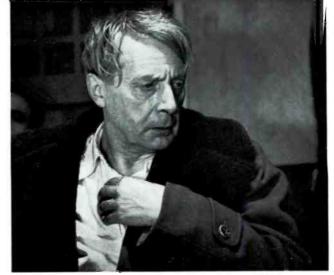
In January 1940, Fred betook himself, wife and Con-

Bruno Walter hears himself interpret Strauss' Don Juan.





Leonard Bernstein, after conducting Milhaud's Creation.



Charles Munch was one of Plant's first picture subjects.



Dame Edith Sitwell at a reading of her poetry.



Eugene Ormandy, gleeful over Philadelphian sound in Berlioz' Fantastique.



absorbed in Beethoven.



Composers Virgil Thomson and . . .



... Aaron Copland at playbacks.



HIGH FIDELITY MAGAZINE

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Composer Darius Milhaud, in scarf after strenuous conducting, listens dreamily to his own performance of his own music.

tax II to the United States. Three months later he joined the staff of the newly-organized Columbia Recording Corporation as recording engineer. One of his first recording-cum-photographing sessions was with violinist Joseph Szigeti, who is represented in this set.

Along with musicians in varying stages of artistic ecstasy and distress, Plaut has photographed non-musical celebrities who have appeared before Columbia microphones for transcriptions. Dozens of actors and authors have "sat" for Plaut. And, in non-recording hours, he has photographed Albert Einstein, Max Weber, Ben Shahn, Arnold Toynbee, Anthony Eden (encountered at Idlewild International Airport), Albert Schweitzer, Robert Flaherty and photography's Old Master, Edward Steichen.

Plaut has bundled the Contax, along with portable re-

Francis Poulenc's organ concerto, notable as a hi-fi recording, gets its first hearing by critical composer.

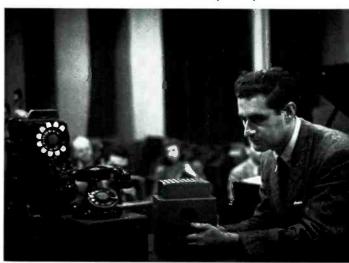


cording equipment, to Boston, Cleveland, Pittsburgh, Philadelphia, the Trappist Monastery at Gethsemane, Kentucky, and to Robert Flaherty's barn in Brattleboro, Vermont.

Musicians will cheerfully let Plaut photograph at will when other cameramen have been barred. He is regarded as an insider, so to speak, and as equally trustworthy behind recording console or camera.

Fred has been surprised sans camera only twice. Once, when General Carlos Romulo arrived at the studio for a transcription, the other when the recording schedule noted that he was due to spend an hour behind the controls recording someone identified only as "Bergman." Berman turned out to be Ingrid, of course, a photographer's dream subject. "What a tragedy!" Plaut mourns, "I'll never forget it."

Before recording his opera The Telephone, composer Gian Carlo Menotti auditions the star of the piece.



SEPTEMBER-OCTOBER, 1953



ADVENTURERS IN Sound

MUSICAL EXECUTOR

Peter Bartok

by Edward T. Wallace

IN THE last week of his life, on a bed surrounded by medicine bottles and littered with pages of music manuscript, Bela Bartok gathered the last small fragments of his strength to orchestrate his *Third Piano Concerto*. Peter Bartok, his son, drew the measure bars, gave medicine and kept the orchestrated pages in order.

The task wasn't finished. On September 26, 1945, Bela Bartok died in New York and the simple entry of his death in the vital statistics seems to have been the signal for fame and recognition to close in and surround his name. Today his music, if not precisely enjoying a vogue, is certainly not uncommon on the concert stage. There is a respectable listing of Bartok in the long-playing record catalogs. The FM stations which major in classical music usually give the recorded repertory of Bartok a fair shake. There will be wide observance this month of his death's anniversary.

Among the most interesting aspects of this accumulating popularity is the live and alert existence of a small record company, located in Steinway Hall, at 113 West 57th Street, New York City. It is called Bartok Records, and it is dedicated to the purpose of recording the 50 or 60 major compositions which Bela Bartok left, and making sure that each recording is the best that can be done.

In its five years of existence, Bartok Records has become outstanding among the two hundred long-playing labels for extreme fidelity of recorded sound. Credit for this goes to Peter Bartok, 29 years old, a moody perfectionist who would much rather extend the frequency range of his recordings than expand his bank account. In many ways the scientific son is like the musical and controversial father.

Peter's father and mother came to the United States in the winter of 1940 to make a concert tour as a piano team, expecting that within a year or two the war in Europe would be over. Bartok and his wife, Dita Pasztory, had but slight fortune with their tour, the husband's health began to fail, yet in this period of physical and financial uncertainty, far from his dear native Hungary,

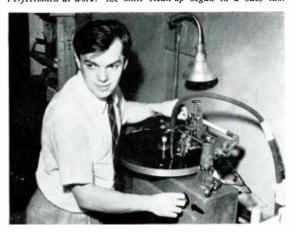
Bartok composed some of his most celebrated music. It is possible that the growing interest in Bartok in America may be due to some extent to the music he composed here, the most famous being the *Concerto for Orchestra*, written on commission from the Koussevitsky Foundation, and given a first performance by the Boston Symphony Orchestra.

When the Bartoks realized that regardless of the length of the war, the Europe they knew would be vastly changed, they began the long and complicated task of getting their son out of Hungary and into the United States.

Peter arrived in 1942 and his father, a rather practical artist, thought it would do the young man good to work on a farm and learn to speak English. Peter was shipped off to a Massachusetts chicken farm, but the chickens didn't speak English and Peter had no time for anything but hens. He decided he didn't have much time for them, either. After two weeks he reappeared, unannounced, at the Bartok apartment in New York. His father was first astonished, then dismayed.

"You accepted the engagement for the season, you should

Perfectionist at work: the sonic clean-up began in a bath tub.



HIGH FIDELITY MAGAZINE

have filled it," Bela Bartok said, indignant as if the son had walked out in the middle of a concert.

Next, since his father's health had taken a serious turn for the worse, Peter enlisted in the U. S. Navy, and became an electrician's mate. To ease the financial burden at home, he assigned a large portion of his Navy pay to his father.

Peter became acquainted with electronics and sound reproduction in the navy and decided to study it when he came out. When he was discharged he returned to New York and discovered that his father had not used any of the money Peter sent to him.

The father handed Peter a bank book, accounting for every dollar.

"It was not mine and I had no right to use it," the elder Bartok said. "It is yours." That was Bela Bartok.

Shortly after his father's death Peter enrolled in Pratt Institute to study engineering. Already the project of recording his father's music was on his mind. In fact, he had made a few amateur recordings which, he admits, were remarkably good, considering that his equipment had cost him exactly \$30 for everything, from pickup microphone to cutting head.

Of these early efforts, one recording of a Bartok quartet brought an outpouring of praise from an established critic, who commented on the live, full sounds. This proved to Peter that there are more ways to kill a cat than drowning it in drawn butter. Actually, while making this disk in his small living room, Peter had been sharply dissatisfied with the resonance he was getting on the record. Abandoning straightforward, simple recording procedure, he fed the music instead into a twelve-inch loud-speaker, which he placed in a bath tub. After the music had bounced around the tile walls, wash basin and commode it was picked up by a second microphone and sent along to the cutting head — full, resonant, vibrantly alive.

One record reviewer called it "clean" and it should have been — it was right from the tub.

Bartok Records, long since, has moved out of the bath tub-echo-chamber stage. It has a young fortune invested in the very latest and most expensive recording equipment. It must be admitted, though, that manufacturers might not recognize their products if they removed the familiar enclosures and looked inside. Peter is an insatiable tinkerer, always bent on improvements. His alterations on standard makes of recording machinery are trade secrets. All the audio devices in the Bartok Records shop are capable of a flat response to 18,000 cps, and Peter is continually striving to raise even this. To prove his claim of 18,000 cps, he is always delighted to slow down a tape or master disk to half-speed, and present the hearer with a demonstrable 9000 cps.

Although Peter Bartok is 29 years old, he looks no more than 19, and has the physical appearance of a pocket-sized, scientific-minded Li'l Abner. He is nervous with strangers, almost to the point of timidity, and his passion for perfection is often maddening to people who work with him. When he makes a mistake he falls into a gloom which would do credit to the average Hungarian folk-song (an exceedingly gloomy affair), and when an assistant makes a mis-



The late Bela Bartok: understanding came at last through music.

take Peter must search the innermost recesses of his being to find absolution.

"That's the reason I want Bartok Records to remain small," he explains. "The more people you depend on to help you — means that many more people to make mistakes. I get along better when I do everything and have only myself to blame."

The music of Bela Bartok, the stock in trade of Bartok Records, is peculiarly suited to recording, and particularly to high-fidelity recording. In his youth Bartok wrote some flowing melodies, engendered perhaps by an early enthusiasm for Richard Strauss, but the elements which make Bartok sound like Bartok are supercharges of powerfully driving rhythms. His genius throbs in a whole gray scale of rhythms through his Music for Strings, Percussion and Celesta, and in bright sharp images of sound in The Miraculous Mandarin.

"It may sound contrived, but I never really knew my father until I got old enough to understand his music," Peter says. "As a child I wanted to ask him many questions, but I learned early that he was not the kind of man who gave explanations very easily. He expected you to understand him through the things he said in musical sounds. Since I began the project of recording all of Bartok, I have listened to all of it many times, and that way I have learned many things about my father. For the first time I know very much about the kind of man he was.

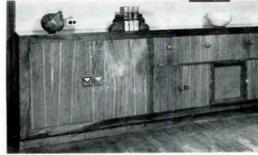
"Then too, it is very satisfying to Continued on page 132



Custom

The piece of elegant chinoiserie pictured above comes, aptly, from the American headquarters for elegant chinoiserie—San Francisco. H is a custom housing by Hal Cox. Below is a long, low, modern job from the opposite corner of the continent. It was built by Lowe Associates, of Boston. The woodwork is walnut. The coaxial speaker, behind the low central grill, is infinite-baffle mounted, with a rear opening into an unused attic space.



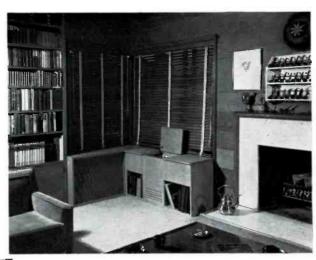


Paradoxically, after the ultramodern installation from conventional Boston comes a carefully traditional housing from Los Angeles. Note the drawerends, transferred to the new cabinet doors. The installation was made by C. T. Kierulff, whose productions have often graced these pages.

Photographs by readers of their own installations are welcomed by the editors. Particularly desired are pictures of systems which are Ingenious and sightly without being expensive.



installations... (coast to coast)







The three pictures on this page are all productions of Hal Cox's San Francisco studio and all adorn Bay area residences — those of Mortimer Fleischacker, Jr. (left, above), Tadema Weilandt, (right, above), and Fred McCrea (below). Particularly worth noting is the skill shown in matching the cabinetry to the atmosphere of the rooms to be

fitted with music systems. The Fleischacker rig is cooly modern and rectilinear against its Venetian blind backdrop. The Weilandt set is modern, but "warmer," to match the faintly exotic room atmosphere. (Note soundproofing in changer compartment, to absorb needletalk.) The McCrea rig is designed simply to be unobtrusive.



— An insurance company says it with music **VYTIC-FM**

HARTFORD

by RICHARD N. BOULTON

ALBERT HOLLAND is assistant to the president of Trinity College, Hartford. Ten years ago he was a prisoner of war in the Philippines. A record album of the Schubert *Quintet in C Major* sustained him during the dreary internment days. So it was a new recording of this that he brought to play on the WTIC-FM's Tuesday night "Collectors' Corner" program.

Harold Colt of Farmington, Connecticut, is a highfidelity recording engineer. His contribution to "Collectors' Corner" consisted of tapes of as-yet-undisked Urania and Classic Editions recordings.

Father Leslie Baggot is an Australian priest, doing field work in Connecticut. He airmailed home for recordings of folk songs from Down Under. One of them, *Botany Bay*, is now in the hands of a New York music publisher, but it was heard for the first time in this country on "Collectors' Corner."

Then there are the Hansons, Fred and his wife, Herdis, who always bring opera. Fred is a silver brazer at the huge, humming Pratt and Whitney Aircraft; but in their Glastonbury home, operatic arias begin in the early morning and continue until bed-time, practically uninterrupted. Leonard Patricelli, WTIC-FM program manager, says "they are plain people with a richness of living I've never seen matched." Although Danish-born, they are such authorities on the Italian opera that visiting celebrities like Met basso Salvatore Baccaloni visit them for "coffee" after a performance at Bushnell Auditorium.

And so it goes. Insurance executives, department store clerks, housewives, students, they line up for weeks to appear on "Collectors' Corner," to share the joys of their own particular musical favorites with one of radio's most loyal audiences. There are plenty of Connecticut Yankees who haven't turned their dial off 96.5 megacycles since WTIC-FM began its midday-to-midnight schedule of "the best in music." That was last February, and it brought something new into the national picture of FM-good music broadcasting. For WTIC-FM doesn't have to make money, directly. It is owned and operated as a good-will stimulant by the famous old Hartford insurance company, The Travelers. WTIC-AM, inciden-

tally, carries the conventional fare of an NBC affiliate. The FM music-schedule is something special.

"Collectors' Corner" is but one feature of this schedule, which is under the direction of Robert E. Smith, musical director, and is explained by Paul Morency, general manager: "We believe there is a place for good music in the hour-to-hour living of the woman in the home . . . the man on his days off . . . the young person to whom good music is just becoming a new adventure." Music can serve, the management thinks, "either as an accompaniment to daily duties or in the concentration of listening that provides one of the greatest joys of living." This implies a certain variety, as did Morency's original announcement: "In symphonic programs we are aware of the position of the three B's — Bach, Beethoven and Brahms. But along with these we shall give you the modern B's — Barber, Bloch and Bartok."

Actually, in the first few weeks, favored treatment went to the modern "B's." There was objection, and the forces of modern versus classical were all but joined in bloody

Once a week, T. H. Parker, music and drama critic for the Hartford Courant, is major-domo for "Symphony Hall."



HIGH FIDELITY MAGAZINE



Collector and Collection. Robert E. Smith, WTIC-FM Music Director, surrounded by some of his 20,000 records.

battle before a balanced diet was introduced. It was one program in particular that gave the initial edge to the contemporaries. That was "Symphony Hall," 90 minutes every evening ("and let the station breaks fall where they may"). Guest commentators on this program were prominent conductors, newspaper critics, and other outstanding local music authorities. Their ears were so weary of the war-horses the visiting symphonies brought to town that, for WTIC, they turned out their most esoteric modern favorites. Mostly they came in with their program notes at noon, put them on tape, then went home in the evening to listen in proud content.

Despite the counter-revolution of the Mozart-Brahms fraternity, it was surprising how many ordinary listeners liked the moderns. Letters saying so came pouring in from the entire valley from Vermont to the Sound, with a few from the surrounding hills.

Only once a week, as a matter of principle, is "Symphony Hall" commercially sponsored. That's the evening Theodore H. Parker, longtime music and drama critic for the Hartford *Courant*, brings his exquisite taste and handsome prose to the decoration of an hour and a half of his own symphonic selections. The Travelers pays for Parker's services. In exchange, it takes a brief minute and a quarter to call its wares.

The station's only other non-musical offering consists of five minutes of weather at 6:25 each evening. That's because WTIC-FM's signal is so strong that local "indies" in the hills rely on it for the weather news they pass along to their farm listeners. There's not even a news program — just good music — on WTIC-FM. Only once has its program been interrupted, and that was for a speech by the President of the United States.

This continuous stream of music springs from one of the largest collections of records in the world. The latest count came to 2,500 LP titles, over 50,000 78's, 10,000 Langworth, Sesac and BBI-Bonus ET's (electrical transcriptions) and spools, rolls and streamers of tape — a grand

total of about 6,750 playing hours (that would be about 10 months' continuous playing, 24 hours a day!).

The station has acquired sizable chunks of virtually all the famous libraries of recorded classical music, foreign and domestic, and intends to fill in all the missing pieces. These include: the BBC, Radiodiffusion Française, London FFRR, RCA-Victor, Columbia, Decca, Capitol and Remington.

A major "standard" symphony may be scheduled twice in a month, once in the afternoon, once at night, on different days. There is a full-length opera every Saturday night. (On Holy Saturday the complete *Parsiful* was played. It ran from 7:30 p.m. to 12:25 a.m.). There is chamber music, choral and organ recitals. Special emphasis is put on the presentation of fresh music in the symphonic field.

As for "live music," dress rehearsals of the Hartford Symphony have long been broadcast by WTIC, and it is hoped that under its new conductor, Fritz Mahler, who is coming this fall from Erie to take over the Symphony, the concerts themselves can be broadcast over FM. This past season, weekly broadcasts from the Hartt School of Music brought live instrumental and vocal music to the FM audience.

The philosophy of the station is summarized by Patricelli, a onetime concert violinist, who says: "If you like music, you don't need philosophy."

However, this is a recent development. The station was founded back in 1924, when commercial broadcasting was in its infancy. Walter Cowles, friend of radio expert Hiram Percy Maxim, and a vice president of The Travelers Insurance Company, saw in this new medium of communications "a public service which his company might adopt as a novel means of promoting goodwill among prospective policyholders."

Within a few months of operation the station made front pages of the newspapers with a direct-wire exclu-

Program building. The builders: Bob King, WTIC record librarian, Leonard Patricelli, program manager, and Robert E. Smith.



sive interview with Colonel Billy Mitchell, airpower enthusiast who was then being court-martialed. Since then, WTIC has made much radio history—the first public broadcast from a moving aircraft; the first Presidential Inauguration broadcast (Coolidge's); the very first radio appearance of Rudy Vallee, and of Dr. William Lyon Phelps; first broadcasts by future Metropolitan stars Robert Merrill, Anna Kaskas, Thomas Haywood, and by future TV and Hollywood stars Michael O'Shea, Edward Begley, Gertrude Warner (queen of the Soap Operas), and Louis Nye (who plays straight man today to none other than Sid Caesar!).

Walter Damrosch's Music Appreciation broadcasts were anticipated by two years by WTIC, when 250 Connecticut schools joined in a weekly series under Moshe Paranov. And, according to Francis Chase's book *Sound and Fury*, the grandpappy of all radio quiz shows was a Hartford tire company president who adapted a parlor game for WTIC and inflicted it on America back in 1927.

By 1928, WTIC, one of the six charter members of the NBC, jumped from 500 watts to 50,000 and became the most powerful radio station in the world, with early morning dial twisters in Australia and Aberdeen, not to mention Germany, Miami and Bermuda, reporting this Yankee station loud and clear.

The first program of recorded music was heard over WTIC. The name of the first disk jockey is unknown, but the date was 1929. Even then, classical music was the favorite. Fourteen hours each week were devoted to the long hair stuff, 11 hours to semi-classical music, and only 11 to popular music — a good chunk of that being hill-billy.

But the big date for music lovers was December 15, 1941, when a one-kilowatt 45.3 megacycle FM station with the call letters W-53-H came on the air. Frequency modulation was so new that much of the programming

consisted of demonstrations of FM fidelity, greetings to new FM set owners, and the latest news on FM development. Soon thereafter, however, the Hartford Oratorio Society's presentation of Handel's *Messiah* was transmitted by FM, and the following year a program entitled "Your Box at the Opera" made its debut.

The war, however, crimped FM operations, and the station fell back on broadcasting the same programs as WTIC-AM. Things got even worse in 1945, when the American Federation of Musicians banned the duplication of live music originating on standard broadcasts, and so FM cut its operation to six hours a day.

In 1946 WTIC's 17-year-old transmitter was replaced by a 50 HG-1 50 kilowatt transmitter, with air-cooled tubes and metal rectifiers. That same year, the FM band was shifted from 88 to 108 megacycles and a REL 3-kilowatt transmitter and a GE circular antenna were added for WTIC-FM. A year later, a \$314,000 tentative order for TV equipment was placed with RCA. The TV station has not yet materialized, since three radio stations are competing for the VHF channel allocated. The fact that one of these stations began relaying the WQXR programs over their FM setup last fall may have hastened WTIC's FM revival this spring—an effort to perform the "community service" that the FCC reputedly considers in determining who gets a TV channel.

But even without the competition for Channel 3, WTIC's management was certainly heading into a "good music" schedule. In 1948 the station, without any solicitation, pledged \$30,000 over a three-year period to the Symphony Society of Greater Hartford. And Leonard Patricelli's long-time dream of opera on the air came to a happy realization with the discovery of a name, an ordinary, prosaic name — Smith.

Robert E. Smith began collecting records when he was 10 years old, after his father brought Continued on page 134

WTIC'S FM studio, Hartford. Chief Engineer, Hermand D. Taylor at the controls and announcer Bruce Kern at the mike.



In the "Collectors' Corner" — Henry Dawes, Assistant Secretary of the Connecticut General Life Insurance Company.



HIGH FIDELITY MAGAZINE



Old techniques and new — wax masters and wide-range tape — work side by side at Britain's most venerable record plant, turning out African bush-ditties and Bach.

HAYES, Middlesex, is sixteen minutes by fast train from London's Paddington Station. It is an industrial suburb where phonograph records have been manufactured for 45 years. As the sign on the station platform proclaims, Hayes is the "Home of 'His Master's Voice'." Its history as a record-making center dates back to February 9, 1907, when the portly English tenor Edward Lloyd ceremonially turned over the first sod on the HMV site. Three months later Nellie Melba laid the cornerstone of the factory, and early in 1908 the plant went into operation. The Gramophone Company itself was then 10 years old.

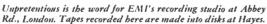
In the course of the preceding decade it had become the richest, most powerful record company in the world. But in its swift climb to dominance, the Gramophone Company had developed into an unwieldy, patchwork organism. From its headquarters in the City of London financial affairs were transacted and matters of high policy decided, but the pronunciamentos from London operated at long range: recording studios were scattered throughout Europe,

while the disks themselves were manufactured in Germany. Clearly, there was need for a centralized base of operations, and Hayes was the spot chosen for the purpose.

When the Hayes plant got into production 45 years ago it covered 11 acres and employed 750 workers. Today it covers nearly 160 acres and employs about 12,000 workers. This expansion betokens the continued growth not only of the Gramophone Company but of its sister companies and one-time competitors, Columbia and Parlophone. For Hayes today is the headquarters and principal manufacturing center of Electric & Musical Industries Ltd., a combine formed in 1931 with the merger of the Gramophone, Columbia and Parlophone companies. Hayes is at once a factory and a nerve center. As a factory it manufactures records and magnetic tape, sound recording and reproducing equipment of all kinds, radio and television apparatus, household appliances, and industrial electronic installations. As a nerve center it is the hub of an international industrial empire controlling subsidiary EMI companies and factories abroad. The recent establishment of an EMI subsidiary in New York - to distribute English Columbia recordings in the United States - adds one more outlet to a worldwide network.* Ireland and the Continent account for thirteen EMI subsidiaries; there are

> three in Asia, two in Australasia, three in South America and one in North America.

> A visitor could easily spend a week or more at Hayes and still not cover





*The new U. S. outlet is Angel Records, headed by Dario Soria, who organized Cetra-Soria and recently sold it to Capitol. The "Angel" label derives from a Gramophone Company trademark whichpreceded Nipper, the listening dog—a cherubic "Recording Angel."

adequately the contents of the large assemblage of buildings. As my own visit was necessarily short, I restricted my investigation to what is still the "basic commodity" at Hayes: phonograph records. The tour began on the top floor of the six-story building, where virgin recordings arrive from EMI's Abbey Road studios in London. At once I was struck by evidences of a *leit-motiv* that echoes throughout the plant — the old and the new side by side, accomplishing the same job and vying for supremacy.

Tradition hangs heavy over Hayes; time-tested methods are not lightly abandoned. Even when a new process is introduced, there is a strong likelihood that the old one will be continued along with it for some time—until the innovation has proved its worth beyond all doubt. Critics might castigate this as pettifogging antiquarianism; well-wishers would call it rather a sensible conservatism. Take as an example the recordings that come to Hayes from the Abbey Road studios. I watched a consignment of these being unpacked, and was startled to discover that some were engraved on wax.

Admittedly, the wax recording blank, even at EMI, has fallen from its former eminence. Today it serves only as an intermediate step between the original tape recording and the finished record, and even in this function it is giving way more and more to the modern acetate blank. But wax lingers on, a hardy survivor of 50 years of record making. Eventually acetate's hegemony will be complete, but its day, at Hayes, is not yet.

I felt again the conflicting winds of a transitional climate as I watched the preparations for electroplating. When disk recording was in its infancy, surfaces of wax recordings were dusted with graphite powder before immersion in the plating bath. Gold or bronze powder later took the place of graphite, but the device used to dust the powder over the disks remained the same. These dusting machines, relics of an era when Melba and Patti were HMV's reigning favorites, are still on view and still in use, for at Hayes the bronze powder method has sturdy devotees who continue to employ it for certain recordings. But this mechanical process of coating a recording, for all its hallowed longevity, is giving ground to a quicker and more

satisfactory chemical process which deposits a film of silver on the recording from the interaction of two solutions simultaneously sprayed upon it. How delighted a medieval alchemist would have been to witness this transformation of jet black acetate into gleaming silver within a space of forty seconds!

The evolution from the original silver-coated (or bronzedusted) recording to the final record stamper is a familiar process, and Hayes provides ample opportunity to observe it in all its ramifications. For the Hayes plant produces stampers not only for home use, but for export to EMI subsidiaries throughout the world.

You could call internationalism the second underlying leit-motiv at Hayes - this sense of being the focal point of a far-flung industrial empire. One finds it especially in the printing department (located on the ground floor of the metallurgical building) where many of the record labels used at Hayes are printed and where the typesetters cope with Danish and Spanish, Greek and Turkish, Hindustani and Tamil, Swahili and Ewe. Despite the growth of local pressing plants abroad and the difficulties of foreign trade in the war and postwar years, Hayes still exports a great quantity of finished records. Scandinavia, Greece, the Near East and Africa depend on Hayes for a large proportion of their record needs. These markets absorb not only the standard international repertoire familiar to us, but also special series of records designed solely for local consumption. A consignment of HMV disks to Turkey will include recordings by Toscanini, Gigli and Menuhin on the international DA and DB series, as well as recordings by Zehra Bilir, Suzan Yakar Rutkay, and K. Nezihe Uyar on Turkey's own JOT series, while West Africa will receive the latest offerings both of Vaughn Monroe and the Band of the Gold Coast Police.

It is a short walk from the printing plant to a low brick building, one of the original 1907 structures, where the record presses are located. Here again the dominant note is the traditional and the modern in close juxtaposition, represented in this case by 78 rpm shellac and microgroove vinyl. In this part of the Hayes plant the scales are well tipped in favor of tradition, the shellac presses outnumbering the **Continued on page 140**

Record-press room at EMI's Hayes plant. More shellac than vinyl is processed, owing to big export business to "backward" areas.



Inside Abbey Road studio, old but acoustically up-to-date, Sir Adrian Boult conducts BBC Symphony Orchestra for a recording.





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J. F. INDCOX • EDWARD L. MERRITT, JR. • DAVID RANDOLPH
JOHN S. WILSON

CLASSICAL

BACH Six English Suites

Alexander Borovsky, pianist. VOX PL 7852. 2 12-in. 81 min. \$11.90.

Fernando Valenti, harpsichord. WESTMINSTER WAL 305. 3 12-in. 136 min. \$17.85.

Once again, the listener is in the fortunate position of being able to choose between different versions. Each has its advantages, so that the choice of recordings must be determined by each individual on the basis of his stand on the question of harpsichord versus piano, or on the basis of economy. The Vox (piano) version is on four sides; the Westminster (harpsichord) version takes six. As a concommitant of this economy, however, one must put up with the inconvenience of having several of the suites split in the Vox set, while the Westminster album neatly allots one complete record side to each of the six suites. Westminster also supplies the complete score of the music, a laudable practice which may justify the greater cost for those who are interested in having the eye support what the ear hears

With these practical considerations out of the way, the choice hinges on purely artistic matters. Oddly enough, although we are prone to think of the modern piano as the more powerful descendant of the harpsichord, it is the latter which emerges from this comparison as the more dramatic, nav. fiery instrument! Borovsky plays the music on the piano cleanly and without any tendency to overload it or to take advantage of the massive effects of which the modern grand piano is capable. This is as it should be. However, thanks to the harpsichord's variety of registration, and thanks also to the "close-to" recording, the older instrument gives the music a sense of drama which makes the piano sound monochromatic by comparison. This criticism is nor meant to apply to Borovsky's performance, which is a sensitive one, indeed, but rather to the appositeness of the music to the respective instruments.

Both albums are tremendous undertakings. Special mention must be made of the excellent notes by Donald W. MacArdle for the Vox set, and by Edward Tatnall Canby for Westminster's.

BANCHIERI Festino

The Primavera Singers of the Pro Musica Antiqua of New York, Noah Greenberg, cond.

Incidental Virginal Interludes of Frescobaldi, Gabrieli, Banchieri and Dalza. Blanche Winogron, Virginals.

ESOTERIC ES 516. 12-in. 49:35 min. \$5.95.

Esoteric would have placed us in its debt, because of the importance of this addition to the recorded repertoire, even if the work were not as well performed as it is. The group of fresh young voices, which makes

its debut with this disk, is to be commended for its zest and style.

If one could have any criticism of the performance, it would hinge on the disparity of tonal approach between the sopranos and the bass. The former sing at times with a purposeful "whiteness" of tone, undoubtedly in an attempt to simulate the "non-vibrato" tone quality which—according ro some theories, at least—characterized 17th and early 17th century vocalism. However, the bass of the group uses a richer, more "colored" tone, with a liberal amount of vibrato—an inconsistency.

Italian and English texts are provided.

The interludes played on the virginals, while they have no relationship whatsoever to the vocal work, are delightful in themselves and supply a nice contrast in sound.

R. E.

BARATI

String Quartet. California String Quartet.

CONTEMPORARY C2001. 10-in. 16 min. \$3.85.

George Barati is conductor of the Honolulu Symphony Orchestra, a graduate of the Franz Liszt Conservatory in Budapest, and a pupil of Roger Sessions. His quartet, composed in 1944, is a brief, brilliantly scored, intensely serious and highly eloquent work, and its recording is exceptionally good. So, at least, it seems to this prejudiced reviewer, who provided the annotations which appear on the record sleeve.

A. F.

BARBER

Overture to The School for Scandal Adagio for Strings Essay for Orchestra †Gould; Latin-American Symphonette

Eastman-Rochester Symphony Orch., Howard Hanson, cond.

MERCURY MG 40002. 12-in. 20, 22 min. \$5.95.

Virgil Thomson once remarked that it takes an American properly to conduct American music. This observation is thoroughly substantiated by Hanson's interpretations of Barber's small-scaled, fine-grained, highly lyrical pieces and Gould's ingenious, lightweight, cleverly orchestrated study in Latin-American rhythms. All these works have been recorded before, but never with such conviction, understanding and deftness. The conductor, furthermore, has been perfectly seconded by the recording engineers. The disk, I understand, has become a nearnecessity to high-fidelity cultists. A. F.

BEETHOVEN

Piano Concerto No. 1, in C Major, Op. 15

Badura Skoda, piano. Vienna State Opera Orchestra; Hermann Scherchen, cond. WESTMINSTER WL 5209. 12-in. 35 min. \$5.95.

Badura Skoda (presumably some concert management divested him of the Paul and the hyphen in order to bedevil editors can one now call him Mr. Skoda?) to date has three Beethoven concertos in his recorded repertoire, the Fourth and Fifth having appeared previously. As usual, his pianism is of a high order; he gets solid support from Mr. Scherchen and the orchestra, and the recording represents Westminster's best, meaning the best there is. The performance is a model of controlled exuberance in the first movement. In the Largo, Badura Skoda works a shade too hard at trying to extract the full meaning of the music, and the poetry becomes rather too earnest. The Rondo is another highspirited affair, with one transition back into the main theme sounding a bit awkward. Acoustically this is the best of the recorded versions of this concerto, but interpretatively it has too formidable competition from the Gieseking version. (Partial dissent) Save a particular, this judicious and thoughtful performance receives the best sound accorded the First Concerto, fully etched in both its vertical and horizontal courses. The particular is a faint and intermittent false violin-shimmer, which cannot be entirely removed by a compensator. The value of the record will depend upon the measure of antipathy discophiles have to this recurrent intrusion. Although the preference here is still for the elegantly articulated gaiety of Gieseking with the Philharmonia Orchestra for Columbia, the soberer contemplation of the newest version has its own stately poetry. C. G. B.

BEETHOVEN

Fidelio: "Abscheulicher!" (recit.); "Komm

Hoffnung" (aria)
†Weber: Oberon: "Ozean, du Ungeheuer!"
(recit.); "Wolkenlos strahlt" (aria)

Christl Goltz, soprano; Bavarian National Orchestra, Robert Heger, cond.

DECCA DL 4058. 10-in. 7, 10 min. \$2.50.

A voice strong and flashing as a broadsword, wielded with dynamic gusto in two of the most heroic arias of early romantic opera; exultation, hope and horror unstinted, and not completely controlled, but impressive. Vivid accompaniments by Prof. Heger, with the expected moments of trauma from the horn quartet in "Komm Hoffnung". The sound is good standard and untroublesome.

BEETHOVEN

Five Overtures: Egmont, Leonora No. 2, Prometheus, Fidelio, Weihe des Hauses

Vienna Philhatmonic, London Symphony, and London Philharmonic Orchestras, Felix Weingartner, cond.



Badura Skoda: in Beethoven's First Concerto, poetry and trouble with strings.

COLUMBIA ML 4647. 12-in. 9, 13, 4, 6, 11 min. \$5.45.

This fourteenth LP in Columbia's reissue of the noble performances made by Felix Weingartner in the 1930's is sonically the most successful: full and honest if without the detailed splendor of the best current recordings. There is no hurt in this sound; and the famous interpretations assert their own authority as they did at their discal introduction. The hearty Prometheus and the majestic Weihe des Hauses are the most effective we have of these, and the others yield only to stutdy interpretations dressed in the most sumptuous tonal glory. Discophiles have no right to be without a Weingartner record: this one offers the most diversified sampling of his talent. C. G. B.

BEETHOVEN

Quartet No. 1, in F, Op. 18, No. 1 Quartet No. 2, in G, Op. 18, No. 2

Paganini Quartet.

RCA VICTOR LM 1729. 12-in. 26, 21 min. \$5.72.

Lovely performances in adequate recording; late arrivals confronted by established, imposing rivals. At their best the Paganini Quartet compound a beautiful tone, and that is evident in parts of this disk, but a violin squeal cannot be banished from high-fidelity equipment without disadvantage to the violins when they are not squealing. What would have seemed outstanding two years ago does not now.

C. G. B.

BEETHOVEN

Quartet No. 14, in C Sharp Minor, Op. 131

Paganini Quartet.

RCA VICTOR LM 1736. 12-in. 38 min. \$5.72.

The work melts the brass of pretension: the musicians who essay it for posterity have authentic credentials. Unluckily for the Paganinis they always arrive in an occupied repertory, and in this exalted example the four predecessors have each a justification for their temerity. The opinion here is that the measured, contemplative Paganini accomplishment, full-breathed and exact, takes second place to the obedient (and commanding) sensibility of the Budapest Quartet on Columbia ML 4585, albeit the Budapesters have not received the solid. untroubled sound that the Paganinis have been granted by Victor. C. G. B.

BEETHOVEN

Sonatas for Piano, No. 13, in E Flat, Op. 27, No. 1; No. 14, in C Sharp Minor, "Moonlight", Op. 27, No. 2; No. 19, in G Minor, Op. 49, No. 1; No. 20, in G, Op. 49, No. 2

Wilhelm Backhaus.

LONDON LL 705. 12-in. 14, 15, 7, 7 min. \$5.95.

Four-on-a-disk makes futility of comparison. These are good, No. 13 very: seriously romantic and serious in its sport, entertainingly. Grand finale in the "Moonlight", angular allegretto, habitual adagio. Good verisimilitude of the piano, not without a mild confusion of background noises. -The various editions of the Beethoven Sonatas, whether complete (Kempff), or announced to be complete (Schnabel, Appelbaum), or progressing towards completion (Backhaus, Solomon), are designed, in one unprepossessing and unanimous feature, to exasperate: the Sonatas are in such a degree out of sequence that a card-index is necessary to make a selection from one's own discothèque. The flexible capacity of LP can meet any problem of editing, and it is to be feared that some day a manufacturer will discover that Sonata No. 1 can share a disk just as cosily with No. 2 as with No. 9; that 3 and 4 fit into two consecutive sides nicely; that 5, 6 and 7, occupying one disk, will not strain the first side more than many modern recordings. Etc. With horror we can anticipate our manufacturer triumphantly redistributing his old versions in this new and sensational way of logical convenience, so that we can buy them all over again. C. G. B.

BEETHOVEN-WEINGARTNER Sonata No. 29, in B Flat, "Hammerklavier", Op. 106

Royal Philharmonic Orchestra, Felix Weingartner, cond.

COLUMBIA ML 4675. 12-in. 41 min. \$5.45. Bavarian Symphony Orchestra. Kurt Graunke, cond.

URANIA 7089. 12-in. 45 min. \$5.95.

Rare, rare is the transcription which improves its music, and what adjective shall be attached to the transcriber of Beethoven Sonatas? Impudent? Intrepid? Confident? (We do not need to consider those arrrangers who have made the slow movements of the "Moonlight" and "Pathetic" Sonatas available for weddings, funerals, anniversaries,

HIGH FIDELITY MAGAZINE

class-days, conventions and clambakes.) When a scholar of the solid knowledge, steady taste and nervous inquisitiveness of Felix Weingartner dares to orchestrate the "Hammerklavier" (for reasons in part given on the cover of the Urania edition), the aesthetic intentions command respect in advance, and the aesthetic results corroborate the intentions, which seem no longer to proceed from temerity, but from a compulsion of logic. Within the restraints that Beethoven accepted, the conductor more than a hundred years later made of the "Hammerklavier", without transgression, a symphonic rhapsody of enormous conviction and power.

It is good to have this in the orchestrator's own conducting. There is a typical deftness in the manipulation of accent and tempo, plus an easy adjustment of force, that makes the Weingartner version seem right by nature, where we must notice stress in Mr. Graunke's commendable effort. The greater clarity in the Weingartner fugue and the serener proportions in the Weingartner adagio command immediate admiration; and then we face again the vicious problem of comparative sonics and interpretations at odds. For the Weingartner-Columbia is an excellent revivification of a recording 20 years old, while the Graunke-Urania is a superb recording by the latest standards. The difference is above all apparent in timbre and dynamics; and it is overwhelmingly apparent.

BEETHOVEN

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

Jean Pougnet (v), Frederick Riddle (va), Anthony Pini (vo).

WESTMINSTER WL 5198. 12-in. 25, 25 min. \$5.95.

The demeanor of the players is one of cool and considered sympathy, appropriate and impressive for this music, but there is a defect in the recording which after a time harasses the listener: a faint but persistent fifth string to the violin, made of frail glass. Otherwise the sound is pure and substantial, winning; and given the charm of the performance, this reviewer experimented savagely to see if the glass could not be exorcised. It could not, although tried with five different magnetic pickups. C.G.B.

BEETHOVEN

Trio No. 4, in D, "Wraith", Op. 70, No. 1 Trio No. 5, in E Flat, Op. 70, No. 2

Santoliquido Trio.

DECCA DL 9691. 12-in. 22, 26 min. \$5.85

(Described on disk and envelope, for no obvious reason, as Trios 5 & 6). The best recorded sound that we have of these works, which grow as we hear them; and very competent playing without much imagination. If No. 5 cannot compare with the stunning Istomin-Schneider-Casals on Columbia ML 4571, No. 4, however unpointed, is more desirable than the rough Serkin-Busch-Busch assault on the Columbia ML 4128.

C. B. G.

BLOCH

Concerto Grosso

tWilliam Schuman: Symphony for Strings

Pittsburgh Symphony Orchestra, William Steinberg cond.

CAPITOL \$8212. 12-in. 18 min. \$5.72.

These are the first releases among the many recordings taken at the Pittsburgh International Contemporary Music Festival last fall. The Bloch is the heaviest interpretation of that famous neo-classical piece which I have ever heard, but it is not heavy-handed; Steinberg conceives it as a big, epical composition rather than as a piece of chamber music, and his interpretation comes off. The Schuman is typical of its composer — dramatic, grandly scaled, energetic, and magnificently imaginative in its treatment of the medium.

A. F.



The late Albert Spalding: a commanding style and a firm, warm tone for Brahms.

BRAHMS

Academic Festival Overture, Op. 80 Tragic Overture, Op. 81 Variations on a Theme by Haydn, Op. 56a

Concertgebouw Orchestra of Amsterdam; Eduard van Beinum, cond. LONDON LL 735. 12-in. \$5.95.

Van Beinum and his excellent orchestra do themselves credit in this grouping of Brahms orchestral works. Their treatment of the Haydn Variations is alive and interesting enough to merit favorable comparison with the recent Toscanini-NBC Symphony recording. The Academic Festival Overture is also played with appropriate vigor and good taste. Unfortunately, the Tragic Overture seems slow-moving at the beginning and the end and a little too fast in the middle. Since most of the record is so tastefully performed, and since the reproduction is clear and well-balanced, this disk deserves serious attention from Brahms-lovers. P. A.

BRAHMS

Piano Concerto No. 2, in B flat Major, Op. 83

Monique de la Bruchollerie, piano. Pro Musica Orchestra of Stuttgart; Rolf Reinhardt, cond.

VOX PL 7950. 12-in. 25:04 and 19:50 min. \$5.95.

Considering the difficulty and magnitude of this concerto — almost a symphony with piano — it is perhaps surprising that it has always been well and generously represented on disks. From the standpoint of sheer quality of recorded sound, this is one of the best available. Mlle. de la Bruchollerie, however, is not quite the pianist for the work. She attacks the music percussively rather than allowing it to sing and flow, and her interpretation often has an inappropriate matter-of-factness about it. Much more acceptable is the full-bodied orchestral part, ably handled by Reinhardt. My favotite recorded performance of this concerto is still that by Serkin, Ormandy and the Philadelphia Orchestra (Columbia); but the recently released version by Rubinstein, Munch and the Boston Symphony (RCA Victor) runs it a very close second. P. A.

BRAHMS

Violin Concerto in D Major, Op. 77

Albert Spalding, violin. Austrian Symphony Orchestra; Wilhelm Loibner, cond. REMINGTON R 199-145. 12-in. \$2.99.

Though it does not say so on the jacket, this disk was undoubtedly issued as a memorial to the eminent American violinist, Albert Spalding, who died suddenly May 26. His last musical likeness shows him as a sincere artist, with a commanding style and a tone warmer than I ever remember having heard from him on the concert stage. Unfortunately, it also perpetuates some faulty intonation, something else I cannot recall having heard from him. Be that as it may, it is one of the very few recordings that Spalding left behind, and as such, will be welcomed by his many admirers. As a performance of the Brahms Concerto, it cannot match the magnificent old Heifetz-Koussevitzky-Boston Symphony version on Victor, but considering the low price, it is not a bad buy. Watch out, however, for bad tracking throughout this disk. P. A.

BRAHMS

Seven Fantasias, Op. 116; Six Clavierstucke, Op. 118

Carl Seemann, piano.

DECCA DL 9667. 12-in. 23, 25 mins. \$5.85.

Some writers have gone so far as to assert that the songs and shorter piano works of Brahms are superior to his symphonies and other large-scale works. Be that as it may, the piano pieces that constitute Brahms' Op. 116 to 119 include much of the finest music he ever wrote. Almost all of the eleven capriccios and intermezzos, the ballade, and the romance in Op. 116 and 118 are gems, containing in concentrated form examples of the lyricism, rhythmic complexities, and formal subtlety that Brahms was master of. To this writer, the gloomy E flat Minor Intermezzo, Op. 118, No. 6, is a masterpiece of German romantic music, rivalling in its distillation of mood and power the 24th Prelude of Chopin. Carl Seemann, a relative newcomer to recordings, plays the music carefully and sympathetically, but some of the tempos seem a little slow and rigid, and a touch of literalness hovers over all. The playing is not as mellow, free, and singing as that of Wilhelm Kempff in his London recording of Op. 118, though Seemann's tone is better, and the Decca recording has a clean, intimate sound.

BRAHMS

Symphony No. 1 in G Minor, Op. 68

Vienna State Opera Orchestra; Hermann Scherchen, cond.

WESTMINSTER WL 5189. 12-in. \$5.95.

Though this is the thirteenth LP recording of the Brahms First, one need not be superstitious about it. Scherchen, sometimes inclined to be heavy and pedestrian, is virile and lively, dynamic and exciting in this firm, finely-proportioned reading of the symphony, and the Vienna State Opera Orchestra has never sounded better, in execution and phrasing. If you are buying a new Brahms First, be sure to hear this one. P. A.

BRUCKNER

Symphony No. 9, in D Minor (Unfinished)
Overture in G Minor

Vienna Philharmonia Orchestra, F. Charles Adler, cond.

SPA 24-25. Two 12-in. 1 hr. 6 min.; 13 min. \$11.90.

Bruckner's Ninth Symphony consists of two massive pillars built of the enduring stuff of Tristan und Isolde, arched by a burly plebeian scherzo of the sort at which the composer was a master. The honest man was not imitating Wagner; he had absorbed so much that the saturation had to exude. The Wagner harmony, melody and orchestration are heard again in the Overture in G Minor.

And both works are rewarding, after a time, as they are given on this pair of disks. Mr. Adler's reverence is not transfixed: he is everywhere fluent and convincing and in control of a flexible, sonorous orchestra. The elaborate but shifting masses of sound are presented with a notable agility and with a dynamic sensibility that repeatedly surprises. The reproduced sound is first-class, occasionally spectacular. Music-lovers to whom Bruckner is not an attraction are invited to listen to the scherzo. C. G. B.

CHOPIN

Piano Concerto No. 1, in E Minor, Op. 11 Gyorgy Sandor, piano. Philadelphia Orchestra, Eugene Ormandy, cond. COLUMBIA ML 4651. 12-in. 35 mins. \$5.45.

Mr. Sandor's playing may not be inspired, but it is highly competent and musical. Taking into consideration the excellence of its mechanical reproduction, this is as good a version as any on the market. The slow movement is particularly rewarding; Mr. Sandor curves the long, nocturne-like phrases gracefully and makes an exquisite passage of the little cadenza in the middle. The Philadelphia Orchestra, for what little it has to do, provides a satiny background. Mieczyslaw Horszowski brings more soaring lyricism to the concerto in his performance for Vox, but he is afflicted with R. E. an echo.

CHOPIN Twelve Etudes

Wilhelm Backhaus, piano. LONDON LS 704. 10-in. 27 mins. \$4.95. Includes Op. 10, Nos. 2, 5, 8, and 10; and Op. 25, Nos. 1, 2, 3, 6, 7, 8, 9, and 11.

CHOPIN Fourteen Etudes

Leah Effenbach, piano. ORFEO 11. 12-in. 35 mins. \$5.45. Includes Op. 10, Nos. 1, 2, 3, 4, 5, 6, 7, 8, and 12; and Op. 25, Nos. 6, 7, 8, 9, and 11.

On the basis of this London recording, there seems to be little affinity between Chopin's music and Mr. Backhaus' temperament. The playing is pedestrian and conscientious, if musically respectable, and almost completely devoid of imagination and élan. Almost all the notes can be heard, which can be a good thing and certainly gives flavor to the étude in thirds (G Sharp Minor, Op. 25, No. 6), where pianists invariably skimp and blur. But he misses the point — a rhythmic one — of Op. 25, No. 2, in F Minor, and the so-called Winter Wind étude is far from stormy. The piano tone is generally ringing but now and then tends to sound thumpy; otherwise the recording is satisfactory.

Miss Effenbach's performances vary considerably from étude to étude. Op. 10, No. 1, in C Major, for example, is delightfully buoyant, the articulation clean, the piano tone good, and a feeling for harmonic coloration evident. In another étude the piano will sound duller, with some of the bass tones not materializing, and Miss Effenbach will adopt the sentimental trick of playing one hand a fraction later than the other. On the whole, though, more of the performances have some quality of fancifulness, charm, or sensitivity than do not, and the pianist is obviously a musician with something to say. The recording, with the exceptions noted, is first rate. R E

CHOPIN Eleven Mazurkas

Guiomar Novaes, piano. VOX PL 7920. 12-in. 34 mins. \$5.95. Includes Op. 17, No. 4; Op. 24, Nos. 2 and 4; Op. 33, Nos. 2, 3, and 4; Op. 41, No. 1; Op. 56, No. 2; Op. 59, No. 2; Op. 63, No. 1; and Op. post., in A Minor (dedicated to Emile Gaillard).

Of all his works, Chopin's mazurkas are probably the most relevant to our times, with their bold harmonies and succinct form. They are highly original and establish a wide range of moods within the confining compass of the mazurka structure and rhythm. Miss Novaes has collected on this record fourteen. Given the kind of performance that is customary from this Brazilian pianist, they make the disk practically indispensable to people interested in piano literature. Miss Novaes' begins rather disappointingly, in rather dry tone. But the reasons for the quality of tone she has chosen are soon apparent - it sets off the mazurka rhythm sharply and makes it possible to keep the swiftly shifting harmonic texture unclouded. William Kapell plays the mazurkas in his RCA Victor recording (together with the Sonata in B Minor) with a more sensuous tone and more resilience, but without the same feeling for proportion. Artur Rubinstein's performances in the old 78-rpm albums set the general standard for style mercurial, very dashing, and technically brilliant. He also can sound impatient. Miss Novaes is more likely to take things easily — witness the tempo of Op. 56, No. 2 but in so doing she can give play to her wonderful sense of harmonic and rhythmic coloration, stressing the crucial tone or voice. The Vox recording is fortunately of high calibre.

CHOPIN

Les Sylphides — see Tchaikovsky.

COATES

The Three Elizabeths Suite; The Four Centuries Suite.

The New Symphony Orchestra, Eric Coares, cond

LONDON LL 753. 12-in. 45 min. \$5.95.

The formula that has served Coates so well for the past 25 years, and given his music world-wide popularity, is used again, to excellent effect in the *Three Elizabeths* suite. The brass and bustle of the opening movement give way to a Scottish tinged pastorale, followed by a typically rousing Coates march. It all sounds disarmingly simple . . . yet no other contemporary composer, except possibly Leroy Anderson, seems to have mastered the secret.

The Four Centuries suite, which is really a short summary of music written for the dance in the last 400 years, is a more adventurous and interesting example of Coates' musical abilities. Naturally we have a waltz — no Coates suite would be complete without one — and so on to a final movement in rather polite jazz (circa 1926) rhythm, complete with saxophones, vibraphone and glockenspiel.

The performance under the composer's direction may be taken to be definitive. The orchestral tone is quite lush, the recorded sound good, even though, I believe, these recordings were made some three or four years ago.

J. F. I.

CORELLI The Twelve Concerti Grossi

Corelli Tri-Centenary String Orchestra; Dean Eckertsen, cond.

VOX PL 7893. 3 12-in. 1 hr., 58 min. \$17.85.

Credit Vox with another fine answer to a long-felt need. Although several of the concerti grossi comprising Corelli's Opus 6 have already been recorded individually, this is the first appearance of the complete 12 works under one cover.

The "Corelli Tri-Centenary String Orchestra" as the album points out, really consists of "leading members of one of New York's great symphony orchestras." Regardless of who they are and what name they take, their performances under the sensitive direction of young Dean Eckertsen are completely satisfying. There is a beautiful clarity among the parts, and the sounds are never overloaded. The capable solo players are the violinists Daniel Guilet and Edwin Bachmann and the cellist Frank Miller. There could hardly be a more fitting way of celebrating the three-hundredth anniversary of Corelli's birth.

D. R.

COUPERIN

Le Parnasse ou l'Apotheose de Corelli †Frescobaldi: Five Canzoni per Sonar †Rosenmüller: Sonata in E Minor

Harpsichord Quartet.

ESOTERIC ES 517. 12-in. 15, 16, 11 mins. \$5.95.

Superb examples of French, Italian, and German baroque music make up this recording by the Harpsichord Quartet (Claude Monteux, flute; Harry Shulman, oboe; Bernard Greenhouse, cello; Sylvia Marlowe,

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harpsichord). The tribute to Corelli, written in 1722 by the greatest of French clavecinists, is by turns grave and elegantly spirited, rich in counterpoint and in the graceful and intricate ornaments of the rococo style. Frescobaldi's Canzoni per Sonar, written over a century earlier, are antecendents of the trio sonata, "the classic medium of baroque chamber music." Made up of contrasting patterns of contrapuntal and chordal sections, which gave them the name "quilt canzonas," they are ingenious and beguiling treatments of lighthearted themes. The surprise of the record is the Sonata by Johann Rosenmüller, who lived from 1619 to 1684. It is unusually touching music, full of long, expressive melodies and tensely built in the harmonic progressions. Expertly recorded, the performances are at once gracious and impeccable, perfectly balanced in that the basso continuo of cello and harpsichord forms a discreet background for the solo work of the flute and oboe. For lovers of baroque chamber music this record should be a real boon.

DEBUSSY

Sonata No. 1 for 'Cello and Piano

Antonio Janigro, 'cello; Ginette Doyen,

Sonata for Flute, Viola and Harp

Camille Wanausek, flute; Erich Weiss, viola; Hans Jellinek, harp.

Sonata No. 3 for Violin and Piano

Jean Fournier, violin; Ginette Doyen, piano. WESTMINSTER WL 5207. 12-in. \$5.95.

Quartet in G Minor, Op. 10 †Ravel: Quartet in F Major

Budapest String Quartet.
COLUMBIA ML 4668. 12-in. \$5.45.

Here, on two 12-inch disks, is all the chamber music Debussy ever wrote. It was a clever idea of Westminster's to issue all three sonatas together; they are musically related, were composed one after the other, and represent Debussy's last musical thoughts. All three are played and recorded with great care and tonal polish, though there is some slight shortage of subtlety.

It was also a good idea to couple the only quarters of Debussy and Ravel, though this is not the first time it has been done. Actually, this is a reissue on a single disk of the famous Budapest Quarter performances — dating from about 1940 — that Columbia originally released on two 12-inch disks. The reproduction does not show its age, and it is doubtful that the interpretations could be bettered.

P. A.

DELIUS

Brigg Fair; An English Rhapsody. On hearing the first cuckoo in Spring. The Walk to The Paradise Gardens A Song of Summer

The London Symphony Orchestra. Anthony Collins, cond.

LONDON LL 758. 12-in. 40 min. \$5.95.

These superb performances of four impressionistic Delian cameos come as a distinct surprise, for Collins has not previously recorded any Delius music. Perhaps some intimation of a possible flair for this music was apparent in his recent recording of

Vaughan Williams' scores, but that evidence fell far short of preparing us for the masterly way he had solved the mysteries of these musical mosaics

Each work is beautifully proportioned, exquisitely balanced, and controlled with great delicacy. Particularly successful is the ravishing performance of "The Walk to the Paradise Gardens", undoubtedly the finest yet committed to records. Transparent may not seem a very appropriate word for the misty, opaque Delius landscapes, but it surely applies to these exquisite performances.

The recording has been endowed with superlative London sound, and the work of the orchestra in general, and of the horn and flute players in particular is extremely fine. But the real triumph is Collins'. J. F. I.

DOHNANYI

Serenade for Violin, Viola and 'Cello in C Major, Op. 10

Quartet in D flat Major, Op. 15

Arnold Eidus, violin; David Mankovitz, viola; George Ricci, 'cello, in the Serenade; with Louis Graeler, 2nd violin, in the Ouartet.

STRADIVARI STR 614. 12-in. 19 and 24:04 min. \$5.95.

The Hungarian pianist, conductor and composer, Erno Dohnanyi, now living in Tallahassee, Fla., is one of the most inventive among the conservative creative musicians of our day. The light, often witty, five-movement Serenade and the more serious three-movement Quartet, both early works, remain among his more popular compositions because of their engaging melodies and facile, easy-going manner. Both are presented here for the first time on long-playing disks—spirited, admirably integrated, and with a wonderfully natural P. A.

DVORAK

The Watersprite, Op. 107
†Kabalevsky: The Comedians — Suite,

Op. 26 †Prokofieff: A Summer Day — Suite, Ob. 65b

Symphony Orchestra of Radio Berlin; Gerhard Wiesenhütter, cond., in the Dvorak; Arthur Rother, cond., in the Kabalevsky; Adolf Fritz Guhl, cond., in the Prokofieff. URANIA URLP 7082. 12-in. \$5.95.

Here is a record, concerned mainly with music for children, that should gain wide popularity with youngsters of every age—even beyond the limits of the proverbial 6 to 60. Most appealing of the three works recorded here is the jolly, dashing Suite from The Comedians—incidental music which Kabalevsky wrote for a children's play, Inventor and Comedian. It is played on this disk with exemplary vigor.

Serge Prokofieff was a genius at writing music for the younger set, and A Summer Day is a prime example of his art. It is a suite of short pieces, his own orchestral arrangements of seven of the twelve movements of his Music for Children — piano pieces designed to be played by or for small fry. Actually, the music sounds more effective in orchestral dress.

Dvorak was not at his best in his symphonic poem, *The Watersprite*, though it has a certain folkish charm.

Reproduction in all three works is well up to Urania's new, exceptionally high standards.

P. A.

ELGAR

Variations on an original theme, "Enigma", Op. 36

†Purcell: Suite from the dramatic music of Henry Purcell (Arranged and edited by Albert Coates)

The London Symphony Orchestra. Sir Malcolm Sargent, cond.
LONDON LL 740. 12-in. 41 min. \$5.95.

There seems to be nothing strikingly individual about Sargent's ideas on the wonderful Elgar variations. His is the typically sturdy, four-square, British approach, with some occasional too-leisurely tempos and a less thrusting direction than some of the variations need. However, it must be said that when the work is over, there remains the memory of a most satisfying performance and it would not surprise me to learn that this version is more acceptable, in England, than the recent glowing Toscanini version. Toscanini takes two minutes less to play the work than Sargent (28 to 30) and manages to get the work on one side. London assigns Variations 1 to 11 to side one, 12 to 14 to side two, using the little suite of Purcell music, arranged by Albert Coates, as a filler.

More excellent sound from London . . . the Coronation seems to have made quite a difference . . . richer, riper, more resonant.

J. F. I.

FRANCK String Quartet

WQXR Quartet.

POLYMUSIC PRLP 1010. 12-in. 41 min. \$5.95.

It is surprising that this should be the first appearance of Cesar Franck's contribution on an LP disk. Admittedly, the composer's chromatic idiom grows wearisome, and his concern with cyclical structure extends the quartet inordinately; but the beauty of its instrumental texture and of its introspective moods cannot be denied. The playing of the WQXR Quartet is variable, at its excellent best in the Scherzo and in the Larghetto, where it adopts a suitably chaste tone. In the first movement the strings throb somewhat melodramatically. The recording is acoustically superior, although my copy had a slight pitch waver. R. E.

FRESCOBALDI Five Canzoni per Sonar — see Couperin

GLAZUNOFF

Symphony No. 7 in F Major, Op. 77 †Miaskovsky: Lyric Concertino in G Major, Op. 32, No. 3

Symphony Orchestra of Radio Berlin; Felix Lederer, cond., in the Symphony; Adolf Fritz Guhl, cond., in the Concertino.
URANIA URLP 7088. 12-in. \$5.95.

Alexander Glazunoff was probably the most conservative of the late nineteenth century school of Russian composers. Though he was young enough to be a pupil of Rimsky-Korsakoff, the latter's music was often more advanced in style. Aside from the Violin Concerto, very little of Glazunoff's serious music is heard in this country today. The Seventh Symphony is only the second of his eight works in this form to appear on disks. Its pleasing quality and many lovely, easy-to-follow melodies may endeat it to many listeners, though it is difficult to say how well it will wear.

Even less likely to survive is the rather colorless Lyric Concertino for flute, clarinet, bassoon, horn, hatp and strings by another Rimsky-Korsakoff pupil, Nicolai Miakovsky, The recording is adequate.

P. A.

GLIERE

Harp Concerto - See Rimsky Korsakoff

GOULD

Latin-American Symphonette — See Barber

GOUNOD

Roméo et Juliette (Act IV: Mon, ce n'est pas le jour.)

†Tchaikovsky-Tanieff: Romeo and Juliet Duet.

Jean Fenn (s); Katherine Hilgenberg (ms); Raymond Manton (t). Los Angeles Orchestral Society; Franz Waxman, cond. CAPITOL P-8189. 12-in. \$4.95.

One of the more instructive and interesting musical pastimes is to compare treatments by different composers of identical dramatic situations. Here is a chance to indulge — and to acquire some very good music, well performed and recorded. Gounod's Roméo et Juliette, through seldom heard, holds some lovely things, this duet among the loveliest. Both it and the Tchaikovsky-Tanieff setting deal with the speeches, near the end of Act III of Shakespeare's play, that begin with Juliet's "Wilt thou be gone? It is not yet near day." Tchaikovsky blocked out the vocal lines; Sergei Tanieff orchestrated it, adding an introduction constructed from material in the Romeo and Juliet Overture-Fantasia. Jean Fenn and Raymond Manton sing with winning freshness of both voice and spirit. Taken as a whole, this is one of the most intriguing of recent curiosities. J. H., Jr.

GRANADOS Twelve Spanish Dances

José Echaniz, piano. Westminster WL 5181. 12-in. 50 min. \$5.95.

Includes Minueto, Oriental, Zarabanda, Villanesca, Andaluza (Playera), Jota (Rondalla Aragonesca), Valenciana, Asturina, Ma zurca, Danza Triste, Zambra, and Abrabesca.

Like the music of Albéniz, that of Granados served in his day to create an interest in Spanish music outside of Spain. Today these pieces still have considerable charm and pianistic interest, and the Playera is extremely populat in both its original and orchestrated forms. Mr. Echaniz, a Cuban now living in the United States, makes his recording debut on this disk. He gives clean, colorful, somewhat brittle performances of the dances. Westminster has given the pianist the benefit of their unexcelled technical skill in producing the recording. R. E.

HANDEL Apollo e Dafne

Margaret Ritchie (s), Bruce Boyce (bne); Orchestra cond. by Anthony Lewis. OISEAU-LYRE LD 14. 12-in. 35 min. \$5.95.

Here is an early work of florid force composed by Handel when he was an Italian composet, on a theme a hundred times used and ideal for musical treatment. It is a cantata (as all dramatic works are on records) which would make an effective short opera. The recording seems to be the best thing in the short Oiseau-Lyre catalogue, technically bright and smatt, led with style and sung with style (although not easily by Mr. Boyce) and adorned by the rich oboe of Pietre Pierlot. Miss Ritchie uses her voice beautifully in this kind of music, and there are delectable moments of tenuous vocal flotation when she implies the zephyr caressing the laurel into which Daphne is to be magically changed. — There are two flaws in the edition: Miss Ritchie's uncertain microphone technique, and a text printed in Italian without a translation.

HANDEI

Cantata: Nel Dolce Dell' Oblio Sonatas in D Minor and C Major Trio Sonata in F Major

Pro Musica Antiqua of New York. Bernard Krainis, recorder; Nina Courant, viola da gamba; Herman Chessid, harpsichord; Arnold Black, violin; Valarie Lamoree, soprano.

ESOTERIC ES 515. 12-in. \$5.95.

Since the performers on this recording use only the original instruments, this disk comes about as close as possible to a realization of the sounds that Handel must have had in mind. Miss Lamoree negotiates the vocal passages easily and gracefully, and her voice is well suited ro music of this period. Moreover, all the performers approach the music with a fine sense of style, so that the parts emerge with complete clarity. Bernard Krainis turns in some of the sweetest recordet playing you're likely to hear.

Except for a little violin trouble, the recording as such is excellent. D. R.

HANDEL

Concerto for Organ and Orchestra in G Minor (Opus 4, No. 1) Concerto for Organ and Orchestra in B Flat Major (Opus 4, No. 2)

Jeanne Demessieux, organ. L'Orchestre de la Suisse Romande; Ernest Ansermet, cond. LONDON LL 695. 12-in. \$5.95.

These are vigorous performances of two delightful and melodious works by the man who is said to have invented the organ concerto. At times, Mlle. Demessieux keeps the registration of the organ light, in keeping with what is presumed to have been the sound of the organs in Handel's time. At other times the sound becomes meatier, more modern. This, however, is a very minor matter, next to what this listener regards as the major sin of this recording. It lies in the cadenzas to both concerti, whereby we are suddenly catapulted out of the era of Handel, into thick, nineteenth century harmonies. The jacket notes inform us that for the concerto No. 1, "Handel has written a fairly complicated cadenza, to which Mile. Demessieux has added". Would that Mlle.

Demessieux had not "added", and thereby had not marred these otherwise good performances!

D. R.

HANDEL

Three Concerti for Viola and Orchestra: B Minor (Casadesus), G Minor, B Flat Major

Emanuel Vardi, violist; the Stradivari Chamber Orchestra.

STRADIVARI 617. 12-in. \$5.95.

These are fine performances of three beautiful works. Vardi's playing is technically secure and tonally rewarding. (The label on Side 2 of my copy lists the B Flat concerto first and the G Minor second, when actually they occur in reverse order on the side.) The anonymous jacket notes are devoted solely to biographical matters regarding Handel, and make no mention whatsoever of the three concerti on the disk! Were they originally written in this form, or were they arranged from other music by Handel? The B Minor Concerto was apparently arranged by Casadesus (Henri-Gustave Casadesus, a violist and founder of the Societe des Instruments Anciens), but no mention is made of the source of the other two works.

HANDEL-HARTY

Suite From the Water Music - See Mozart

HANSON

Symphony No. 2 (Romantic), Op. 30 — See MacDowell

HAYDN

Concerto for Violoncello - See Schubert

HAYDN

Symphony No. 7, in C, "Noon" Symphony No. 45, in F Sharp Minor, "Farewell"

Philadelphia Orchestra, Eugene Ormandy, cond.

COLUMBIA ML 4673. 12-in. 24, 23 min. \$5.45.

These are juicy peaches of orchestral succulence. Even in the days of Dr. Stokowski's most tropical efflorescence, the Philadelphians could contrive a tonal voluptuousness no more heated than this. And the enticement is made from Haydn's restrained orchestration - pairs of oboes and horns with the strings in the "Farewell", the same with flute and bassoon in the "Midi". A larger phalanx might have been suffocating. It is surprising how the fabric of these two symphonies sustains the juices, and wonderful how the elegant old-fashioned tapestry of No. 7, with its ornate figures and interweaving concertino, gives a new and enticing glow in the sumptuous playing here. (The delectable performance by Franz Litschauer for the Haydn Society is not tonally in this class.) As for the "Farewell", it is of course the best we have, and faultless until the tail to the finale, the farewell itself, whose wistful reluctance requires a little more deliberation than Mr. Ormandy permits. C. G. B.

HAYDN

Symphony No. 44, in E Minor, "Mourning" Symphony No. 49, in F Minor, "La Passione"

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Vienna National Opera Orchestta, Hermann Scherchen, cond.

WESTMINSTER WL 5206. 12-in. 24, 20 min. \$5.95.

Dr. Scherchen's way with the greater Haydn symphonies must be pretty well known by now. No other conductor in Haydn extorts so decided an accent consistently, and few make the effort to realize the dynamic markings so explicitly. Since Dr. Scherchen's lyrical sense is very broad, listeners are regularly piqued by contrast, and find Haydn sounding new. So with this pair of tormented works, where the icy minuet of No. 44 and the terrified finale of No. 49 are unforgettable in their definition, especially after slow movements drawn with curves so full. - The sound is not good for this series. Not bad, but not Westminster's best. The violins are difficult, the severest curtailment of treble being not quite sufficient to silence all suggestion of a faintly C. G. B. vibrating wire.

HINDEMITH

Sonata for Four Hands (1938) †Martin: Ballade for Flute, Strings and Piano (orchestrated by Ernest Ansermet)

Grete and Josef Dichler, duo-pianists. Kamillo Wanansell, flute. Collegium Musicum Orchestra; Kurt Rapf, cond. COOK 1037. 10-in. 13, 8 mins. \$4.00.

The interest here lies in the pianos on which the Hindemith sonata is played and the first recorded performance of the Martin Ballade. The Dichlers play on two Bosendorfer 13-foot concert grands that are used as reference instruments for new pianos. The distinguishing factor in the tone is the remarkable fullness and depth of the bass. Cook Laboratories, makers of SOOT disks, describe the record as intermingling "purity of tone with passages where the breathy overtone rustle and growl most Unsinusoidally," a claim I will support to my dying day. For anyone interested in pianos and piano playing, the record is a must.

The Swiss Frank Martin's Ballade offers high-grade workmanship in latter-day impressionistic style. It is not strong on originality, but it is quite lovely and deeply felt. In the recording every little nuance of the flute is crystal clear; the instrumental balance and the entire performance are perfection itself.

R. E.

IPPOLITOFF-IVANOFF

Caucasian Sketches, Op. 10 — See RimskyKorsakoff.

KABALEVSKY
The Comedians — See Dvorak

KALINNIKOFF Symphony No. 2

National Radio Orchestra of U.S.S.R., N. Rachlin, cond.

PERIOD SPL 566. 12-in. 35 min. \$5.95.

Basil Kalinnikoff, who died in 1901 at the age of 35, is known almost entirely for his first symphony, a work containing wonderful tunes, feebly developed. The tunes in his second symphony are as good as those in his first, and their handling is altogether masterly. It is therefore quite impossible to understand why this splendid work is torally



Hermann Scherchen: a firm hand at Haydn

unknown to the general public and to the majority of conductors. It belongs on one's shelf next to the second symphony of Alexander Borodin, which it strongly recalls. An excellent performance and an outstandingly fine recording.

A. F.

KHACHATURIAN Piano Concerto

Moura Lympany, piano; London Philharmonic Orch., Anatole Fistoulari, cond. LONDON LL 692. 12-in. 28 min. \$5.95.

Cello Concerto

State Orch. of U.S.S.R., Sviatoslav Knushevitsky, piano; Alexander Gauk, cond. VANGUARD VRS 6009. 12-in. 23 min. \$5.95.

Now that Prokofieff is dead, Kabalevsky, Khachaturian and Shostakovitch seem to be the leading names in Soviet music, but Khachaturian is much the weakest of this triumvirate. His piano concerto is, to be sure, a very popular piece, but it is none-theless a tired. vulgar contraption, relying strongly on Rachmaninoff and the kind of superficial orientalism which Rimsky-Korsakoff had exhausted before Khachaturian was born. The 'cello concerto is less flashy than the piano concerto, but scarcely more significant. The London disk is the better recorded.

LEONCAVALLO Pagliacci

Lucine Amara (s); Richard Tucker (t); Thomas Hayward (t); Giuseppe Valdengo (bar); Clifford Harvuot (bar).

Metropolitan Opera Orchestra and Chorus; Fausto Cleva, cond.

COLUMBIA SL-124 (with Cavalleria Rusticana, q.v. below. Also sep., as SL-113. Two 12-in. \$10.90.)

Victoria de los Angeles (s); Jussi Bjoerling (t); Paul Franke (t); Leonard Warren (bar); Robert Merrill (bar); Richard Wright (t); George Cehanovsky (bar).

RCA Victor Symphony and the Robert Shaw Chorale; Renato Cellini, cond.



Leonard Warren: Pag-man par excellence

RCA VICTOR LM 6107 (with Cavilleria Rusticana, q.v. below).

MASCAGNI Cavalleria Rusticana

Margaret Harshaw (s); Mildred Miller (ms); Thelma Votipka (ms); Richard Tucket (t); Frank Guarrera (bar). Metropolitan Opera Orchestra and Chorus; Fausto Cleva, cond. COLUMBIA SL-124 (with *Pagliacci*). Three 12-in. \$16.35. Also sep. as SL-123 (with Verdi: overtures to La Forza del Destino and I Vespri Siciliani; preludes to Acts I and II of La Traviata — Reviewed last issue). Two 12-in. \$10.90.

Zinka Milanov (s); Carol Smith (ms); Margaret Roggero (ms); Jussi Bjoerling (t); Robert Merrill (bar). RCA Victor Orchestra and the Robert Shaw Chorale; Renato Cellini, cond.

RCA VICTOR LM 6106 (with Pagliacci). Three 12-in. \$17.16.

When Pietro Mascagni's Cavalleria Rusticana has its premiere in Rome on May 17, 1890, its success was immediate, and its young composer found himself hailed as the new leader of Italian opera, as the man who had given musical expression to the literary vogue of vertimo— that is, realism.

In the wake of Cavalleria followed a whole series of kindred works. Another young composer, Ruggiero Leoncavallo, dusted off the score of his long-rejected Pagliacci and heard it sung in Milan. The rerismo enthusiasm swept Europe, and in Vienna Cavalleria Rusticana and Pagliacci were produced as a double bill. They have been together ever since, and now both RCA Victor and Columbia have sealed the union in albums of LP records.

It is nearly impossible to know today the tremendous impact these fiery, bloody little operas had on those who first heard them. Santuzza and Turiddu; Nedda, Canio, and Silvio are to us as much stock operatic figures as Gilda, Rigoletto, and the Duke of Mantua; Norma and Pollione. But in the Italy of the 1890's they were figures from real life, as real as the characters in Death of a Salesman are to us. The verismo movement gave rise to many operas, but, aside from some pages of Puccini, rhe surviving representatives of the genre are these two works. Cavalleria Rusticana and Pagliacci are still with us, and they show no signs of losing their hold on the public. Neither holds the greatest music ever written, by a long shot, but both are honest and vital musical theatre. capable of tremendous impact still if they are given performances of power and forthrightness. Both have been well represented on records from the very beginning.

Since Cavalleria Rusticana comes first on the bill, let us consider it first. Until now, the LP representatives have been a sportily sung but idiomatic issue on the Cetra label and a Victor reissue in which the aged Mascagni himself conducts a cast headed by Beniamino Gigli and Bruna Rasa in what must surely be the slowest, dankest, weariest performance his opera ever had.

In the Columbia set Margaret Harshaw sings splendidly but, alas, vocal precision and tonal beauty are not by any means the whole of the role of Santuzza. She is a creature of passion, and Miss Harshaw, to me, is not. The accents are all in place, but the inner flames of love, shame, and jealousy are missing. If Zinka Milanov's voice is

warmer than her competitor's it is also sometimes flawed, but she knows and - more to the point - projects far more of the musico-dramatic content.

As to the Turiddus, it is largely a matter of choice between voices; both Richard Tucker and Jussi Bjoerling give cleanly sung, hardhitting performances. Frank Guarrera's Alfio, for Columbia, is more intelligently sung than Robert Merrill's. The Lolas are stand-offs: neither Mildred Miller nor Carol Smith is all that could be wished, but both are acceptable. Thelma Votipka, in the Columbia set, is far, far and away better than Margaret Roggero as Mamma Lucia. Both performances are well conducted, but, in the final analysis, Fausto Cleva (Columbia) belongs in a faster league than Renato Cellini. The Robert Shaw Chorale produces a firmer, lovelier body of tone for Victor than the Metropolitan Chorus does for Columbia, but the wonderful opera-house delivery of the offstage punch line - Hanno ammazzato compare Turiddu! (They have murdered neighbor Turiddu!) throws the balance back the other way. Engineering values are about equal, shaded, I would say, in favor of Victor's liver resonance.

So the considerations just about cancel except for Santuzza; and, after all, Cavalleria Rusticana is Santuzza's story. One vote for Zinka Milanov and Victor, with apologies to Mr. Cleva.

The Pagliacci issues present no such problem, for the competitive older versions (an ordinary, but, again, idiomatic, performance on Cetra disks, and a Victor reissue in which Mr. Gigli's singing does not outweigh the outmoded sound) are in varying degrees unsatisfactory, and the listener to the Columbia issue is confronted with a Nedda, in the person of Lucine Amara, who is so disconcertingly immature dramatically that she might as well not have sung prettily either. It is really upsetting to think that the Metropolitan management should put its "official" stamp on a performance so patently not yet ripe for the ears of any but a most unsophisticated public.

Again Mr. Cleva's performance is more forceful and firmer than Mr. Cellini's. Again both Mr. Bjoerling and Mr. Tucker sing splendidly - although here, as a matter of personal preference, I would choose Mr. Bjoerling. Leonard Warren, the Victor Tonio, is always in character vocally and always expert, while his opposite number, Giuseppe Valdengo, is merely routine and brawny.

The Victor set's Nedda, Victoria de los Angeles, sings with real tonal beauty almost all of the time, and shows remarkable dramatic awareness for one who has not had much experience of the role. She is surely one of the finest singers to be heard today, and I, like many others, find her vocal personality peculiarly ingratiating. So if her unattractively strained A sharp in the balatella goes unmentioned here, take solace in the thought that the approach is very difficult and that almost all sopranos have a hard time getting that particular rone focussed. So, another vore for Victor. J. H., Jr.

Fantasia and Fugue on the Chorale Ad Nos ad Salutarem Undam

Jeanne Demessieux, organ. LONDON LL 697. 12-in. 25, 10 min. \$5.95.

Miss Demessieux, a petite Frenchwoman, gives a towering performance of Liszt's gaudily monumental work. She has the technique to sweep through the music's difficulties in bold, grand fashion; the registration provides a kind of aural kaleidescope in its richness, variety, and detail; and she treats the more meditative moments with a love and devotion that endow them with considerable meaning. The recording, made in England on an undesignated organ, is extraordinarily lifelike, with its sense of spaciousness and tiny, characteristic degree of echo and blur. It should be a useful disk for demonstrating how good high-fidelity equipment is. The work itself is one of Liszt's most striking, based on a chorale Meyerbeer created for his opera Le Prophète. (It also exists in a piano-duet version made by Liszt and a solo piano version — the best known - made by Busoni.) Miss Demessieux's playing is equally dazzling in the Widor variations, which have their own virtuosic problems but sound a little pallid after the Liszt.

LISZT

Piano Concerto No. 1, in E Flat Major †Mendelssohn: Piano Concerto No. 1, in G. Minor

José Iturbi, piano. RCA Victor Symphony; José Iturbi, cond. RCA VICTOR LM 1734. 12-in. 17, 18 mins.

LISZT

Piano Concerto No. 1, in E Flat Major; Hungarian Fantasy, in E Minor

Claudio Arrau, piano. Philadelphia Orchestra; Eugene Ormandy, cond. COLUMBIA ML 4665. 12-in. 19, 15 mins.

Two more recordings of the Liszt E Flat Major Piano Concerto bring the total to eight. Mr. Iturbi displays all sorts of surface technique, with clean articulation as its main virtue. Beyond that is almost nothing, and the result is just plain dull, something that seems almost impossible with this The companion piece, Mendelssohn's G Minor Concerto, resembles a Czerny or Hanon exercise in Mr. Iturbi's hard and steely performance. The recording is almost excessively brilliant.

Mr. Arrau's version of the Liszt belongs among the best. It does not have the acoustical magnificence of the Westminster recording, in which Edith Farnadi is the pianist but the two soloists come out about even musically. The Chilean offers more sheer brilliance and dazzle within an aristocratic pianistic style, but he is mannered and less successful than Miss Farnadi in the Adagio. The Hungarian Fantasy, another work that has practically retreated from concert to conservatory halls, is based on the same material as in the Fourteenth Hungarian Rhapsody for solo piano. It remains good, spirited fun, and Mr. Arrau tosses it off with an unbearable combination of polish and glitter. Mr. Ormandy conducts with flair, and the Philadelphians play rhe music ro the hilt. The reproduction is all it should be except for an occasional lack of body in the piano tone. The recording is recommended. R. E.

LOFFFLER

A Pagan Poem - See Scriabin

Ballade for Flute, Strings and Piano -See Hindemith

MENDELSSOHN

Piano Concerto No. 1, in G Minor -See Liszt

MACDOWELL

Piano Concerto No. 1, in A Minor, Op. 15; Piano Concerto No. 2, in D Minor, Op. 23

Vivian Rivkin, piano. Vienna State Opera Orchestra; Dean Dixon, cond. WESTMINSTER WL 5190. 12-in. 27, 26 mins. \$5.95.

MACDOWELL

Piano Concerto No. 2, in D Minor, Op. 23 †Hanson: Symphony No. 2 (Romantic), Ob. 30

Jesus Maria Sanroma, piano. Eastman-Rochester Symphony; Howard Hanson,

COLUMBIA ML 4638. 12-in. 25, 27 mins. \$5.45.

MacDowell's two piano concertos, produced toward the end of the nineteenth century. were instrumental in gaining status for American music both here and abroad at a time when it had practically none. In them Mac-Dowell succeeded in combining European style with indivualistic, flavorsome harmonic and melodic devices thought to be authentically American. The first concerto is the less interesting of the two, although it still retains some freshness in its simplicity and occasional harmonic surprises.

Of the two recordings of the D Minor concerto, Miss Rivkin's is the more thoughtful and modern in conception, Mr. Sanroma's the more romantic. Mr. Sanroma achieves his emotional excitement at the cost of a good many wrong notes and some overpedaling. In the Columbia recording the piano tone is tinny, the balance uncertain. The Westminster is admirably recorded and conducted.

The coupling of MacDowell and Hanson on the Columbia disk is apt, however. Hanson has been an important and steadfast supporter of American music in American concert halls. The Romantic (by which the composer means "warm-blooded") symphony has achieved more popularity here and in Europe than most American symphonies, helped perhaps by three odd facts: A jazz version of the principal melody of the slow movement became the theme of a United States Army dance band touring Europe during the war; the slow subject of the first movement opened the annual broadcasts by the National High School Orchestra from the camp at Interlochen, Mich. (before the notorious Petrillo ban); and a jazz version of the same melody had some currency years ago. The symphony, written in 1930 for the Boston Symphony's 50th anniversary, has pretty, somewhat banal, tunes, formal simplicity; and lush orchestration. The performance, presumably authentic, and the recordings are unexceptionable. R. E.

MIASKOVSKY Lyric Suite - See Glazunoff

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MASCAGNI

Cavalleria Rusticana - See Leoncavallo

MOZART

Concerto for Piano No. 21, in C, KV 467 Concerto for Piano, No. 25, in C, KV 503

Marguerite Roesgen-Champion; Lamoureux Orchestra, Paris, Arthur Goldschmidt, cond. PERIOD 571. 12-in. 27, 30 min. \$5.95.

Concerto for Piano No. 21, in C, KV 467 Concerto for Piano No. 26, in D, "Coronation", KV 537

Joerg Demus; Vienna National Opera Orchestra, Milan Horvath, cond.

WESTMINSTER WL 5183. 12-in. 31, 32 min. \$5.95.

No. 21 is the common item, in which Messrs. Demus and Horvath, with the surpassing fingers and surpassing orchestral tone, bump into a team of surpassing Eighteenth Century understanding and practice, whose crisp eloquence outruns the more earnest but less persuasive Viennese. Impressive sound from Westminster, less valuable than the extremely natural sound from the Period disk, an unassuming triumph in spite of too much hum. The glassy violin-shimmer cannot be completely eliminated from the Westminster. The Period 21 is the best recorded example of the Concerto.

Mme. R-C's 25 is good but the sound is less exact than that of its obverse; and Mr. Goldschmidt does not match the nervous sensibility of Prof. Krips accompanying Edwin Fischer on Victor LHMV 1004.—
There is still no completely satisfying "Coronation", Demus-Horvath in a dutifully republican way subduing its potential of glory to a lulling dullness.

C. G. B.

MOZART

Les Petits Riens — See Scarlatti-Tom-

MOZART

Concerto for Violin No. 3, in G, KV 216 †Handel-Harty: Suite from The Water

Gerard Poulet; "Austrian" Symphony Orchestra, Gaston Poulet, cond. (Mozart) and same orchestra, Gustav Koslik, cond. (Handel).

REMINGTON 199-131. 12-in. 25, 17 min. \$2.49.

Most of us agree that the child-musician is among the least endearing of fauna, but a 14-year-old violinist is presented here in appealing and presentable guise, without pretension in a direct and musicianly recreation of an expertly guileless concerto by a 19-year-old composer. The conducting of Poulet père must have had much to do with the cool tastefulness of this record, which challenges the preëminence of several renowned violinists in the same music, and has the most accurate reproduction of them all. - Beautiful slow movements in The Water Music, but the orchestra ought to be larger for this, and the deliberation of the terminal allegros dilutes their festivity. C. G. B.

MOZART

Symphony No. 39, in E Flat, KV 543 Symphony No. 40, in G Minor, KV 550

London Philharmonic Orchestra, Sir Thomas Beecham, cond.

COLUMBIA ML 4674, 12-in. 25, 25 min. \$5.45.

Reissues for the "Collector's List" of celebrated 78's, the two sides show a Beecham more confident and steadfast in Mozart than he has been consistently since. No. 40 particularly seems to proceed in mobile precision through its vicissitudes to an inevitable destiny. — The old sound is surprisingly effective; the worst fault is blurred articulation in the big bass. C. G. B.



Edith Farnadi: Always room for another Rachmaninoff Second, if the fi is hi.

PROKOFIEFF A Summer Day — See Dvorak

PROKOFIEFF

Symphony No. 7, Op. 131; Lieutenant Kijè Suite, Op. 60

Philadelphia Orchestra; Eugene Ormandy, cond. (symphony).

Royal Philharmonic; Efrem Kurtz, cond. (suite).

COLUMBIA ML 4683. 12-in. 30, 20 mins. \$5.45.

When Prokofieff's final symphony, the Seventh, was introduced to American audiences by the Philadelphia Orchestra last spring, critical reaction was almost completely uniform - it was second-rate Prokofieff, perhaps conditioned by his final illness, by the high Soviet authorities' demands for more "understandable" music, or by a combination of these factors. A welcome chance to hear the work repeatedly in this recording does not raise the basic estimate of it. It still sounds watered-down, platitudinous. Yet there is much to charm the ear and the mind, for, sick or compromising, Prokofieff was too great a composer to write anything negligible. Like Richard Strauss in such of his last works as the Metamorphosen, Prokofieff used tired, old materials with consummate mastery. The performance seems flawless. Another recording of Lieutenant Kijé seems scarcely necessary. R. E.

PURCELL Suite (Coates) - See Elgar

RACHMANINOFF

Piano Concerto No. 2, in C Minor, Op. 18

Edith Farnadi, piano. Vienna State Opera Orchestra, Hermann Scherchen, cond. Westminster WL 5193. 12-in. 35 mins. \$5.95.

Westminster's late entry in the overcrowded

field of recordings of Rachmaninoff's second piano concerto is justified by its considerable mechanical superiority to other versions and by Miss Farnadi's large-scale performance of the solo part. The tempos are slower than customary, which sometimes lends a foreign placidity to the music, but the pianist can inflect the swooning phrases as beautifully as the next. There are some lethargic tempos; otherwise the orchestral playing is very fine.

R. E.

RAVEL Quartet in F—See Debussy

RESPIGHI The Fountains of Rome; Pines of Rome

NBC Symphony; Arturo Toscanini, cond.

RCA VICTOR LM 1768. 12-in. 15, 20 mins. \$5.72.

This is something!. Audiophiles can have a field day comparing this version with the famous Westminster one, (both give wonderful definition to all the choirs of the orchestra). An old hand at conducting these two works - he conducted the world premiere of Fountains in 1918 and the American premiere of Pines in 1926 - Mr. Toscanini leads performances that in their tension and sensuosity are peerless. The last section of Pines, with its ominous muffled drum beats, is positively hair-raising. The gloss and razor-edge precision of the NBC ensemble make the blinding acoustical clarity worthwhile. All in all, a triumph for everyone concerned. R. F.

RIMSKY-KORSAKOFF Le Coq d'Or — Suite Capriccio Espagnol, Op. 34

L'Orchestre de la Suisse Romande; Ernest Ansermet, cond.

LONDON LL 694. 12-in. 25:55 and 14:18 min. \$5.95.

Capriccio Espagnol, Op. 34 †Tchaikovsky: Marche Slav, Op. 31 †Ippolitoff-Ivanoff: Caucasian Sketches, Ob. 10

Op. 10
Philharmonia Orchestra of London; Wil-

helm Schuechter, cond. M-G-M E 3022. 12-in. 23:25 and 20:54 min. \$4.85.

Skazka (Fairy Tale), Op. 29 Snegourotchka (The Snow Maiden)— Suite

Philharmonia Orchestra of London; Antole Fistoulari, cond.

M-G-M E 3017. 12-in. 16:24 and 16:38 min. \$4.85.

Symphony No. 3 in C Major, Op. 32 †Gliere: Concerto for Harp and Orchestra

National Radio Orchestra; Alexander Gaukscond., with Dulova, harp, in the Concerto. PERIOD SPL 567. 12-in. 29:24 and 24:39 min. \$5.95.

A veritable avalanche of Rimsky-Korsakoff has been loosed on us recently. Of the works listed above, Skazka, the Suite from Snegouratchka and the Third Symphony make their first appearance on records, while the Coq d'Or Suite is now represented 10 times on LP and the Capriccio Espagnol 11 times.

Ansermet gives cleat, precise, but not too exciting readings of the Coq d'Or Suite one of Rimsky's most magical creations and the Capriccio, and London has provided faithful - if sometimes fuzzy - reproduction. As far as this listener is concerned, however, the last word has been said on these two compositions in the startlingly realistic Capitol disk, brilliantly conducted by Roger Désormière. Besides, the latter manages to get each of these works complete on one record side, whereas Ansermet spills the Suite over into the Capriccio side. Also, comparison should be made with Sir Thomas Beecham's broader interpretation of the Suite on an excellent Columbia disk.

The performances by Schuechter of the Capriccio, together with two other popular favorites — Tchaikovsky's Marche Slav and Ippolitoff-Ivanoff's Caucasian Sketches — are little more than routine, though the reproduction is quite good, except for what sounds like a bad splice.

Skazka and The Snow Maiden, both dating from 1880, are among Rimsky's first really mature works. The former, an orchestral fairy tale without any real story, was inspired by Pushkin's Prologue to Russlan and Ludmilla; it is full of imagination and drama, colorful orchestration and effective use of Russian folk tunes. Fistoulari does very well by both works, and the recording is clear and lifelike.

Least interesting of the Rimsky music offered here is the early, rather academic Third Symphony, which sounds rather like Borodin or even Rimsky's younger compatriot, Kalinnikoff. The main appeal of this disk is the comparatively recent, though very conservative, Harp Concerto by Reinhold Glière, the second movement of which is strikingly reminiscent of Cesar Franck's Symphonic Variations. Considering that it was made from Soviet tapes, it is recorded with surprising clarity.

P. A.

ROSENMULLER Sonata in E Minor — see Couperin

SCARLATTI

Sonatas for harpsichord, Vol. IV: Longo 463, 321, 209, 386, 388, 136, 418, 103, 205, 381, 475, 323

Fernando Valenti, harpsichord. WESTMINSTER WL 5186. 12-in. 52 min. \$5.95.

SCARLATTI

Sonatas for harpsichord. Vol. V: Longo 407, 155, 129, 375, 376, 86, 325, 327, 218, 84, 457, 487

Fernando Valenti, harpsichord. WESTMINSTER WL 5205. 12-in. 52 min. \$5.95.

Westminster has now issued five volumes of Domenico Scarlatti's harpsichord sonatas (each volume being one disk of 12 sonatas). Since there are over 500 sonatas, the series could go on for some time, and it will be interesting to see at what point Westminster and Mr. Valenti, the performer involved, will stop.

The series, however far it continues, is invaluable. Scarlatti exploited the instrumental capacities of the harpsichord more completely than anyone else, and the small binary form of the pre-classical sonata be-

came a display case for his seemingly inexhaustible inspiration. The works on these two records, for example, range from an exciting tarantella (LONGO 475) to a quiet piece that is almost Brahmsian in its harmonies and brooding sentiment (L. 376). The unprepared dissonances and rhythmic subtleties of L. 205 should find a delighted ear among modern musicians.

The sonatas' musical substance is sufficient to make them valuable as piano pieces, but only when they are played on a harpsichord is their true magnificence apparent. The possible variations in instrumental texture are amply demonstrated by Mr. Valenti in registrations that are lively, rich, and tasteful. The vigor of his performances, and his policy of making all repeats, give the sonatas the physical weight and size they deserve. As David Randolph has observed about some previous Valenti-Westminster disks, the recording is realistic to the point where all the mechanical action is audible. It is not disturbing, really, and



The late Emanuel Feuermann: a wonderful way with Schubert's "Arpeggione" sonata.

it gives a wonderful sense of intimacy with the instrument, even if Mr. Randolph thinks it approaches immorality.

One further word about the issues, Mr. Valenti's comments on the jackets are more illuminating than those of most performer-commentators or just plain commentators.

D. SCARLATTI-TOMMASINI The Good Humored Ladies †Mozart: Les Petits Riens

Royal Opera Orchestra, Covent Garden, Warwick Braithwaite, cond. MGM E 3034. 12-in. 22, 18 min. \$4.85.

The earlier ballet receives its best recorded sound and its worst recorded performance, both by far. Mr. Braithwaite contributes to his competent band no more than a casual beat, to Mozart an unearned beating. Turning over, we find the same conductor alert and responsive to the scintillating orchestration provided by Vincenzo Tommasini for five of Domenico Scarlatti's five hundred "Sonatas". Brilliant recording. C. G. B.

SCHONBERG A Survivor from Warsaw (Op. 46) Kol Nidre (Op. 39)

Vienna Symphony Orchestra, Vienna Academy Chamber Chorus, and Hans Jaray, narrator; Hans Swarwowsky, cond.

Second Chamber Symphony (1939)

Vienna Symphony Orchestra; Herbert Hafner, cond.

COLUMBIA ML 4664. 12-in. \$5.45.

Of all the composers who lived and worked during the first half of this century, Arnold Schonberg was one of those who not only broke new paths but inspired others to follow. When all the returns are in, perhaps a couple of centuries from now, only Igor Stravinsky, and possibly Paul Hindemith, will rank with or above him as a creative figure and as an influencer of musical form. This recording provides as good an introduction as any to Schonberg's music, for the works recorded here, generally well performed and well reproduced, are neither his most rigorous essays in twelve-tone technique nor early, post-Wagnerian works from his formative period. One point they all make clear: that the meat of Schonberg's music lies not in its formal design (as with Stravinsky) but in emotional communication. The Second Chamber Symphony is a freeflowing piece, relatively easy to "hear" Kel Nidre, with dodecaphonic elements is more complex but again, the point is emotional. A Survivor of Warsaw, commissioned by the Koussevitzky Foundation and completed in 1947, is a cantata for speaker, chorus, and orchestra in which the speaker recalls the horror of a Nazi pogrom in Poland, with the orchestra underlining and amplifying his words. Then, suddenly, with en electrifyingly affirmative shout, the chorus bursts out with the ancient Jewish prayer Shem Yisroel. It is most moving. J. H., Jr.

SCHUBERT

Sonata for 'Cello and Piano in A Minor ("Arpeggione")

Enrico Mainardi, 'cello; Guido A. Borciani, piano.

DECCA DL 7539. 10-in. \$3.85.

Sonata for 'Cello and Piano in A Minor ("Arpeggione") †Haydn: 'Cello Concerto in D Major

Emanuel Feuermann, 'cello. Gerald Moore, piano, in the *Sonata*. Symphony Orchestra; Sir Malcolm Sargenr, cond., in the *Concerto*. COLUMBIA ML 4677. 12-in. \$5.45.

Schubert's A Minor Sonata, composed in 1824 for the "arpeggione" — or "guitar-violoncello" — is gloriously melodic music that has outlived the instrument for which it was written by more than a century and a quarter. It is a smooth-flowing, graceful work that greatly enhances the repertoire for 'cello and piano, in which medium it is now performed.

Next to the beautifully refined and polished recording of this work by Maurice Gendron and Jean Francaix (London), Mainardi's rough, choppy and often oversentimentalized interpretation falls quickly by the wayside. The lare Emanuel Feuermann, however, had a way with this music, and his smooth, facile, commanding approach represents one of his finest achievements on disks.

Also on the Feuermann record, a valuable reissue in Columbia's "Collectors Series," is

the most exciting performance of the difficult and extremely attractive Haydn Concerto to be heard anywhere. It far outshines Mainardi's recent feeble attempt for Decca and, though the recording is somewhat dated, is superior even to Antonio Janigro's splendid reading for Westminster. Feuermann plays a more extended version of the first movement than is usually heard, a version which he once informed me is the original, unedited Haydn.

The choice, then, falls, in the Schubert, between Feuermann and Gendron, and in the Haydn, between Feuermann and Janigro. If I were forced to choose, I would take Feuermann, but anyone interested in expert 'cello playing of a lasting character should own all three disks.

P. A.

SCHUBERT

Symphony No. 4 in C Minor ("Tragic")

Concertgebouw Orchestra of Amsterdam; Eduard van Beinum, cond. LONDON LL 736. 12-in. \$5.95.

Despite its pointless "Tragic" title, Schubert's fourth symphony, written when he was only 19, remains one of his best, most attractive works in this form. As yet, it has not had the representation on disks it deserves, and the present version does not quite repair this lack. Van Beinum approaches the symphony in a tasteful manner, allowing every detail and every inner voice to come through clearly. He is also aided by fine, clean-cut recording. But his interpretation lacks Schubertian glow, and his tempi in the first and third movements, are on the slow side. Interpretively, Wolfgang Freilassing and the Salzburg Mozarteum Orchestra come closer to the mark but as noted in my review in the last issue, the reproduction on the Orfeo disk is harsh and often distorted. Both it and the present record needlessly run to two 12-inch sides. P. A.

SCHUBERT

Trio No. 2, in E Flat Major, Op. 100

Adolf Busch, violin; Herman Busch, cello; Rudolf Serkin, piano.

COLUMBIA ML 4654. 12-in. 40 min. \$5.45.

Issued in memory of the late Adolf Busch, who died June 10, 1952, this recording is a fitting tribute to a musician of great integrity and insight. His collaborators, as they frequently were in his lifetime, are his brother and son-in-law, and the three give a restrained and lyrical account of the second of Schubert's two piano trios, which in its first two movements contains some of his most ruefully poignant ideas. The two Buschs' tone is not always blandishing, but they play with self-effacing devotion and disarming simplicity. Mr. Serkin, with a bigger share in the proceedings, is almost too good to be true and the recording of the piano strikingly clear. R. E.

SCRIABIN The Poem of Ecstasy †Loeffler: A Pagan Poem

Paris Philarhmonic Orchestra; Manuel Rosenthal, cond.

CAPITOL P8188. 12-in. 23, 24 min. \$4.98.

Two lush, second rate tone poems gorgeously performed and recorded. A. F.

SCHUMAN, WILLIAM
Symphony for Strings — See Bloch

SCHUMANN

Fantasiestucke, Op. 73; Three Romances, Op. 94 — See Schubert.

SIBELIUS

min. \$5.95.

En Saga — Symphonic Poem, Op. 9 Tapiola — Symphonic Poem, Op. 112

Concertgebouw Orchestra of Amsterdam; Eduard van Beinum, cond. LONDON LL 737. 12-in. 18:33 and 17:31

Lemminkäinen Suite

Philadelphia Orchestra; Eugene Ormandy, cond.

COLUMBIA ML 4672. 12-in. 23:59 and 19:26 min. \$5.45.

Though En Saga, composed in 1892and Tapiola, dating from 1925, represent the two chronological extremes of Sibelius' creative career, they make admirable disk companions. Both are given properly vigorous, intense readings by van Beinum, who seems to have a keen understanding of this music.

If memory serves correctly, it was Ormandy who, only recently, introduced to America the two "forgotten" movements of Sibelius' Lemminkäinen Suite - "Lemminkäinen and the Maidens of Saari" and "Lemminkäinen in Tuonela" — melodic and often dramatic companions to the betrerknown "Swan of Tuonela" and "Lemminkäinen's Homecoming." This is early Sibelius, attractive music based on the Finnish national epic, The Kalevala, in which Lemminkäinen is one of the four heroes. In recent years, Ormandy has earned something of a reputation as a Sibelius authority. His right to this is amply proved by his incandescent interpretation of this suite. And no praise is too high for the truly exciting fashion in which the full, glorious tone of the Philadelphia Orchestra has been reproduced by the recording engineers. P. A.

SIBELIUS

Symphony No. 1 in E Minor, Op. 39

Royal Philharmonic Orchestra; Sir Thomas Beecham, cond.

COLUMBIA ML 4653. 12-in. \$5.45.

For years, along with almost everyone else I have thought of Sibelius' First Symphony, as Slavic in character, strongly marked by the influence of Tchaikovsky. But after listening to this marvelously perceptive reading by Beecham, I'm no longer so sure. This master conductor, who so often breathes new life into overworked symphonic music, has approached this symphony as if it were purely Nordic, setting off its themes in strong, bold relief, giving the whole composition a fresh, rugged texture. It's new, it's different, it is, I am sure, musically right. Spacious recording.

P. A.

STRAUSS, R.

Aus Italien - Symphonic Fantasia, Op. 16

Symphony Orchestra of Radio Berlin; Arthur Rother, cond.

URANIA URLP 708M. 12-in. 19:43 and 19:28 min. \$5.95.

Ans Italien (From Italy) was Richard Strauss' initial excursion into the field of the symphonic poem. Warm, melodic, ingratiating, mildly adventurous, it is actually a suite in four movements, evocative of the sights and sounds of Rome and Naples. Listeners to whom it is new will be surprised to hear an extended fantasy on "Funiculi, Funicula" in the concluding section. Rother and his fine-sounding orchestra perform the work in a most satisfying fashion, and Urania has provided excellent high-fidelity reproduction.

TCHAIKOVSKY

Piano Concerto No. 2, in G Major, Op. 44

Margot Pinter, piano. Radio Berlin Symphony; Arthur Rother, cond.

URANIA URLP 7081. 12-in. 41 mins. \$5.95.

Tchaikovsky's Second Piano Concerto is here recorded in its original version. A customary cut in the development section of the first movement is restored, and the second-movement material today usurped by the piano is restored to the solo violin and cello as Tchaikovsky intended. This latter point is important, for in its pristine form the second movement gives the concerto its distinction. The piano becomes the least important of the trio of soloists, transforming the texture of the movement entirely, and, in the process, increasing its interest greatly. Miss Pinter plays this music with real flair, but she is poorly served by the sound of her piano or the recording thereof. R. E.

TCHAIKOVSKY

Marche Slav. Op. 31 — See Rimsky-Korsakoff

TCHAIKOVSKY

Princess Aurora †Chopin: Les Sylphides

Ballet Theatre Orchestra; Joseph Levine, cond.

CAPITOL P 8193. 12-in. \$4.98.

Since ballet lovers principally will be interested in this disk, it is perhaps superfluous to identify the Chopin music as transcriptions (in this case by Benjamin Britten) of various preludes, waltzes, and mazurkas and the Op. 32 Nocturne; the Tchaikovsky as excerpts, mainly the wedding divertissements from Sleeping Beanty. The Ballet Theatre Orchestra on its mettle before the microphone plays considerably better than it often does in the pit, and although Joseph Levine is by no flight of the imagination an inspired conductor his readings are basically balletic.

J. H., Jr.

TCHAIKOVSKY-TANIEFF Romeo and Juliet — See Gounod

VERDI Otello

Herva Nelli (s); Nan Merriman (ms); Ramon Vinay (t); Virginio Assandri (t); Leslie Chabay (t); Giuseppe Valdengo (bar); Nicola Moscona (bs); Arthur Newman (bs). NBC Symphony and chorus; Arturo Toscanini, cond.

RCA VICTOR LM 6107. Three 12-in. 2 hr., 2 min. \$15.66.

The release of Arturo Toscanini's 1947 broadcast performance of Verdi's Otello is an event of the greatest importance, for it fills, and seals effectively, what has until now been a yawning gap in recorded literature. The opera itself stands as one of the very loftiest peaks in dramatic music, and Toscanini's forces scale it nobly. The performance, it is true, is not entirely unflawed, and it is not difficult to see why so great a perfectionist as Mr. Toscanini hesitated before giving his approval to the release. But flaws pass quickly and shortcomings seem unimportant against the sweep and passion of the music, the grand tragedy of the story, the precision and force of the total achievement.

When Verdi completed the score of Otello in the fall of 1886 he had just turned 74. Aida was 15 years behind him; Falstaff was to come seven years later. It is impossible here to go into the genesis of Otello, to tell how Arrigo Boito condensed Shakespere's play into what is perhaps the greatest libretto ever handed to a composer, how carefully and with what supreme craftsmanship Verdi fashioned the score. The end result was—and is—the greatest of his operas, and the greatest affirmation of the Italian theatrical genius.

In preparing his broadcast opera performances, Toscanini has not been uniformly fortunate in his casting. His procedure, apparently, has been to insist on the right quality of voice for a role under consideration, presumably on the theory that if the instrument is suitable its owner can be led, coaxed, or threatened into following the master's interpretative path. Usually it has worked.

In the casting of this Otello there are weaknesses, but most shortcomings are cancelled out by the phlogiston of the conducting, the precision of the orchestral and choral work. Ramon Vinay does not possess, nor did he in 1947, the most opulent and free-flowing of tenor voices. But he is an Otello. His tones here are strong and full of heroic vigor, and his treatment of the text is full of passion and nobility. Sometimes he does not sing squarely on pitch; sometimes he is unable to vocalize perfectly passages that would be easy for a less bulky voice. But he always makes his points.

As Iago, Giuseppe Valdengo rises to—and sometimes, it seems, above—his best potentialities. Under Toscanini's administra-



Giuseppe Valdengo: an exciting lago in Toscanini's incandescent 1947 Otello.

tion he sings with a care for vocal niceties and a variety of colorations and dynamic shadings that are often very exciting. The weakest of the principals is Herva Nelli, who, at least until the last act, sings largely without color or emphasis, with literal correctness but virtually no vocal character. The lesser roles are sung well enough (although a better Cassio would have helped), but only Nicola Moscona shows independent authority within the framework of Toscanini's direction.

So we have a strong, vital Otello, a good lago, a weak Desdemona — and Toscanini. It is possible to imagine a performance better sung than this, but very difficult to conceive of one conducted with more fire, precision, and authority.

The RCA engineers have done an extremely adroit job of revising and refurbishing the sound, bringing out a fullness of dimension that would normally have been lost in a Studio 8-H performance. If you wait for a better *Otello* recording than this, you may have to wait a long time. J. H., Jr.

VILLA-LOBOS Cirandas

Joseph Battista, piano. MGM E 3020. 12-in. 32 min. \$4.85.

A huge suite of 16 piano pieces based on Brazilian folk tunes, all most ingeniously handled and some handled with inspired originality and creativeness. Excellent performance (officially "approved" by the composer); lifelike piano recording.

A. F.

WAGNER Die Walküre: Act I

Maria Müller (s), Wolfgang Windgassen (t), Josf Greindl (bs). Wurttemberg State Orchestra; Ferdinand Leitner, cond.

Gotterdammerung: Act II. Scene 3.

Josef Greindl (bs); Munich Philharmonic Orchestra and chorus of the Bavarian State Opera; Fritz Rieger, cond. DECCA DX 121. Two 12-in. \$11.70.

Since Josef Greindl's voice lacks the rock-like solidity and blackness of color to make him an ideal Hagen, his delivery of the grand-opera scene with the Gibichung vassals is of less interest than the act from Die Walküre. In this, Maria Müller is musical, warm-voiced and womanly as Sieglinde; aside from a lack of ease at the top, her accomplishment is first-class. Wolfgang Windgassen, the Bayreuth Parsifal, displays a really fine voice and some lapses in judgment. Mr. Greindl is good as Hunding, and Ferdinand Leitner conducts with firm command.

This effort must stand comparison with the Victor re-release, which has Lotte Lehmann, Lauritz Melchior, and Emmanuel List, with Bruno Walter conducting. The verdict must be rendered individually, on a technical vs. artistic basis. Miss Müller is good, but Miss Lehmann is even better, although she too strains at top tones; otherwise, no contest, for Mr. Melchior and Mr. List were in full possession of their powers when they recorded, and Mr. Walter's conducting was incandescent. But the old disks handed down flutters in addition to rich sound, and the new Deccas are bril-J. H., Jr. liant and true.

WAGNER

Gotterdämmerung: Rhine Journey; Siegfried Dead Tristan und Isolde: Prelude to Act III Tannhäuser: Prelude to Act III A Siegfried Idyll

London Philharmonic Orchestra in the *Idyll;* Paris Conservatory Orchestra in the others, Felix Weingartner, cond.
COLUMBIA ML 4680. 12-in. 8, 7, 8, 8, 15 min. \$5.45.

Out of the deep muddy bass and uncertain treble of these resurrections from 78 emerge five beautiful interpretations, two unforgettable: the Rhine Journey in a heady poetry all visual in its black river, invincible hero, impatient steed, leaping fire and hellish fate; and the third-act Prelude in Tristan, sober in its dire annunciation of death in We hear it usually fast, from ecstasy. conductors who fear it will bore; or slow, from conductors reluctant not to dwell on its dark harmonies. Felix Weingartner seems to have been indifferent to such formulas. For discophiles not primarily insistent on gorgeous sound this record can serve well as a standard of conductorial insight. C. G. B.

WIDOR

Variations from Symphonie Gothique, Op. 70 — See Liszt

MISCELLANY

MASTERPIECES OF THE THEATRE Bizet: Carmen-Introduction to Act One Rossini: Overture to La Gazza Ladre. Mendelssohn: Scherzo from A Midsummer Night's Dream.

Von Weber: Overture to Euryanthe.

The New Orchestral Society of Boston, Willis Page, cond.
SOUNDS OF OUR TIMES. 10-in. 2064.

MASTERPIECES OF THE DANCE Brahms: Hungarian Dance No. 6. Johann Strauss: Emperor Waltz. Saint-Saens: Danse Macabre. Rimsky-Korsakoff: Dance of the Buffoons.

The New Orchestral Society of Boston, Willis Page, cond.
SOUNDS OF OUR TIMES 2066. 10-in. 21 min. \$4.80.

Hey, you sound cats . . . this is it . . . a couple of biscuits you should dig . . . now. They're real gone, men . . . definitely the most. Cook pushes the sound out, and I mean out . . . and there's no glimmering as to what's on the wax . . it's sound . . I mean, hep sound. Triangles, xylophones, brass, percussion or what have you . . . right down front and centre, to really send you guys. What's the secret . . who knows. Is it music? Who cares, as long as it comes out this way . . . solid at the bottom . . . solid at the top. Get with these two disks men, they're cool . . . just cool. J. F. I.

BEETHOVEN

Sonata for Piano and Horn, in F. Op. 17

Rondo for Piano and Horn, in E Flat, KV 370 SCHUBERT

"Auf dem Strom", for Soprano with Piano and Horn, Op. 119

SCHUMANN

Adagio and Allegro for Piano and Horn, Op. 70

Paul Ulanowsky, piano: James Stagliano, horn; with Margo Stagliano in the Schubert.

BOSTON L 200. 12-in. 12, 6, 10, 9 min. \$5.95.

The company's title is "French Horn Masterpieces" for this well-chosen group, new to LP. Mr. Stagliano is one of America's best horns, musician and virtuoso both, imposing both in the relative contentment of the Sonata and the perilous acrobatics of Schumann's Op. 70. His associates are less remarkable: the piano is not placed to advantage, and Mrs. Stagliano has a palpably laborious ordeal in the Schubert, hardly ameliorated by imperfect microphone technique.

C. G. B.

BEETHOVEN

Variations for Piano and Violoncello on "See the Conquering Hero Comes", G 157

BACH

St. Matthew Passion: "Erbarme dich"

MOZART

Idomeneo: "Zeffiretti lusinghieri" Ch'io mi scordi (Recitative and Aria, KV 505)

Rudolf Serkin, Pablo Casals (Beethoven); Jennie Tourel (ms); Perpignan Festival Orchestra, Pablo Casals, cond. (rest). COLUMBIA ML 4640. 12-in. 14, 10, 7, 11 min. \$5.45.

The Beethoven Variations on Handel's noble theme (so much like a Beethoven theme) receive an ultimate performance of uninhibited musical expressiveness, a classic of spontaneous flight and infectious sentiment. Some curious background noises are rather amusing than obnoxious. — Overside, Miss Tourel is expert but not memorable in three grand arias vividly conducted by the great cellist, and the impression would have been better in a recording kinder to her voice.

FRENCH BAROQUE ORGAN MUSIC

Clarence Watters, organ.

CLASSIC EDITIONS CE 1008. Two 12-in. 85 mins. \$11.90.

Includes Clérambault's Dialogue, and Basse de Trompette; Dandrieu's Muzète: Marchand's Tierce en Taille; Du Mage's Grand Jeu; Couperin's Benedictus; Sire's Sarabande; Le Bègue's Prélude et Fugue sur le Kyrie Cunctipotens, Offertoire sur O Filli et Filiae, Noël—Laissez paistre vos bestes, Noël—Pour l'amour de Marie, and Puer Nobis Nascitur; Jullien's Dialogue, and Basse de Trompette; Raison's Offerte—Vive le Roy; Loeillet's Air, and Gigue; Balbastre's Noël—Joseph est bien marié; and D'Aquin's Noël No. 1—Sur les Jeux d'Anches, No. 3—En Musette, En Dialogue, et en Duo, No. 9—Sur les Flutes, No. 10—Grand Jeu et Duo, and No. 12—Noël Suitse

French baroque organ music gets deserved attention in this album. The music is

characterized by a conservative (for its period) polyphonic style, a stress on the coloristic possibilities of the instrument, and a wealth of ornamentation. To this listener, the French school produced nothing as harmonically exciting or expressively communicative as the music of the same period's German masters, but it has its own virtues.

Some works stand out: the fanciful variants on charming folk noëls constructed by Balbastre, D'Aquin, and Le Bègue. Raison's long and spacious work and Couperin's gravely lovely Benedictus should also be noted.

Mr. Watters uses the organ of St. John's Church, West Hartford, Conn. With its sharply brilliant stops, it makes a satisfactory instrument for this music, and Mr. Watters' registration seems ideal. Still, it is hard not to believe that the French did not on occasion inject more verve into performances of their brightly styled music. The recording is a model of clarity.

R. E.

FIRST CHAIR

First-desk instrumentalists of the Philadelphia Orchestra, with the Orchestra, Eugene Ormandy, cond.

COLUMBIA ML 4629. 12-in. 41 min. \$5.45.

This review was delayed through mischance, and should not have been, for here is a bargain in aural delight, musical mastery and imaginative programming. Seven first-chair men of the Philadelphia perform as soloists, and never have their colleagues backed up soloists so well. As a result, the disk contains at least three LP "bests" - William Kincaid playing Griffes' Poem for Flute and Orchestra, Marcel Tabuteau in Handel's Concerto in C for Oboe; Sol Schoenbach in Burrill Phillips' Concert Piece for Bassoon and String Orchestra. The other selections measure up, and the sound is fit for the sane, mature audiophile: no weird extremes, just extreme realism. J. M. C.

BRITTEN Variations on a Theme of Frank Bridge

WARLOCK
Capriol Suite

Boyd Neel String Orchestra, Louis Boyd Neel, cond.

LONDON LL 801, 12-in. \$5.95.

Benjamin Britten's aptitude for mixing antique flavors is known to anyone who has heatd his music. These ten variations on a theme of his teacher, who died in 1941, comprise a bouquet of musico-historical styles, from Elizabethan through Eighteenth Century to Wagnerian, punctuated at intervals with the signature of 1936, the year he published the variations. They are more clever than profound, but never boring. If this version is a reprint of the 78 rpm Boyd Neel recording, there is still no harm done; the fi is hi indeed. The Warlock (Philip Heseltine) suite is a brief, irresistible compilation of folk-song arrangements, very welcome. J. M. C.

SPANISH MUSIC FROM THE COURT OF FERDINAND AND ISABELLA

Pro Musica Antiqua; Safford Cape, cond. EMS 219. 12-in. 38 mins. \$5.95.

The Belgian ensemble known as Pro Musica Antiqua, which was heard here four years ago and is scheduled to tout the United States again this coming season, comprises a soprano, contralto, two tenors, bass, and players of a minstrel's harp, treble viol, two tenor viols, recorder, and lute. Their instrumentally authentic and vocally adequate performances of this fascinating Spanish music is a constant delight. About half of the record is devoted to music by Juan del Encino - elegiac, epic, folkish, in courtly chivalresque or robust peasant style. The instrumental pieces are short and gay, sounding for all the world like popular tunes of the day. All but two of the works are secular, and the program booklet prepared by Mr. Cape is more than ordinarily helpful. The recording is clean, with quiet surfaces. A disk of great charm and atmosphere.

BACH Chaconne in D Minor

FIOCCO
Allegro

MOZART

Sonata in G Major; Sonata in E Minor

Arthur Grumiaux, violin; Gregory Tucker, piano.

BOSTON B 202. 12-in. \$5.95.

This is a puzzling record. The Bach Chaconne is played with impressive authority and taste, no bloopers, and enthralling digital surety. Furthermore, the recording is technically superb. The same comments apply to the Fiocco, a trifle. What happens on the other side of the disk is hard to account for. Mr. Grumiaux is still working hard, but Mozatt seems oddly aloof from the proceedings, and Mr. Tucker's piano at times is a mere blur in the background. The microphone, rather than the musicians, probably is at fault.

J. M. C.

CLASSICAL ARIAS SUNG BY GERARD SOUZAY

Mozatt: Mentre ti lascio, o figlia (K. 513).

A. Scarlatti: Caldo sangue, from Il Secadia.
Lully: Il faut passer, from Alceste; Belle
Hermione, hélas, hélas, from Cadmus et Hermione. Gluck: C'est un torrent impetueux,
from Les Pélerins de la Mecque. Rameau:
Nature, Amour, from Castor et Pollux.
Gerard Souzay, baritone; L'Orchestre de la
Société des Concerts de la Conservatoire de
Paris, Robert Cornman, cond.
LONDON L5 730. 10-in. \$4.95.

Admirers of vocal music of the 17th and 18th centuries should find this one of the pleasantest little recital-type disks of the year. The music itself, much of it relatively unfamiliar, is out of the top drawer; the reproduction is up to London's best standards; the performances, although not absolutely uniform in value, are on a consistently high level of musicality and technical skill. Perhaps the finest band is the one that holds Lully's Belle Hermione, which Mr. Souzay sings with striking breadth of line and poignant beauty of phrasing. His voice, for those who have not heard it, is a lyric baritone of adequate size and a moderately wide range of colors. Robert Cornman's conducting is expert and tasteful. J. H., Jr.

THE BEST OF JAZZ

THE MAGNIFICENT MARION MC-PARTLAND, Vol. 1

SAVOY MG 15021. 10-in. 17 min. \$3.00.

Marion McPartland, piano; Max Wayne, bass; Mousie Alexander, drums.

Lullaby of Birdland; A Nightingale Sang in Berkeley Square; Limehouse Blues; Paper Moon; Moonlight in Vermont; Hallelujah.

If it is possible for a husband to be a Republican while his wife is a Democrat then there is probably no real reason why Marion Mc-Partland should not play a very modern style of jazz piano even though her husband, cornetist Jimmy McPartland, sticks to the old ways of doing things. As a matter of fact, Mrs. McPartland is no scorner of the past. Her work on this disk shows that she has a swinging mentality which is well founded on techniques of the past but equipped with a modern surface. She can take a very simple, uncomplicated approach to a proper piece of jazz material such as Paper Moon or get considerable music out of very little material when she is faced by something such as A Nightingale Sang in Berkley Square. There are shades of early Shearing in her work and shades of Garner, but she is essentially her own mistress - an extraordinarily capable and highly creative pianist with excellent taste. A large part of the success of these numbers is due to the fine support she receives from Max Wayne and Mousie Alexander.

TONY SCOTT QUARTET — Music After Midnight

BRUNSWICK BL 58040. 10-in. 21 min. \$3.00.

Tony Scott, clarinet; Dick Katz, piano; Milt Hinton, bass; Philly Joe Jones, drums. Katz' Meow; After After Hours; I Never Knew; Away We Go.

The frugal, pinched clariner style of Tony Scott is given its first real showcasing on this disk. These numbers, recorded at a session at Minton's Playhouse in Harlem, have an intimate, live quality which reveals Scott's frequently dry manner of playing. Even so, the real star of the disk is bassist Milt Hinton who keeps the group swinging so consistently that Scott and pianist Dick Katz can wander far afield when they want to without losing Hinton's driving beat. All four numbers have a clean, swinging quality which lends added distinction to the solo work.

NEW ORLEANS JAZZ Wilbur DeParis and his Rampart St. Ramblers

ATLANTIC ALS 141. 10-in. \$3.85.

Wilbur De Paris, trombone; Sidney De Paris, cornet; Omer Simeon, clarinet; Don Kirkpatrick, piano; Eddie Gibbs, banjo; Harold Jackson, bass; Fred Moore, drums: Tres Moutarde; The Pearls, Hindustan; Prelude in C Sharp Minor; The Martinique; When the Saints Go Marching In.

This is superb hot jazz, excellently recorded. The De Paris group is made up of men of experience, talent and taste whose playing, both ensemble and solo, is a model of imag-

inative, cleanly executed jazz performance. In particular, Sidney De Paris and Omer Simeon shine throughout these numbers. Sidney gets in his fanciest licks on *The Martinique* which gives him an opportunity to display some choice and varied techniques with a mute while Simeon Conjures up delightful New Orleans style clarinet variations on Rachmaninoff's *Prelude in C Sharp Minor*.

However, it is the ensemble work that is the consistent high point of this disk. It is beautifully integrated and performed with a zest and polish rarely heard in a group such as this.



Marion the magnificent.

TURK MURPHY — Barrelhouse Jazz

COLUMBIA CL 6257. 10-in. 29 min. \$3.00.

Turk Murphy, trombone; Bob Helm, clarinet; Don Kinch, trumpet; Wally Rose, piano; Dick Lammi, banjo; Bob Short, tuba. Creole Belle; Daddy Doo; The Pearls; King Chanticleer; Fire Aces: Clarinet Foo Yong; Mississippi Rag; Panama.

TURK, NO. 3

GOOD TIME JAZZ L-7. 10-in. 26 min. \$3.00.

Turk Murphy, trombone; Bill Napier, clarinet; Don Kinch, trumpet; Skippy Anderson, piano; Pat Patton, banjo; George Bruns, tuba and string bass; Stan Ward, drums.

Down by the Riverside: By and By: Storyville Blues: After You've Gone; Canal Street Blues; A Closer Walk with Thee; Ory's Creole Trombone: St. James Infirmary.

Turk Murphy has been one of the leading figures in the New Orleans revival which has been taking place on the West Coast for the past decade, first as a member of Lu Watters Yerba Buena Band and latterly with his own group. He has definite ideas about the proper approach to worthwhile jazz material—as can be seen by his leadership on these disks—but, in the end, the two records show quite clearly that the individual musicians are a more important factor in good jazz than a proper approach.

Murphy has two superb jazzmen working with him on these sides — Don Kinch on trumper and Bob Helm on clarinet. Both of them appear on the Columbia disk, which was made in 1952, while only Kinch is on the Good Time LP, out in 1950.

Helm is a musician of tremendous vitality whose every entrance lifts the listener and carries him along, willy-nilly. There are moments when he appears to sound like any one of three or four of the greater jazz clarinetists—his exuberance on King Chanticleer is reminiscent of Teschmacher; his intense and vigorous clarinet version of Louis Armstrong's Cornet Chop Suey chorus on Clarinet Foo Yong has a lot of Johnny Dodds in it; and on a slow blues such as Daddy Doo he might be a cross between Edmond Hall and Sidney Bechet in their bettet moments. It all boils down to the fact that he is an extraordinarily exciting jazzman whose work on this Columbia disk makes it one of the finest jazz products in many months.

Kinch is a versatile trumpet man, essentially graceful and melodic yet capable of providing a hatd, punching lead when it is called for. Somewhat overshadowed by Helm on the Columbia record, it is his work that carries the Good Time Jazz disk and gives it its finer moments. The Columbia platter is marred by some unhappy balances which leave soloists playing off in a corner. A much better overall balance is provided on the Good Time record.

WOODY HERMAN'S ORCHESTRA — Woody's Best.

CORAL CRL 56090. 10-in. 24 min. \$3.00. Perdido; Ingie Speaks; I've Got You Under My Skin; Refuse It; Goin' Home; Cherry; I Get a Kick Out of You; Noah.

The voracious needs of LP records are, happily, bringing to light recordings which otherwise might have remained hidden in storage vaults. These Woody Herman numbers, recorded in 1944 and never released, are a case in point. They show Herman's crew at a crucial point in its development — when he was shifting from the two-beat "Band That Plays the Blues" to the hard driving, pressure style which was to lead him to the heights of big jazz band popularity in the next few years.

Compared to the output of later Herman Herds, these numbers are mild stuff, although taken in context, pleasant and capable. The full band passages are inclined to be stodgy (this is partially the recording) but the solo work holds up admirably. Herman has the assistance of some Ellington men - Johnny Hodges, Juan Tizol and Ben Webster - on Perdido but relies on his own clariner and vocal work to carry most of the solo interest on the other numbers. Aside from its musical merits, this disk is of historical interest in that it catches Herman's band looking both backward and forward -Cherry retains overtones of Herman's early band; I've Got You Under My Skin boasts a drummer with a style which was to become known as "modern."

JOHN S. WILSON

THE MUSIC BETWEEN

THE DESERT SONG

COLUMBIA ML 4636, 12-in. \$5.45.

Nelson Eddy, Doretta Morrow, Wesley Dalton, Lee Cass, David Atkinson, Wilton Clary with chorus and orchestra conducted by Lehman Engel. Music by Sigmund Romberg. Book and lyrics by Otto Harbach, Oscar Hammerstein 2nd, and Frank

HIGH FIDELITY MAGAZINE

Mandel. Produced for records by Goddard Lieberson.

Prelude and Opening Chorus; The Riff Song: Margot; Opening Chorus; French Marching Song; Romance; Then You Will Know; I Want A Kiss; The Desert Song; Act I-Finale; Act II - Opening Chorus; Eastern and Western Love; Let Love Go: One Flower In Your Garden: One Alone; The Sabre Song: Final Scene.

This new issue of Romberg's Desert Song takes one back a dozen years to the day of the Eddy-MacDonald collaborations in Naughty Marietta and its successors. The present release features the fine ensemble assembled by producer Lieberson for his entire series of show recordings. Add to this the charm of the familiar music, and the revitalized singing of the star, and the result is a highly attractive album.

With regard to Nelson Eddy, as we have recently remarked, he sings at the present time with a great deal more persuasiveness than in the past. Non-Eddy fans would do well to hear this album and the preceding Oklahoma.

A RECITAL OF SPANISH AND SLA-**VONIC MUSIC**

CONCERT HALL CHS 1168. 10-in.

Larry Adler, Harmonica, with Lee Collins, piano.

LARRY ADLER PLAYS MOZART. BACH AND VIVALDI

CONCERT HALL CHS 1161. 10-in.

Larry Adler, harmonica, with Walter Goehr and The Winterthur Symphony Orch

Mr. Adler does amazing things with his harmonica and, so far as these records are examples of harmonica playing, they are well nigh perfect. No technical feats seem beyond the performer. For this mixed bag of music Concert Hall has provided a beautiful setting, first with piano accompaniment and secondly with orchestra. The balance and the recording are first rate and the surfaces are excellent.

However, the harmonica, no matter how deftly employed, is not the human voice, the violin, the oboe, or the piano. As presented here it remains a novelty. A musical one to be sure, but a novelty none the less. This reviewer enjoyed these records as much as any he received this month, but it does seem that the sign-post of the one single original composition for harmonica (Fandango Brazileiro, by Jean Berger, on the first disk) points the way to the ultimate. Whereas the transcription has a definite place in music, so individualistic an instrument as the harmonica calls for writing tailored to its color and capabilities. Much as we have enjoyed these examples of Larry Adler's art, we await some harmonica originals with greater anticipation.

ECHOES OF PARIS

Vox vx 500. 10-in. \$3.15.

George Feyer, piano, with rhythm accompaniment.

La Vie En Rose; Troix Cloches; Avril Au Portugal; La Mer; Domino; Je N'En Connais Pas La Fin; Darling, Je Vous Aime Beaucoup; Mon Homme; Alouette; Sur Le Pont D'Avignon; C'Est Si Bon; Feuilles Mortes; Clopin, Clopant; La Ronde; La Seine; Pigalle; J' Attendrai; Vous Qui Passez; Valentine; Paris Je T' Aime.

From the host of piano records in the MU-SIC BETWEEN category, this ranks as one of the very best. On first hearing, the recording itself makes a vivid impression. It is perfectly balanced and the tones of the piano come out of the speaker sounding surprisingly like the tones of a piano. The rhythm accompaniment complements the piano nicely without becoming obtrusive.

As for the performance. Feyer's charm is not caught as successfully. The listener's first impression is of a brittle cocktail piano. However, with repeated hearings it proves to be bright, humorous and graceful. It certainly is not popular piano as played in the United States, but this sample calls for more.

MUSIC FROM HOLLYWOOD

COLUMBIA CL 6255. 10-in. \$3.00.

Percy Faith and his orchestra. Return to Paradise; The Song from Moulin Rouge; Theme from The Bad and The Beauti-

The popular stylings of Percy Faith have built up an enormous public since the conductor-arranger came down from Canada to the United States. This is an excellent example of Mr. Faith's lush and careful work. Now that Hollywood, and the popular taste, seems to have turned from the novelty to the richly detailed melodic line, a long series of similar tunes have been showing up. This record, with the exception of Return to Paradise, presents highly satisfactory expositions of the newest in popular taste. The latter, however, appears to be an even more obvious collection of clichés than most of its genre. The recording is fine and the surfaces good.

GYPSY MUSIC Volumes II and III.

WESTMINSTER WL 3004 and 3002. 10-in. \$3.95 each.

Antal Kocze and his band. Roumanian Dance; Hungarian Song: Dances from Transylvania; Poszth Melody; Dances from Hungary; Gypsy Song, Czardas; Gypsy Song: Hungarian Dance.

Two months ago, on the release of the first Westminster group of music in the lighter vein, I applauded Antal Kocze's gypsy aggregation for the fire of their performance. These two new samples of their playing are as good as the first. Here is no 52nd Street tea-room music, but rough, wild, authentic Romany rhythm. The engineering and balance are fine and the surfaces uniformly excellent

VICTOR HERBERT SELECTIONS

COLUMBIA AAL 29, 10-in. \$2.85.

Eugene Ormandy and The Philadelphia "Pops" Orchestra.

Selections from Naughty Marietta, arranged by Harold Sanford; selections from The Fortune Teller, arranged by Otto

This is familiar music taken from the larger

form of operetta and pre-digested for the impatient listener. Each of these selections gives the listener the high-lights of a show in a matter of seven or eight minutes. It is 'pops' fare and as such will probably enjoy a wide popularity. However, the magic of the LP disk has made the "selection" idea rather obsolete.

EDWARD L. MERRITT, JR.

Dialing Your Disks

This column lists latest available data on the recorded frequency characteristics used by record manufacturers. The BASS column refers to low-frequency turnover. The TREBLE column to high-frequency preemphasis.

The NAB curve has a turnover point of 500 cycles and a treble boost of 16 db. The AES turnover is at 400 cycles. Its treble boost is 12 db at 10,000 cycles. In imprecise terms (for people with imprecise amplifier controls), NAB records need more treble cut and more bass boost than AES disks; LON and COL need less bass boost than NAB; COL and NAB are the same at the high end but LON and AES need less treble cut than COL. Asterisk means manufacturer lists on record jackets.

LABEL	BASS	TREBLE
Atlantic ^t ·	NAB	NAB
Bartok	6292	16 db3
Blue Note Jazz	AES	AES
Caedmon	6292	11 db4
Canyon	AES	AES
Capitol	AES	AES
Capital-Cetra	AES	AES
Cetra-Soria	COL	NAB
Columbia	COL	NAB
Cook Laboratories!	NAB	AES
Decca	COL	NAB
EMS*	AES	AES
Elektra	6292	16 db3
Esoteric	NÁB	AES
Haydn Society	COL	NAB
London	COL	LON
Lyrichord*, new5	6292	16 db3
Mercury*	AES	AES
M-G-M	NAB	AES
Oceanic	COL	NAB
Philharmonia	AES	AES
Polymusic ¹	NAB	NAB
RCA Victor	Ortho6	Ortho ⁷
Remington	NAB	NAB
Tempo	NAB	Ortho ⁷
Urania*, most	COL	NAB
Urania*, some	AES	AESQ
Vanguard — Bach Guild*	COL	NAB
Vox	COL	NAB
Westminster	NAB^8	NAB®

¹Binaural records produced by this label are re-corded to NAB standards, on the outside band, On the inside band, NAB is used for low frequen-cies, but the treble is recorded flat, without pre-

²NAB position on equalizer is close match

³NAB position on equalizer is close match.

^{&#}x27;Use LON position on equalizer, or AES with slight treble cut.

⁵Some older records of this label were recorded to COL curve, others to AES.

Very close to NAB on lows.

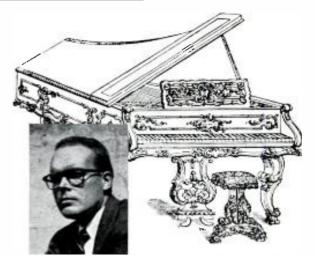
⁷Very close to AES on highs; cut treble slightly.

⁸Unless jacket indicates AES.

building your record library

number three

RAY ERICSON SUGGESTS TEN BASIC PIANO RECORDS



Bettman Archives

Record collectors who have taken to heart David Randolph's list of ten basic Bach selections will have in their possession two sets of his keyboard works — some two-part inventions and the French suites. It seems natural, then, to begin a list of ten basic piano selections with some music by Mozart, played on an eighteenth century piano that combines the harpsichord's wiry tone and linear clarity with the Clavichord's capacity for nuance. Ralph Kirkpatrick has recorded the Sonata in B Flat Major (K. 570), Suite in C Major (K. 399), and Fantasy and Fugue in C Major (K. 394) on a piano built in recent years by John Challis after late eighteenth-century models (Bartok BRS 912; 12in.). The performance is in good taste, not in the least cute, and the reproduction is ultra-realistic.

For the basic library, my favorite coupling of Beethoven piano compositions on a single disk is that of the appealing Sonata in E-Flat Major (Farewell), Op. 81a, and the Fifteen Variations and Fugue in E-Flat Major (Eroica), Op. 35, ably played by Friedrich Gulda (London LLP 322; 12-in.). Technically the recording is not quite of the best — the last movement of the sonata has to be increased in volume to match the rest of the piece. Beethoven's mastery of the variation form is well represented here. So are the coloristic extensions he made in piano composition, such as the use of heavy basses and high trebles.

Probably no finer recorded performance of a Schubert piano work exists than Clifford Curzon's of the Fantasy in C Major (Der Wanderer), Op. 15 (London LPS 83; 10-in.). The work is long, but its melodies are as eloquent as they are simple, indicating how well Schubert's great lyrical inspiration transferred to the medium of the piano. The recorded tone is faithful, the instrument in perspective, and Mr. Curzon has a sincerity in the romantically melodramatic passages that is utterly persuasive.

Chopin wrote almost exclusively for the piano, creating ornamental devices that gave the instrument wider emotional range. The list of good Chopin recordings is large, and it is necessary to pick out one arbitrarily as representative — Artur Rubenstein's playing of the 24 Preludes, Op. 24 (RCA Victor LM 1163; 12-in.). Harmonically original, succinct in form, greatly varying in mood and style, they reveal Chopin at his best. The Polish pianist plays his compatriot's music with a rare combination of power, awesome technique, and complete musicianship.

Finding in literature inspiration for much of his piano music, Schumann composed several extended works that are chains of brief character, nature, or situation sketches. Carnaval, Op. 9, and Papillons, Op. 2, are as enchanting as anything he ever wrote. Guiomar Novaes' recording of these two works (Vox PL 7830; 12-in.) sings and dances as naturally as if no mechanical instrument were involved. The disk is notable for clarity.

Virtuosity for virtuosity's sake was sometimes the goal of Liszt. Glissandos, trilled chords, and great leaps make his music tremendously difficult and give it an almost orchestral richness. Vladimir

Horowitz, who probably has even more technical prowess than Liszt did, has recorded an attractive Liszt assortment: Funérailles, Sonetto del Petrarca No. 104, Valse Oubliée No. 1, and Rakoczy March (Fifteenth Hungarian Rhapsody) (RCA Victor LM 100; 10-in.). There is sheer physical excitement in listening to Mr. Horowitz play his own elaboration of the already elaborate march. Although not very new, the recording is good.

Brahms was not an innovator, but he wrote some very lovely, intricately patterned short pieces for the piano. Wilhelm Kempff's introspective versions of the six Piano Pieces, Op. 118 (London LPS 204; 10-in.). fill an important niche in a survey of piano music. The recording is in keeping with the music, clear without clangor.

After Liszt's era, the biggest advances in piano music came in the compositions of Debussy and Ravel. Their so-called impressionistic style attempts to reproduce visual images in tonal language with the application of new sonorities and patchworks of melodic fragments. Of the four disks Walter Gieseking has devoted to Debussy's music, the first book of Preludes is probably the most illuminating (Columbia ML 4537; 12-in.). Mr. Gieseking's miraculous touch is at once crystalline and muted; with deceptive ease he keeps the musical voices and colors distinct. The engineers seconded his efforts aptly.

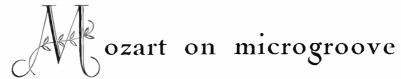
Ravel's more aristocratic, more tightly organized piano music has been recorded in its entirety by Robert Casadesus with the skill of a master technician and the authentic style of a close colleague of the composer. Volume II (Columbia ML 4519; 12-in.) is a good single record to have, offering the charming Mother Goose Suite (a four-hand work, in which Mr. Casadesus is assisted by his wife), the haunting triptych called Gaspard de la Nuit, and three short pieces. Columbia's sound is ideal — the listener soon forgets about it, in favor of the music.

I do not know of a single disk combining examples of the disparate directions modern music has taken through the works of Prokofieff, Bartok, Hindemith, Schönberg, and Stravinsky. Such a one would be extremely valuable. However, Bartok's piano music gives a good idea of the extremely percussive use to which contemporary composers have put the piano and of the more astringent colors they have developed. For the adventurous, Leonid Hambro's brilliant performance of Bartok's Out of Doors Suite and Improvisations, Op. 20 (Bartok BRS 002; 12-in.), is recommended as a tenth basic record, also as a hi-fi item.

For the less daring, the tenth record might well be Rachmaninoff's two Suites for Two Pianos, in the really dazzling performances of Vronsky and Babin (Columbia ML 4379; 12-in.).

The above list has to ignore the fact that some of the best piano playing is done in concerted works — in concertos, piano trios and quartets, even in song accompaniments. Many of the finest recording artists are necessarily omitted, as is the company that has recorded the piano tone most faithfully — Westminster. It would be easier to list 100 basic piano records than ten.

HIGH FIDELITY MAGAZINE



By C. G. BURKE

Part III: Concert Arias; Opera; Songs

ARIAS

(Except arias from Mozart's operas. Songs with piano accompaniment will be found under Songs.)

Air and Variations, "Ah Vous Dirai-Je, Maman"

Someone unknown wrote the air — to which children in several European countries learn the alphabet, and which has a striking resemblance to the theme of the andante of Haydn's "Surprise" Symphony — and the young Mozart wrote piano variations (Kv 265) on it. The ingenuous Adolphe Adam, in turn used the variations as the basis of an intoxicated display of coloratura monkey-tricks. Such trash is not Mozart, and is included here for clarification only. Miss Pon's acrobatics, in English, are agile and should please those who like this sort of thing.

—Lily Pons (s); Orch. cond. by André Kostelanetz. Columbia ML 4217. 12-in. (with 6 Mozart arias and bravura pieces by David and Proch). 7 min. \$5.45.

CONCERT ARIAS (5) FOR SOPRANO

Ah, lo previdi! KV272; Chi sa, chi sa? KV 582; Vado ma dove? KV 583; Ch'io mi scordi? KV 505; Bella mia fiamma, KV 528. Three extended scenas and two short arias for interpolation into an opera by Vicente Martin occupy this record, which is good enough to make us wish it had been a good deal better. The lineal purity of Miss Laszlo's utterance is delightful; so is the glow of her middle tones, but the hearer is justified in feeling that the first is obsessive at the expense of drama and sentiment, which, in KV 505 and 272, ought not to be sacrificed for mere good singing. No fault with the crystal of the sound, but some with the orchestra's uneven playing.

—Magda Laszlo (s); Vienna Nat. Op. Orch., Argeo Quadri, cond. Westminster WL 5179. 12-in. 13, 3, 4, 11, 10 min. \$5.95.

CONCERT ARIAS (5), FOR SOPRANO (4) AND ALTO (1)

Ombra felice! KV 255; Ab, lo previdi! KV 272; Ch'io mi scordi? KV 505; Bella mia fiamma, KV 528; Nehmt meinen Dank, KV 383.

Miss Michaelis offers a tender and steadfast alto as Aeneas in an aria composed by Mozart for someone else's *Dida*; but Miss Nentwig—who has in the past shown charm in more comfortable things—suffers from the stress of work unsuited to her,

particularly the heroic recitatives; and while it is human to sympathize with her efforts, it is no adequate reason to buy the disk. The orchestra is undernourished: the printed text contains no English translations.

-Ruth Michaelis (a), Käthe Nentwig (s); Pro Musica Orch., Stuttgart, Rolf Reinhardt, cond. Vox PL 7370. 12-in. 8, 13, 10, 9, 3 min. \$5.95.

CONCERT ARIAS (6) FOR BASS

Mentre ti lascio, KV 513; Un bacio di mano, KV 541; Per questa bella mano, KV 612; Cosi dunque tradisci, KV 432; Rivolgete a lui, KV 584; Alcandro, lo confesso, KV 512.

KV 513 is the only one of these munificences to be found on another record, and that exclusiveness is in itself a justification for the old and uneven Tajo disk. The heavy, earthy voice is capable of surprising flexibility and tenderness, (though not guiltless of some affectation) and the orchestra plays well. Reproduction is pleasant for the voice, rather dull for the instruments.

—Italo Tajo; Orch. of Radio Italiana, Mario Rossi, cond. Cetra-Soria 50-019. 12-in. (with Don G.: Madamina!). 4, 2, 4, 4, 4, 5 min. \$5.95.

CONCERT ARIA, "MENTRE TI LASCIO",

This moving, dramatic aria interpolated into an opera by Paisiello, included in the Tajo disk above, has here one of the best Pinza realizations before "South Pacific" took him



Magda Laszlo; a purity of line, a paucity of sentiment in a disk of crystal sound.

to an easier clime. Perceptive, delicate accompaniment; distinct, if not distinctive sound.

—Ezio Pinza (bs); Metropolitan Opera Orch., Bruno Walter, cond. Columbia ML 4036. 12-in. (with 5 arias from 4 operas). 7 min. \$5.45.

TRIOS

Nine of the twelve things on this disk are little vocal trios of an intimate nature, and three are trios from operas. The original instrumentation has been reduced to piano accompaniments, and in the case of the canon, KV 562, which has no accompaniment in the original, a piano part has been contrived. The record itself has the rather limited importance associated with the souvenir of a happy, impromptu evening or a successful high school performance-deserving a modest sale to doting relatives and proud friends, and members of the senior class. Elsewhere it ought to be forgotten, as precisely contrary to the essential responsibility of the phonograph, which is to endow all places with a unique experience apprehended at first in one place only. This record is a multiplication of an experience already commonplace. We do not expect a casual soirée to have a first-class orchestra or chamber group available, but we damn the record company that has not.

Unfortunately this poor little record, which would be most comfortable in oblivion, compels an expenditure of space lest an extraordinary contention of its annotator obtain credence by lack of challenge. The annotator — who contrary to civilized usage includes his medical title with his signature — implies that "no great violence" is done by the dilution of the accompaniments; and that the substitution of a piano for the orchestra in *Tivo* and *Zaide* affords "a unique opportunity to study the vocal lines".

This oblique defence of corrupt recording principles may not be admired by those who have opposed them for decades. Those of us who remember when tubas were used for basses, saxophones substituted for horns and a piano for anything, never eulogized those practices although some had a technical justification. When we heard "The Trumpet Shall Sound" without a trumpet, the jubilant military mockety of "Non piu andrai" pale on a keyboard, and the three hundred partipants in the "Prize Song" economized to tenor, violin and piano, we were not elated by a sense of improvement.

Of course, we were not looking for "a

unique opportunity to study the vocal lines". We were trying to take pleasure from music, and maybe we were wrong. In our experience, that was the hope of every discophile; but this annotator is perhaps unveiling new delights.

He has pointed out, irrefutably, the obvious, and no one else has thought to print his conclusion in spire of its patency. He says that in concert one voice obscures another, and this is true. But he is looking for a unique opportunity: he removes the obscuration; and behold those vocal lines!

He could - should have been bolder. Having flourished his bull (grasped by the hotns) at us, he dropped it, just outside the threshold of revelation. He has shown us how to find the vocal line by thinning out the accompaniment; but in these trios, why were not two of the voices suppressed, to let us study the line of the third? Is it fair of him to give us a logic and flee from it? Let's pursue it here: the vocal lines in Don Giovanni are superb but cluttered, and the opera ought to be recorded a capella, with the voices in sequence and never simultaneous. Since a plurality of instruments must cloud the clatity of any one, our string quartets ought to be played by a single viol. perhaps a single string; and the Ninth Symphony, with a vocal line that really needs careful study, were best reproduced by a soprano and a piano.

The annotator's brilliance leaves no room for printed texts. Over.

—"The Mozart Trio". Den DR 1. 12-in. 31 min. \$5.95.

OPERA

(Those recorded in complete form or nearly, and extended excerpts. Separate editions of the Overtures have been noticed under Orchestral Music. A brief consideration of isolated arias and collections of arias will be found at the foot of this section.)

BASTIEN UND BASTIENNE, KV 50 1768 (1 Edition)

In the profusion of Mozart's miracles this little one-act pastoral eludes condign acknowledgment because pastorals have for long been erased from the list of civilization's fashionable diversions. Its sparkle is placid, its perfection reticent. To a tale as substantial as a blade of grass, the composer, in his twelfth year and already a successful creator of opera, has donated a music of beguiling and inviolate simplicity, to be forgotten immediately at its conclusion, and remembered with collected delight at its next presentation.

Stuttgart has been generous with operas for the phonograph, and of all those to find their way to American disks Bastien und Bastienne has been realized the most pleasantly. The conductor, that Rolf Reinhardt who has made so many records, leads with a successful and unpretentious sympathy answered in kind by the three singers. These singers, who have not been notably at ease in other records, are relaxed and confident in the inconsequential tragics of a comedy made of air, and they do not mock the joke by betraying that it is one. We may object to the use of a mezzo in the tenor part of Bastien, since on the phonograph that makes identification more difficult, but

art is not injured by the substitution. The little orchestra transmits the same amiable comfort, and the sound is clear and satisfying, with the spoken dialogue a model of intelligibility. There is a libretto with the text in German and English.

(The performance is the same as the threesided version originally issued as Period 520, now withdrawn.)

—Käthe Nentwig (s), Hetty Plümacher, (ms), Gustav Neidlinger (bs); Ton-Studio Orch., Stuttgart, Rolf Reinhardt, cond. Period 542. 12-in. 48 min. \$5.95.

COSI FAN TUTTE, KV 588 (THE WAY OF WOMEN) 1789-1790 (3 Editions)

Mozart's last great comedy bridged two years when the western world was initiating, at first with an economy of bloodshed, the most spectacular of its social changes; but the opera was only two months in the composing. The fall of a fortress in Paris and the installation, at New York, of the first president of a new republic, were events too vast to affect the contours of Casi fan tutte.



The late Fritz Busch: throughout all his Glyndebourne reprints, unfailing mastery.

Mozart, sensitive to zephyrs, was bored by cyclones.

Indeed in its slighted characterization, and its exhaustive exploitation of a single low-comedy situation, the opera's story is remarkably unsubstantial even in the list of horrible librettos out of which Mozart made masterpieces. If we estimated operatic achievement by the composer's flight above his librettist, we should acclaim Cosi as Mozart's greatest work for the stage, such is the bilge that Lorenzo da Ponte supplied him for their final collaboration. two pairs of colorless lovers, a stock troublemaking cynic and a conventionalized soubrette as flesh for his drama and a weary farce for its movement, the composer contrived music for a spirited, beautiful and penetrating high comedy. He set each line and expounded each emotion as no other composer could. This genius was also the perfected journeyman, with a point of pride in realizing a blueprint, good or bad. Da Ponte's puppets are transfigured every time they sing, and if the transfiguration exceeds the limitations of their characters it provides the greatness of the opera, and cannot harm a story beneath the possibility of damage.

The Columbia version is one of brilliant proficiency. The voices are remarkably capable, with none bad, and Mmes. Steber and Thebom outstanding. There has never been a performance perfect to everyone, and this will appear perfect to no one, but the points justifiably subject to cavil are minor, unless one finds the use of English basically invidious. The orchestra is excellent, and Dr. Stiedry's direction both robust and subtle, according to the contradictory tendencies of the production and the music.

For this is the Metropolitan Opera production, burlesque in its costumes, gestures and declamation. Some of this brashness carries over into the orchestral playing, not unpleasantly, inflating the tone and enlivening the commentary. Much of the recitative, including several entire scenes of no importance, has been omitted from the recording as it often is in the opera house. The sound throughout is distinct, complete and robust, and the definition of the singers' English exemplary without violence to balance. No doubt this English, by itself, will decide the choice for many musiclovers. To the writer it seems cleverly contrived in its matter-of-factness although verbally far from the original and tainted in a few places by slangy anachronisms. A rather fouled-up libretto is supplied, containing the unsung Italian and this new translation. The running analysis by Irving Kolodin is intelligent and comprehensive.

The Remington records (originally issued by Period as 555) contain a small-scaled, neat little production featured by a good Alfonso, a Fiordiligi ingratiating at rimes, and a direction well-mannered and supple. The music, here sung in Italian, is trying for the other singers, and orchestra and chorus are too small for tonal and dramatic propriety. A dozen more strings would have improved the effect immeasurably, for the registration of what we hear is direct and skillful, barring some rumble. Like the other editions this one has excised much of the recitative and several arias, not to the detriment of intelligibility or continuity. The album contains a libretto in Italian and

It is too bad that the old Glyndebourne version was not susceptible to a greater improvement of sound in transfer from the 78's, for this, as an entity, is the best performance. Fritz Busch conducts with the kind of glowing restraint that characterizes all his recorded Mozart — a considered, pulsating formalism in which the singers are adjusted to the musical texture as if they were instruments, with a rein on dynamics enforcing symmetry between climaxes, the while encouraging roundest development of the melodic line. Furthermore, Messrs. Brownlee, Domgraf-Fassbänder and Nash contribute an opulence of vocal taste and style such as we are not likely soon to have again. But alas, the recording, nearly 20 years old, reaches us in reproduction veiled, fatigued, its delicacies concealed or opaque. Music-lovers who wish the best interpretation of Cosi fan tutte are advised not to hear the other versions, which have the enlivening slap of present life.

The fairly recent Glyndebourne record of "Highlights from Cosi fan tutte" is good enough to merit attention in a survey generally unsympathetic to excerpts. Here the

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SYMPHONIC RECORDING AWARD FOR THE BEST AUDIO ENGINEERING

Symphony No. 5 in C Sharp Minor-Symphony No. 10 in E Sharp Minor. Orchestra of the Vienna State Opera, Hernard Scherchen, conductor. WAL 207

loys and Sorrows of Andalucia WL 5135 FOLK MISH RECORDING THE BEST THE BEST AUDIO ENGINEERING OPEZ TEJERA:

GRAND PRIN DU DISQUE MOJ GHYMV

1t. Kije Svite, Op. 60—Scythian Svite, Op. 20. Vienna Symphany Orchestra, Hermann Scherchen, conductor. WL 5091 PROKOFIEFF:

talian Songs. Magda Laszlo, soprano. WI 5119 DOWNBEAT AWARD FOR BEST VOCAL RECORDING

BOWNBEAT AWARD FOR REST PIANO RECORDING SCHUBERTI: Four Impromptus, Op. 90-Four Impromp-tus, Op. 120-Sonata in A Major, Op. 120 WAL 205

AS FEATURED IN LIFE MAGAZINE FAVORITE HI FI RECORDINGS

WAL 210 WL 5045 WL 5031 WL 5068 WL 5025 WL 5167 RIMSKY-KORSAKOV: Military Symphony Red Poppy Ballet iano Concerto RESPIGHI: Pines of Rome PROKOFIEV: SCHUBERT: Trout Quintet HAYDN:

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SEPTEMBER-1953

SOME OF THE FINEST RELEASES EVER OFFERED!

BEETHOVEN: Symphony No. 3 in E Flat Major Op. 55 ("Eroica"). Orchestra of the Vienna State Opera, Conducted by Hermann Scherchen.

RACHMANINOFF: Concerto for Piano and Orchestra No. 2 in C Minor. Edith Farnadi—Piano, Orchestra of the Vienna State Opera, Conducted by Herman Scherchen. WL5193 Hermann Scherchen.

BACH: Six English Suites. Reine Gianoli-Piano.

WAL 306

in C Major. WL 5217 BACH: Cello Suite No. 1 in G Major, Cello Suite No. 3 Antonio Janigro-Cello.

DE FALLA: Piano Music of De Falla (complete). José Echaniz—Piano. WL 5218

LISZT: Fifteen Hungarian Rhapsodies (complete). Edith Farnadi—Piano

BEETHOVEN: String Trio in C Minor Op. 9 No. 3, String Trio in D Major (Serenade) Op. 8. Jean Pougnet-Violin, Frederick Riddle-Viola, Anthony

Gypsy Songs, Vol. IV. Antal Kocze, King of the Gypsies and his Band.

equipment

MENDELSSOHN: Quartet in E Flat Major Op. 12 No. 1, Quartet in D Major Op. 44 No. 1, Curlis String Quartet.

Major Op. 44 No. 1. Curtis String Quartet.

WL 3009 Austrian Folk Music. Deutschmeister Kapelle, Conducted by Julius Herrmann

Old English and French Music. Leslie Bridgewater and the Westminster Light



sound, fair by the latest standards, is enormously superior to the complete Glynde-bourne, and exposes the Busch talents vividly. The singing of Sena Jurinac and Blanche Thebom (again, but this time in Italian) is admirable, with the three men little inferior. Since the excerpts are identified only by their first lines, a libretto must be purchased to establish the background.

In summary, Columbia is easily the most effective Cosi if the use of English is not a barrier; Remington-Period is a so-so performance with interludes of excellence and consistently capable sound; Victor-Glyndegourne is a masterly performance very disappointing in reproduction.

—Eleanor Steber (s), Roberta Peters (s), Blanche Thebom (ms), Richard Tucker (t), Frank Guarrera (bne), Lorenzo Alvary (bs); Chorus and Orch. of the Metropolitan Opera, Fritz Stiedry, cond. Columbia SL 122. Three 12-in. 2 hr. 25 min. \$16.35.

—Erna Hassler (s), Käthe Nentwig (s), Hetty Plümacher (a), Albert Weikenmeier (t), Karl Hoppe (bne), Franz Kelch (bs); Ton-Studio Chorus and Orch., Stuttgart,

Three 12-in. 2 hr. 12 min. \$7.47.

—Ina Souez (s), Luise Hellersgruber (s), Irene Eisinger (s), Heddle Nash (t), Willi Domgraf-Fassbänder (bne), John Brownlee (bne); Chorus and Orch. of the Glynde-

Josef Dünnwald, cond. Remington 199-117.

bourne Festival, 1935, Fritz Busch, cond. Victor LCT 6104. Three 12-in. 2 hr. 34 min. \$17.16.

—("Highlights") Sena Jurinac (s), Blanche Thebom (ms), Richard Lewis (t), Erich Kunz (bne), Mario Borriello (bne); Orch. of the Glyndebourne Festival, 1949, Fritz Busch, cond. Victor LM 1126. 12-in. 51 min. \$5.72.

Don Giovanni, kv 527 1787 (2 Editions) The greatest musical work for the stage needs no detailed analysis of its qualities to support its preëminence. Still, music-lovers of recent infection may benefit from some statistical propaganda: Don Giovanni has seventeen faultless arias, nine concerted numbers, most of them ravishing, a great overture and two extended finales Comparable in stage music with the finale to the second act of Figaro only. The secco or dry recitative, clarifying the action, illustrates character and motive as well; and the wonderful accompanied recitative - which excludes Don Giovanni from consideration as true opera buffa - has a dramatic vividness we shall



Geneviere Warner: six delicate songs in a sweet and healthy voice (see page 96).

not meet again until Wagner. When it is recalled that many operas have acquired success by one popular aria or one catchy chorus or one spectacular scene, the fantastic prodigality of Mozart's genius becomes awesome.

The story is the best of those raked up by Lorenzo da Ponte for Mozatt's use, and Mozart's music has endowed it with a certain mystic. Fundamentally the history is of the pursuit and extinction of an irresistible lecher, the Don Juan of immortal tradition, that enemy of society who is the most envied of society's heroes. Da Ponte wrote this ten thousandth version as buffa, and Mozart transfigured the successive scenes as he found them, exalting every notion and emotion to the utmost, giving us magnificent buffa darkly striped with ominous tragedy. For prudence demanded that the athlete of conquest be brought to bay, the censors gagging otherwise; but Don Juan, the only person of principle among the eight characters, and with Dona Ana the only other character of strength, has centered all interest in himself, and his end perforce becomes tragic. He is dragged to hell a martyr to the principle he will not renounce, and although that is the principle of evil his decision and domination have made it, throughout the drama, heroic. Were he merely a doomed rake our tragedy would be debased to the tabloid level of movie actors and hatcheck girls snarled in the Mann Act. He is vehemently a man of caliber although of wicked aim, and the others' fear of him in this opera makes them all alive.

There are two recorded performances, one excellent and the other better than fair in sum. Let it be said at the outset that the poorer performance, by the Haydn Society. has an electrifying thrust that the better interpretation, by Victor, cannot begin to challenge. The difference is sonic, caused by 15 years between the recordings. The newer expresses timbre and dynamic contrast and is forceful: the older, which seemed healthy at birth, has enfeebled as it has aged, and its voice is restricted in color and clarity. The more notable accomplishment was the earlier effort, but like Fitch's steamboat its glory is obscured by the greater efficiency of a newcomer.

Both versions are estimable in the conducting, with the well-known symphonic control of Busch in plain evidence despite the lack of bite in the orchestral sound, a point in which Mr. Swarowsky has a natural and abundant advantage. Archaic recording cannot, however, hide the general superiority of the Victor-Glyndebourne singers, amongst whom Messrs. Brownlee and von Pataky are outstanding as Don Giovanni and Don Ottavio. In the same parts for the Haydn Society Mr. Stabile's understanding has outlasted the best utility of his voice; and Mr. Handt, a most promising bel canto tenor, will improve his pretty good Ottavio after more experience. Neither Anna is acceptable, but Ina Souez for Victor is the more endurable. In the formidable part of Donna Elvira both sopranos have unsteady stretches and moments of glory, with Luise Helletsgruber as a whole superior to Hilde Konetzni. Both Zerlinas are good, Miss Mildmay more assured and more artful. There are two excellent Masettos with little to choose between them, and only in the splendid Leporello of Mr. Pernerstorfer does the Haydn Society have an evident superiority.



Alois Pernerstorfer: the best Leporello loyally helps out his own Don Giovanni.

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—Librettos with both albums, with the text in Italian and English. The Glynde-bourne edition uses a piano to accompany the dry recitative, pale in comparison with the harpsichord, cello and bass of the Haydn Society.

—Gertrude Grob-Prandl (s), Hilde Konetzni (s), Hedda Heusser (s), Herbert Handt (t), Mariano Stabile (bne), Alois Pernerstorfer (bs), Alfred Poell (bs), Oskar von Czerwenka (bs); Vienna Nat. Op. Chorus and Vienna Sym. Orch., Hans Swarowsky, cond. Haydn Society 2020. Four 12-in. 2 hr. 46 min. \$23.80.

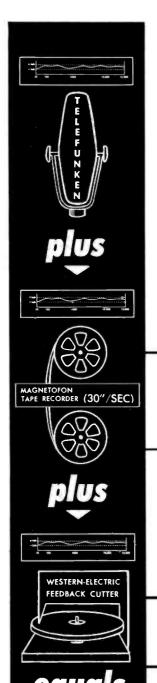
—Ina Souez (s), Luise Helletsgruber (s), Audrey Mildmay (s), Koloman von Pataky (t), John Brownlee (bne), Salvatore Baccaloni (bs), Roy Henderson (bne), David Franklin (bs); Chorus and Orch. of the Glyndebourne Festival, 1935, Fritz Busch, cond. Victor LCT 6102. Three 12-in. 2 hr. 49 min. \$17.16.

(Die) ENTFUHRUNG AUS DEM SERAIL, KV 384 (THE ABDUCTION FROM THE SERAG-LIO) 1782 (1 Edition)

Out of things like this singspiel we have received, through a process of steady degeneration, the modern musical comedy. Mozart, too, wrote for immediate considerations, but Die Entführung was composed by the same surpassing genius which made Idomeneo. If the notion of immortality was alien to Mozart's consciousness so too was any thought of cheapening his workmanship for ulterior motives. He set his operas, of whatever type, as best he could.

'Turkish" music, and Turkish themes and costumes had become cautiously fashionable in the century following the Ottoman defeat by Poland's King John III, Sobieski, at the Vienna gates. As the Mussulmans receded into the Balkans they became progressively more comfortable to contemplate, and finally, as the ascending power of Russia eased their pressure on the west, rather endearing. Hence, Mozart's operatic harem, and the cymbals and drums inseparable from a musical consideration of the Turks. A pair of young lovers gives occasion for several romantic arias, and a comic Turk has one of the most magnificent buffo songs in music. The heroine has a long and sensational coloratura air of grand

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a decidedly German folkish flavor. The vicissitudes do not matter, and terrible dangers do not terrify, in a pageant which everyone from the beginning knows will turn out all right. The wonderful thing is that there is no dullness in all this truck after Mozart has decorated it. The album's virtues outweigh its faults.

difficulty, and there are several choruses of

After all, its worst fault is background noise. covered most of the time, and there are several patent felicities, especially the cheerful expertise of the orchestra. Dr. Krips is intelligently sympathetic to everything except the most spirited interludes, and we all know by now that his way is never peremptory. But one naturally hoped for a better 'Martern aller Arten' from Wilma Lipp and a gustier "O wie will ich triumphieren" from the Osmin, and Walther Ludwig still is short of being a really good tenor. No one is bad, and no one stands out, and the sound is equivalently satisfactory although it is difficult to adjust. Detail is slighted and the violins have a shimmer, but the tuttis are boldly solid and balance is fair except during choral passages when the orchestra seems aloof. Enough of the spoken dialogue is retained to explain the action, but it is too loud.

In the aggregate, a good Grade B, far above routine, noticeably below true excellence: worth having but not bragging

-Wilma Lipp (s), Emmy Loose (s), Walther Ludwig (t), Peter Klein (t), Endre Koreh (bs); Vienna Nat. Op. Chorus and Vienna Philh. Orch., Josef Krips, cond. London I.I.A 3. Three 12-in. 1 hr. 46 min. \$17.85

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(La) FINTA GIARDINIERA, KV 196 (THE PRETENDED FLOWER-GIRL) 1774 (1 Edition)

The astonishing but occasional interjections of witty and moving music into this woebegone buffa of the most obnoxious kind (a circled chain of witless lovers pursuing one another; perspicuous and embarrassing disguises, contradictory motives, etc.) fail to make a tolerable opera but give some glorious moments. We can hear the instinct for Figaro already restless in this lad of 18. If La Finta Giardiniera shows Mozart imitating the ways of others, it does not conceal who the composer really is, and it did enjoy enough success to lead Mozart deeper into opera.

The performance on records does not stimulate an immoderate enthusiasm. The orchestra is too small for good tone, and the singers, with one exception, are competent without distinction. The soprano Margot Guillaume is the exception: her voice and style in the title-part are poised, confident and notable. The direction is stolid, and in the first finale close to collapse. Some excisions have been made, which seems reasonable, and German is used because part of the original Italian text has been lost. Background noise is prominent in a reproduction of satisfactory reality in other particulars. There is a German-English libretto.

-Margot Guillaume (s), Elinor Junker-Giesen (s), Gertrud Jenne (s), Hetty Plümacher (a), Werner Hohmann (t), Alfred Pfeifle (t), Gustav Neidlinger (bs); Ton-



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IDOMENEO, RE DI CRETA, KV 366 (IDOMENEUS, KING OF CRETE) 1780-1781 (1 Edition)

Few readers of this discography can have heard a stage production of Idomeneo, for its genre and austerity have relegated it to performance at festivals. It is an opera seria of the type prevalent in Europe until the reforms of Gluck and the invasion of romanticism suppressed the form forever. The operas of Handel, which we cannot hear nowadays either, follow the same measured pattern, and Mozart composed others, not of the stature of Idomeneo.

In opera seria an event from classical mythology or history instigates an interplay of the fundamental human grandeurs, which may be elevated or base: ambition, lust, hate, treachery, devotion, death, destruction, triumph, defeat, etc. Action is depicted musically, by a dty tecitative. The meaning of the action, its emotional stresses and philosophical implications, are conveyed by arias and choruses. Often accompanied recitative is used to establish suspense for an event immediately to follow. The stage is thus static and mobile in repeated alternations. In its day, the style had impact, but it is singularly unacceptable to audiences accustomed to the realistic operas of the last 60 years.

To a libretto of such imitation classicism, Mozart made his longest opera, which was his favorite. He filled it with a majestic procession of musical tableaux in which grandeur, ferocity and pathos are stipulated with irresistible inevitability. Idomeneo is hard to compare with anything else of the composer's - Lucio Silla and La Clemenza di Tito are not like this - until after a long experience of listening. It does not affect deeply at the first impression, but at the third its shape is clearer and its core is harder, while at the fourth hearing some of the splendid facile jocularities of Die Entführung are less seizing; and at the eighth repetition the strength of Idomeneo's texture still waxes while the wonderful, but wonderfully confused, brew of the Zauberflöte is stale in the bubbles that sparkled most at first.

It is remarkable, indeed hardly credible that the Haydn Society should have selected *Idomeneo* as their first opera to record. Commercialism cannot be less commercial. It is to be hoped that music-lovers will respond to the intrepid probity of the choice.

The production is a solid one without serious flaws. The singing is not salient, except the excellent work of Herbert Handin the small part of Arbaces. Horst Taubmann is a good Idomeneo and would have been a superior one with more assurance. Gertrud Hopf is appealing when not unduly taxed, Miss Menzel is satisfactory although unforceful, and Mme. Grob-Prandl fortunately is well above her unfortunate Donna Anna.

We are conscious of restraint in Mr. von Zallinger's direction. He keeps his classicism claste, his orchestra undulant, his chorus temperate, the opera being about Greeks if not Grecian.

Primarily the credit goes to an unusually distinctive sound. This realization is not one of outstanding technical accomplishment, rather perhaps one at least partly for-

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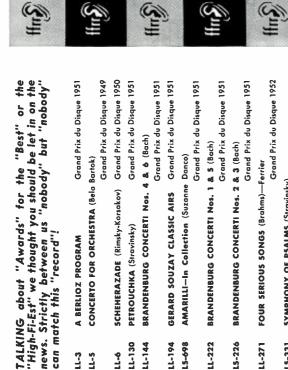
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tuitous, since it is the capture of a warm, liquid tone ingratiating and smooth, not quite like anything on records; not artificial but ordained less by the engineers than by the happy conditions in a concert hall at the session.

- A Victor record, "Highlights from Idomeneo," underlines how grave was our loss of Fritz Busch. These excerpts are perhaps the late master's most successful Glyndebourne recording, since the sound is vivid, the direction electric and the singing good, that of Sena Jurinac as Ilia definitive and unforgettable.

Such foremost Mozarteans as Strauss and Wolf-Ferrari doctored Idomeneo to meet the prejudices of modern audiences. The results are less admirable than the intentions. The Wolf-Ferrari version, speeded, cut and compressed - "streamlined," God help us is no longer opera seria and is a denaturization of Mozart. It has been recorded, and Mozarteans are warned to eschew it.

The stately ballet music, included in the Haydn Society's recording of the complete opera, is available separately on Haydn Society 2042.

-Greta Menzel (s), Gertrud Hopf (s), Gertrud Grob-Prandl (s), Horst Taubmann (t), Herberr Handt (t), Erich Majkut (t), Anton Heiller (bs); Vienna Nat. Op. Chorus and Vienna Sym. Orch., Meinhard von Zallinger, cond. Haydn Society 2020. Four 12-in. 3 hr. 21 min. \$23.80.

—("Highlights" only) Sena Jurinac (s). Dorothy MacNeil (s), Richard Lewis (t). Alexander Young (r); Chorus and Orch. of the Glyndebourne Festival, 1951, Fritz Busch cond. Victor LHMV 1021. 12-in. 50 min.

(Le) NOZZE DI FIGARO, KV 492 (The MAR-RIAGE OF FIGARO) 1785-1786 (3 Editions) Le Mariage de Figaro, Caron de Beaumarchais' dexterous amalgam of amorous farce and social satire, which shifted attention from Beaumarchais the outfitter of privateers to Beaumarchais the dramatist, provided Lorenzo da Ponte with his best and most successful libretto. The adventurer trimmed most of the satire (prudent, in Imperial Germany), retaining the intrigues, the sharp characterizations and a good deal of the penetrating dialogue intact. Thus, thanks to Beaumarchais, Mozart had pungent material to set. Figaro ought to be rhe most enjoyable opera ever written, and maybe it is. Space does not suffice for a descant on the beauties of this high comedy: it is convenient to assume that nearly everyone knows some of it. Those who do not ought to tempt themselves by listening to any of the arias, and those who know the arias will find a more complex enjoyment in heeding the unprecedented finales to Acts II and IV. The music is notoriously hard to sing, but in two of the recorded editions the difficulties have been surmounted with apparent ease.

By a distressing mischance which is terribly injurious to the two best performances, none of the recorded editions is complete. In two instances editorial perversity seems to be the villain. In the other, the earliest, contemporaneous conditions dictated and justified the cuts (without, however, making them acceptable now).

This earliest recording is the elegant Glyndebourne production of 1935. HMV issued the 33 78-rpm sides cautiously and tentatively, an album at a time, the records assembled by type (concerted together, solotogether) and not in consecution. All the recitation secon was omitted but, with the pauses between sides compelled by 78 rpm. the omission was not striking, or at least not fatal. But in the sequence ordained by the LP's, where one scene breathlessly follows another, where the actors who have just sung are violently succeeded by actors who were not there, the musical form is ruined and the dramatic sense is lost. What we have are the elements of Figaro, but not the opera

Tragic, of course, for the performance has an exhilarating glow, a stunning albeit reticent transmission of instrumental implications, a nice adjustment of forces, typical of the late Fritz Busch's Mozart at its best. The singers, from top to bottom, are competent, confident and drilled in style. Willi Domgraf-Fassbänder takes first honors as Figaro, and Roy Henderson is the most distinguished of recorded Counts. The sound is what we should expect from its era: skillful and satisfactory although overbassed and nowhere brilliant.

Columbia's version is the one we must curse for perversity. Here is the Vienna Opera at its best, with a singing cast applicable to Figure notably superior to what any other opera house has in residence. The vocal luxury gives us Elisabeth Höngen and Rosl Schweiger in the small parts of Marcellina and Barberina, with the delicious Anny Felbermayer restricted to the few notes of one Young Girl. Erich Kunz is a lively and warm-toned Figaro, and if we had meters for aesthetic accomplishment they might inform us that the Cherubino, Susanna and Countess of Mmes. Jurinac, Seefried and Schwarzkopf have not, as a unit, had their better on the stage, in the beauty of their voices and the distinction of their delivery.

In this edition we find too the best orchestral playing, and in Prof. von Karajan the most decisive conductor. It is instructive to compare his work with that of Busch since in all major details they are the same and yet in control of subsidiary currents Karajan makes a romantic narrative more ablaze and more tender; while Busch, always with something in reserve, suggests portent and produces shadow until the end. The sound is the brightest of the three sets and emerges well from most kinds of apparatus. In short, masterly work all around, except from the editor: all the dry recitative has disappeared, in imitation of the Glyndebourne edition. Tragic.

Cetra uses the method followed by Columbia later in Cosi fan tutte: enough of the recitative is retained to establish a continuity of action and preserve the musical form. Nevertheless, an evil editor was lurking here, who had the appalling bad sense to excise the recitative "Hai gia vinta la causa" and the following aria. "Vedro, mentr' io sospiro", which give absolutely necessary weight to the Count's character and serve as an exact counterweight to Figaro's "Se vuol ballare". This is a sharp wound in Figaro, but not faral, since the skeleton is there and the rest of the important flesh. In fact this is the only Figaro truly, and so must be the preferred edition; although if the others were complete this would be the worst.

Still it is not bad. If only one of the singers takes first honors - Mr. Corena as Bartolo

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only one, the Cherubino, is lamentable. Mmes. Gatti and Noni as the Countess and Susanna, without the plain vocal opulence of Mmes. Schwarzkopf and Seefried, are adept and dramatically intelligent, and the lower Noni tones are a delight. Mr. Tajo will arouse qualified admiration for his agility as Figaro, a part for which his voice simply is not suited. Mr. Previtali's persistently rather slow tempos must cause comment, and while undoubtedly they obscure some of the sparkle, they are here and there beneficial to lyricism; and the conductor has this advantage over both others, that the interadjustments of his orchestra are imposingly successful, the remarkable balance permitting a demonstration of the contrapuntal and harmonic involvements of Figaro to a degree that we seldom can hear. This nicety of proportion gives the Cetra Figaro a preëminence of sonic effect superior to the other versions in general attractiveness, although it is less brilliant than the Columbia.

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—Gabriella Gatti (s), Alda Noni (s), Graziella Sciutti (s), Jolanda Gardino (ms), Miti Truccato Pace (ms), Angelo Mercuriali (t), Manfredi Pons de Leon (t), Italo Tajo (bs), Sesto Bruscantini (bs), Fernando Corena (bs), Cristiano Dalamangas (bs); Chorus and Orch. of Radio Italiana, Fernando Previtali, cond. Cetra 1219. Three 12-in. 2 hr. 29 min. \$18.50.

—Elisabeth Schwarzkopf (s), Irmgard Seefried (s), Sena Jurinac (s), Rosl Schweiger (s), Elisabeth Höngen (a), Erich Majkut (t), Erich Kunz (bne), George London (bs), Marjan Rus (bs), Wilhelm Felden (bs); Vienna Nat. Op. Chorus and Vienna Philh. Orch., Herbert von Karajan, cond. Columbia St. 114. Three 12-in. 1 hr. 57 min. \$16.35.

—Aulikki Rautawaara (s), Audrey Mildmay (s), Luise Helletsgruber (s), Winifred Radford (s), Constance Willis (a), Heddle Nash (t), Morgan Jones (t), Willi Domgraf-Fassbänder (bne), Roy Henderson (bne), Norman Allin (bs), Fergus Dunlop (bs); Chorus and Orch. of the Glyndebourne Festival, 1935, Fritz Busch, cond. Victor LCT 6001. Two 12-in. 1 hr. 58 min. \$11.44.

—(Overture and 9 numbers only) Anonymous singers and orchestra. Parade 1008. 10-in. 28 min. \$1.69.

(II) RE PASTORE, KV 208 (THE SHEPHERD KING) 1775 (1 Edition)

Is cast in a form so pliant that it may be mounted as opera, oratorio or cantata acted in part. Recitativo secco joins the arias, which are also punctuated by accompanied recitative. It is a pastoral, and credulity would be a deterrent to its savor. It is decorated with music of tender lyrical beauty.

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-Agnes Giebel (s), Käthe Nentwig (s), Hetty Plümacher (a), Albert Weikenmeier (t), Werner Hohmann (t); Ton-Studio Orch., Stuttgart, Gustav Lund, cond. Period 553. Two 12-in. 1 hr. 19 min. \$11.90.

(Der) SCHAUSPIELDIREKTOR, KV 486 (The IMPRESARIO) 1786 (2 Editions)

A little musical plum soured by a lemon of a libretto: stale satire withheld from limbo by vivacious music. The records omit the first part of the work. Thus we have the sprightly overture and four things sung: unfortunately one version was not received.

The Mercury edition is a curious hodgepodge of good and bad. The overture is a transfer of Erich Leinsdorf's splendid achievement originally made for a rare plunge into aesthetics by an unlikely but imposing Maecenas: Sears, Roebuck. The rest is new recording; and if the orchestra has been reduced by three-fourths in strength it has gained by half in clarity. English is used, the graceless English so common in operatic translations. The singing is good, especially from the ladies, who have the major work, but the dialogue is declaimed in the uncomfortable way of promising amateurs. If one listens while the singers sing, and shuts the ears while the singers talk, Mozart's holiday is agreeable.

-Edith Gordon (s), Lois Hunt (t), Luigi Vellucci (t); Ch. Orch., Hermann Herz, cond. Mercury 15025. 10-in. 24 min. \$3.85. -Soloists with Ton-Studio Orch., Stuttgart, Rolf Reinhardt, cond. Period 532. 12-in. \$5.95. (Not received.)

THAMOS, KOENIG IN AEGYPTEN, KV 345 (THAMOS, KING OF EGYPT) 1773 and 1779 (1 Edition)

Here we have incidental music to a drama, not an opera. There are three choruses and five instrumental interludes, introducing or supporting action on the stage. Most of this action was tiresome heroics, but there is nothing tiresome in the dramatic congruity of Mozart's music. There are passages anticipatory of The Magic Flute, and a bass solo in the accents of the Statue's shocking vengence in Don Giovanni.

In withdrawing this from silence, Vox has provided the kind of invaluable service to music-lovers and scholars that only the phonograph can perform. It is a rescue and everyone is grateful, but as in most rescues the erstwhile derelict has undergone some battering. No one would insist that the standards we demand for The Magic Flute be applied to Thamos, but this easy-going performance is utterly without distinction. It is ably reproduced - by recording supervisors whose glum duty was to duplicate a craggy orchestral tone.

The first two interludes, much better played by an orchestra conducted by Felix Günther, and well recorded, have identical incarnations on Remington 199-54 and 149-25, on Plymouth 10-5, and probably on Etude 705 although the last is attributed to another conductor.

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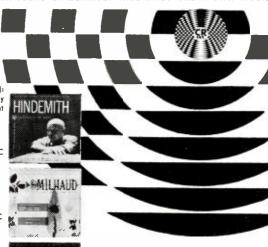
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ZAIDE, KV 344 (1779) (1 Edition)

Mozart did not complete the first of the three (with Die Entfubrung and Die Zauberflöte) singspiele that he composed to a dubious Oriental setting. There are 15 numbers in Zaide as we have it. There is no overture and no finale. As we might expect, from Mozart, and from the testimony of the only familiar thing in the opera, the lovely aria "Rube sanft", the music is prime. It has a nervous rasp, missing in Die Entfubrung, without the easy melodic good-fellowship of the later work: it does not captivate at once; but once captured - say at the third repetition - we stay captives.

The Polymusic records — the first musical production of such scope to be attempted by that company - offer bountiful evidence of careful preparation. The lovers who must be joined before the final curtain have singly or in concert a part in about two-thirds of the music. Mr. Cuénod, a specialist in music that nobody knows, commands his pure. sinuous tenor with the authority of a capital musical mind: and the assured address of Miss Dobbs, in a tricky part, is admirable in itself, and holds an even higher promise. The others have little opportunity for prominence, but acquit themselves properly.

The freshest laurel is to the conductor. Mr. Leibowitz. It would be presumptuous to say that a performance reflects a score to the last gleam, when the score is hardly known; but the conductor is persuasive to his hearers as he was to his singers and band. His Zaide speaks with an impressive authority.

Good reproduction can be obtained only after careful adjustment of controls. Volume is low, the high-frequency climb is steep and bass is small. After correction we have a pleasant transparent blend of sound, and an increment of background noise caused by the very correction. It is not a recording for apparatus without flexibility, except rhose of very restricted range.

-Mattiwilda Dobbs (s), Hugues Cuénod (t), Joseph Peyron (bne), Bernard Demigny (bs), John Riley (bs); Paris Philh. Orch.. René Leibowitz, cond. Polymusic 901-902. Two 12-in. 1 hr. 16 min. \$11.90.

(Die) ZAUBERFLOETE, KV 620 (The MAGIC FLUTE) 1791 (2 Editions)

The indispensable catalogue of Mr. W. Schwann discloses no other work of such dimensions with two performances comparable to the brilliance of the two recorded editions. The faults in these masterly sets are themselves the kind of faults that emanate from a superiority of expertise, a kind that many music-lovers may not consider faults at all: a barely perceptible exaggeration of style in Tiana Lemnitz; a suggestion, in the beautiful tones of Gerhard Hüsch, of a bemused pride of those very tones; an artful sensuousness in the manipulation of the women's trios, by Prof. von Karajan, almost overbearing, like the deepest of our erotic perfumes. These are the faults of an aërial acrobat who contrives five somersaults when he had announced four.

It will not be easy for anyone to make a confident choice of the better edition. A superiority of one in one place is balanced by a superiority of the other in another. All the men are excellent, with Columbia preferred in two: Mr. Kunz as Papageno, for a more vigorous enactment of the spirit (his voice is hardly better than Gerhard Hüsch's); and Mr. Dermota as Tamino, with a riper Teutonic romanticism than Roswaenge. No one is likely to hear a greater Sarastro from a living voice than Ludwig Weber has contributed to Columbia, but Wilhelm Strienz (who is not what he was) established a standard of majestic linear steadiness for Victor that the fuller humanity of Mr. Weber cannot drive from memory. Superficially the Columbia ladies have it too; there is more enticement to the Seefried and Lipp voices than we hear from Vicror's Pamina and Queen of the Night. But the enticement is tainted by an incipient tiny hoot inflicted during the process of recording, not generally perceptible except when the voices are concerted. This is the only particular in which the Victor recording of 1938 and the Columbia of 1951 do nor illustrate the advantage of recency.

Not that the Victor sound is impoverished or notably inaccurate; far from that. It was splendid when it appeared on 78's, and it is better now. Only in direct comparison with Columbia's modernity can its deficiencies of timbre and incisiveness be called obvious. Columbia is bigger and fresher, is cut into sharper blocks and reflects a greater complexity of lights. Once the comparison is made, discophiles lean to the newer version as an entity

The two Philharmonic orchestras have high claim to esteem, Berlin for unison and Vienna for tonal opulence. The conductors differ very little in tempo, considerably in stress. Sir Thomas Beecham has allowed greater force to the orchestra against the voices, and his higher instruments are more

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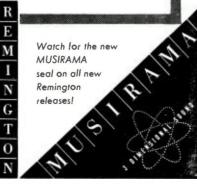
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279 Main Street Great Barrington, Mass. prominent comparatively than in the rich Karajan mixture. This gives the Beecham performance a lighter semblance, the Karajan a more thoughtful. In such a dramatic hash as The Magic Flute, one characteristic has as much authority as the other.

For never did Mozart surmount the degradation of his literary material as in the music that he supplied to the dreary verbal mess of the greatest of his singspiele. A fairy-story without invention, low comedy without humor, and an ethical preachment absurdly trite, the abysmal libretto is so attificial a confection that its perpetrator, after commencing it, altered Sarastro from evil magician to lofty priest without substantially altering anything else. No matter. Mozart made it fairy-like, made the low comedy delicious, and made Sarastro and freemasonry majestic.

—Irmgard Seefried (s), Wilma Lipp (s), Emmy Loose (s), Anton Dermota (t), Peter Klein (t), Erich Kunz (bne), Ludwig Weber (bs); Chorus of the Friends of Music. Vienna, and Vienna Philh. Orch., Herbert von Karajan, cond. Columbia SL 115 Three 12-in. 2 hr. 8 min. \$16.35

Three 12-in. 2 hr. 8 min. \$16.35
—Tiana Lemnitz (s), Erna Berger (s), Irma Beilke (s), Helge Roswaenge (t), Heinrich Tessmer (t), Gerhard Hüsch (bne), Wilhelm Strienz (bs); Berlin Philh. Chorus and Orch.. Sir Thomas Beecham, cond. Victor LC1 6101. Three 12-in. 2 hr. 9 min. \$17.16.

OPERATIC EXCERPTS

Long ago, Mozartians with a phonograph used to collect isolated disks from the operas in the hope that the parts would eventually assemble to a synthetic whole. A Don Giovanni without the finales and recitative could be fitted together from 30 recordsides by nearly as many singers. The game developed a competitive snobbery, the collectors tending to boast of their taste and insight in having this Don Ottavio, that Donna Elvira. A fancied perfection was demanded of vocalists in Mozart never required in other composers, a perfection imagined from the storied glories of an inaudible past. LP does not offer the delights of the chase to the same extent, and the complete editions of Mozart's Big Five (Don Giovanni, Figaro, Idomeneo, Cosi and The Magic Flute) contain superlative singing besides, but all the LP's that this writer could locate exploiting at least one operatic excerpt have been examined for special il lumination. Limitations of space compel cursory references, and several items are not mentioned because they are neither good nor bad enough to warrant comment The ordination followed is haphazard, and is not supposed to indicate an order of merit.

Victor LM 9010 is an operatic miscellany of admirable virtues, wherein Risë Stevens's capable singing of Cherubino's two airs from Figaro is the smallest attraction, her vocal endowment too robust for the part. Ljuba Welitch in another miscellany, on Columbia ML 2118, brings her transfixing intensity to a heroic exposition of Donna Anna's two big airs in Don Giovanni. Hilde Gueden sandwiches a strangely insensitive "Venite, inginocchiatevi" between a luscious "Ach, ich fühl's" and a brilliant "L'amero" to back her "Essultate, Jubilate" on London 1.5 681. Elisabeth Rethberg and Ezio Pinza,

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LYRICHORD DISCS INC. 464 West 51st Street New York 19, N.Y. singly and together, offer five things from Figaro and "Là ci darem la mano" on Victor LCT 1031 which illustrate their artistry, particularly Rethberg's in "Porgi amor", without being able to reproduce the melted sunlight of her voice at its best.

Another Victor - LCT 115 - Irving Kolodin's "Critic's Choice", carries the lamented Elisabeth Schumann's "Venite, inginocchiatevi" with its perfection of tender, wonderstricken mockery, the best singing of the beautiful little aria that this writer has ever heard; and the same disk has among its eleven items the late Maria Cebotari's strongly-characterized but tasteful "Dove The shrill skill of Lily Pons can be heard by those who wish in six arias on Columbia ML 4217, acrobatic and rather inane, without enunciation. Barbara Troxell's "Ruhe sanft" from Zaide is moving but vocally unsteady (WCFM 8, with the Third Horn Concerto and "Exsultate".) Four singers try nine arias on London L 457 and all are more than competent. The feature is Anton Dermota's Portrait Song from The Magic Flute, rich in tasty Germanic juice, far superior to the tenor's singing of Don Ottavio's two airs. Maria Reining is lovely in "Dove sono" and "Porgi amor", compellingly; and so too Lisa della Casa in "Ach, ich fühl's" and "Voi che sapete", recordings hurt by a hoot and background noise. Paul Schoeffler is here too, in good if not memorable moments as Leporello and Figaro. As a whole, a superior infusion of Mozart.

Bidu Sayao, intelligent, versatile and durable, has been a blessing to those operahouses she has served. A 10-inch Columbia (ML 2152) devoted to her talents has four Mozart arias on its first side, and every one is a testimonial to the skill of an invaluable journeywoman of opera. Fetnando Corena is a gifted and exceptionally promising young light-bass who on a beautifully recorded London ten-incher (LS 671), further distinguished by glowing orchestral assistance, tries everything which is not tenor. In eight arias he shows that his voice is not deep enough for Sarastro and hardly high enough for Figaro; but that in the buffo land between he has few peers. The record is recom-mended; for even where he is wrongly placed this singer is not unconvincing; and where the tessitura is right he is too, de-

Hilde Gueden again, in "Mozart and Verdi Arias", London LS 485, two arias from Figure and two from Idomeneo, including a prime "Deh vieni, non tardar". The others are hurt by a curious actidity in the good voice, possibly caused by the recotding; and distinguished by the vety knowing accompaniments of Clemens Krauss and the Vienna Philharmonic Orchestra. Tajo's Catalogue Aria, included with six Mozart arias not from Mozart operas on Cetra 50019, is over-mannered to modern Two records by Ezio Pinza - a 12inch Columbia ML 4036 and a 10-inch Victor LM 107 - cover familiat ground with three arias in common. Both are distinguished by excellent accompaniments and reproduction - especially Victor for the latter and display the experienced artistry of this basso who could make anything convincing even when he could not quite sing it. Osmin's superb gloat in Die Entfuhrung, "Ha! wie will' ich triumphieren", on the Columbia disk, has a triumphant finality of vehemence irresistible and unchallenged. The use of

Italian does not seem harmful here, but is a disappointment in Sarastro's arias, one on the Columbia, two on the Victor. The Paul Schoeffler recordings of the Catalogue Aria and "Non piu andrai", part of London LL 457, are found also on London LL 288, with music from Die Walküre and Otello.

Helen Traubel's "Or sai chi l'onore" (Columbia ML 2052), one-sixth of a record, is ungainly. John McCormack's Don Ottavio (Victor LCT 1106 and LM 1202), and Tito Schipa's (Victor LCT 1106) are old recordings of beautiful singing, with little more than a wisp of orchestra. Even so they are very instructive in style and poise.

SONGS

Mozart wrote some thirty songs, and there are some fakes. Most of the genuine ones are frail, easy to sing and not hard to forget; concerned with immediate slight sentiments, evanescent moods, temporary piety, inconsequential pleasures. (Mozart poured his grandeur into grander moulds.) With few exceptions stanzaic, they have little resemblance to the thorough-set lieder of Schubert and his followers. An Chloë, Das Veilchen and Abendempfindung are known nearly to the exclusion of all the others, and in the five disks devoted in part to Mozart songs those three appear 11 times.

Miss Warner's record is the preferred one, simply because she presents the greatest number of songs: six; in her healthy voice and unblemished natural expression. Miss Danco's four seem to have the highest average, consideting vocal quality, appropriateness and delivery. Miss Berget is easily the most artful, and if the childlike voice and airy facility do not pall her five are ordained. (Even when they do pall, as they do here, her arch Warnung, so delicately inflected, is a prize to have.) Mr. Rogers is an amiable tenor, at a disadvantage in songs whose ftagility we most readily accept from women's voices. Miss Nikolaidi is gravely effective in her single unstereotyped choice. She also enjoys the truest recording, not of first importance when the material is voice and piano, but notably rich on this record, and the orchestra too, on the reverse.

—(Dans un bois solitaire; Das Lied der Trennung; Als Luise die Briefe; Abendempfindung; Das Veilchen; An Chloe). Genevieve Warner, soprano, Franz Rupp, piano. Columbia ML 4365. 12-in. (with 6 Songs by Schubert). 20 min. for the Mozart songs. \$5.45.

—(The above minus 2 and 3). Suzanne Danco, soprano, Guido Agosti, piano. London Ls 699. 10-in. (with 5 Songs by Strauss). 12-min. \$4 95.

—(Das Veilchen; Dans un bois solitaire; Warnung; Der Zauberer; Abendempfindung). Erna Berger, soprano, George Schick, piano. Victor LM 133-. 10-in. (with Schubert: Heidenroslein). 13 min. \$4.67.

—(An Chloë; Warnung; Abendempfindung; Die Zufriedenbeit). Earl Rogers, tenor, Emilia Mittani, piano. Allegto AL 13. 10-in. (with Haydn: 4 Songs). 11 min. \$4.45.
—(Der Sylfe des Friedens). Elena Nikolaidi, contralto, Jan Behr, piano. Columbia ML 2165. 10-in. (with a collection of arias and lieder by 6 composers). 4 min. \$4.00.

Part IV of the Mozart discography will include Masses, other church music, and miscellaneous short orchestral works.

HIGH FIDELITY MAGAZINE

ASSESSED NO.

News of the SME



FOR SME the summer weeks have been busy and useful. Memberships from subscribers to HIGH FIDELITY increased as a result of our report in the July-August issue of the Magazine, as did memberships from the general public. The Society now has members in every state except Arizona, Arkansas, Idaho, Maine, Nevada, Rhode Island, South Carolina, South Dakota, Utah, West Virginia and Wyoming. From Canada and Cuba the SME has spread, and three new foreign territories were added to the roll call—Mexico, Guatemala, and the West Indies.

It was during the summer, amazingly enough, that a burst of fresh activity blossomed out in the local SME Chapters. Always we had supposed that in hot, muggy weather even high fidelity enthusiasts and music lovers would be tempted to lie low and take it easy, but we were wrong. Eager new Chairmen diligently rounded up their quotas of twenty SME members per Chapter and plunged into setting up their groups. (On page 129 a list of Chapters, their Chairmen and their addresses is printed so that any of you who live near enough, and wish to take advantage of their SME program plans, may contact them.)

In a relatively short period of time the SME has captured the imagination of doctors, lawyers, bankers, engineers, teachers, salesmen, technicians, the clergy, artists, scientists, editors, dentists, clinical psychologists, research chemists, housewives and students. In preparing a survey of the entire SME membership, a preliminary report on 10% of the members shows that the Society has a travel agent, clothing designer, weather observer, tourist lodge owner (who also plays alto horn!), nurse, farmer, geologist, food service inspector, tool and die maker, and even an opthalmologist. If you're wondering what in the world the latter is, we had to look it up in the dictionary ourselves, and here's what it said: "a doctor of medicine skilled in the science of dealing with the anatomy, functions, and diseases of the eye"!

With the same unfinished survey used just as a running start in the race to keep up with SME's enthusiastic members, it is found that over 400 musical events were attended in a year, ranging from symphonies to operas, ballets to choral groups, and from band or jazz concerts to recording sessions of live music. SME members play

the piano, cello, French horn, violin, tenor guitar, and one gentleman plays what he modestly calls a "hot trumper"!

On the SME musical score board the symphony rates the top popularity spot among our members, with instrumental music coming in second and the opera finishing a strong third.

Another survey completed by SME Headquarters brings out some rather surprising facts. For instance, of the total Society membership only 9% do not own hi-fi installations, while 8% are busy building their sets, planning to buy installations soon, or state sadly that the sets they do have aren't perfect enough to qualify to the title "high fidelity". One such truthful soul calls his unit "medium fidelity."

Among the vast majority who have high fidelity in their homes (one has two sets, and another boasts of three!), 74% either installed or connected the installations themselves and 43% have actually built one or more pieces of audio equipment.

The score board of a poll taken to determine the division of SME members' interests in (1) music, (2) high fidelity, and (3) a combination of both reveals: 35% prefer music, 30% are smitten by high fidelity, and 31% like their music combined with high fidelity. The remaining 4% seem torn between not committing themselves at all, or have found the recording of tapes to be the most fascinating activity.

SME Headquarters didn't spend the entire summer just making surveys. It also edited and mailed the second issue of the Society's publication, sent out a release to all FM radio stations in the United States and Canada to alert program directors to the SME, printed a Chapter Manual to give new SME Chairmen hints and instructions in setting up local Chapters, and worked out plans for the Society's exhibit at the Sight and Sound Exposition to be held in Chicago early in September. We're looking forward to meeting those of you who attend this event.

Lisbeth Weigle, Executive Secretary The Society of Music Enthusiasts Great Barrington, Mass.

Turn to page 129 for list of local SME Chapters.

ENCLOSURES FOR LOUDSPEAKERS, PART I

By G. A. BRIGGS

In the FOUR articles which I have previously written for this journal I have touched upon response curves, cone resonances, room acoustics and the human ear—ostensibly leading up to the fifty-dollar question of how to house the perfect loudspeaker once it has been acquired. I must admit that I was in fact skating round the main problem, or merely indulging in a few bouts of shadow boxing. As the Editor is now showing signs of impatience and insists that I redeem my promise to appear in the Anglo-American Cabinet-cum-Flare Controversial Ring, I have put in hand a series of tests which will, I hope, help to throw some light on a difficult problem. An effort will be made to deal mainly with fundamentals so that the results can be applied to any loudspeaker, whether American or British.

Two recent issues of HIGH FIDELITY have contained significant editorial comments with which I heartily agree, and which have some bearing on the question. In the January-February issue the Editor wrote:

"There is a growing conviction among expert, critical listeners that speaker measurements alone have little significance outside the development laboratories. Final judgment, it appears, must include a procedure aptly phrased by some as 'psycho-acoustic appraisal'."

This is no doubt true, and applies particularly to response curves taken in anechoic rooms, which I do not propose to use in this series of test-reports.

In the March-April issue, the Editor drew attention to a new disease: "Ear Conditioning", as a result of which the listener tends to lose his powers of tonal judgment. Pope—like the Greeks—usually has a word for it; his lines about vice could aprly be quoted here:

"Yet seen too oft, familiar with her face, We first endure, then pity, then embrace."

It is nevertheless fortunate, for domestic peace, that many ears grow accustomed to a certain type of reproduction and accept it as authentic, thus avoiding the frequent upheavals which can be such a trial to the wife of the man who is never acoustically satisfied.

We are therefore faced with a problem in which the usual methods of test and measurement are suspect, and in which the ability of the listener to judge correctly the final results may also be suspect: a state of affairs which might deter the conscientious investigator but could well attract the charlatan.

Qualities Involved

It seems to me that the question of loudspeaker mounting involves various elements, all of which must be considered before a final assessment can be attempted. These are:

- a) Response level.
- b) Efficiency (output versus input level).
- c) Quality of output (waveform).
- d) Transient response.
- e) Coloration.
- f) Directional effects.

It has been agreed that the response curve (a) usually receives undue attention, so we will use the minimum number of oscillograms to illustrate various conditions.

The question of efficiency (b) is directly related to quality (c), but both are often ignored; in fact I have read descriptions of demonstration centres in New York and Chicago where the acoustic output of the most efficient speakers is deliberately cut down to the level of the least efficient by the insertion of resistors in the voice coil circuit. This practice strikes me as a travesty of good salesmanship, and it is hard to believe that it is perpetrated in the U. S. A. — a country in which salesmanship is reputed to have risen to the level of a fine art!

The basis of true efficiency in any loudspeaker is high flux density, and flux density¹ costs real money. It reduces the risk of distortion because the input level required for a given output is obviously lower than is necessary with a weaker and cheaper magnet system.

(It appears that, in addition to response curves of doubtful usefulness and the pitfalls of ear conditioning, we have to include the risk of misleading demonstrations as another bunker in the acoustic fairway.)

Transient response (d) is again mainly related to high flux density and should never be overlooked in any listening test. It is also affected by the method of mounting, as a good deal of "ringing" can be added to reproduction by thin panels and unsuitable enclosures. Internal lagging² and draping also come into the picture.

The qualities (e) and (f), coloration and directional effects, are mainly affected by the type of mounting and loading which is used.

The foregoing gives an outline of the scope of the present investigation; the remainder of the articles will describe actual tests made, supplemented by the writer's deductions which, unlike the tests, may be open to question.

Test Units

All the tests have been made with two loudspeaker units, each fitted with a cone with corrugated surround, and

HIGH FIDELITY MAGAZINE

¹Mr. Briggs has discussed the subject of flux density at some length in his books, "Loudspeakers" and "Sound Reproduction". We have quoted excerpts from these at the end of this article.—Editor.

²"Lagging", in our sense of the word, means a combination of absorbent and stiffening qualities. I should consider a cabinet lagged if it was lined with two layers of Celotex, because Celotex is absorbent and it also increases the rigidity of the panel. — G. A. B.

open, die-cast frame to avoid "chassis resonance". The essential details are as follows:

8-in. unit: 1-in. centre pole.

10,000 lines flux density. 39,500 lines total flux.

Voice coil impedance 15 ohms.

Open baffle resonance 72 cycles.

12-in. unit: 134-in. centre pole.

13,000 lines flux density. 145,000 lines total flux.

Voice coil impedance 15 ohms.

Open baffle resonance 70 cycles.

Speakers were loaded with 11 types of baffles, enclosures, or horns:

TYPES OF LOADING MAIN CONE RESO-NANCES, WITH 8-INCH UNIT Open baffle, 3 ft. by 2 ft. 6 in. 72 cycles 1) Reflex cabinet A, 134 cu. ft. 2) 50 and 110 cycles Reflex cabinet B, 41/2 cu. ft. 50 and 80 cycles 3) 4) Corner reflex C, 9 cu. ft. 50 and 70 cycles 5) H-R cabinet³, 1¹/₄ cu. ft. 50 and 100 cycles 40 and 85 cycles 6) H-R cabinet, 21/4 cu. ft.

Totally enclosed cabinet, 41/2 cu. ft.

75 cycles True infinite baffle 70 cycles

Tapered pipe 40 and 85 cycles

10) Heavy exponential horn, 3 ft. 6 in. long, mouth 2 ft. square 50 cycles

Heavy exponential horn 5 ft. 6 in. long, mouth 4 ft. square 50 cycles

Notes on Loading

The reflex cabinets A and B (Nos. 2 and 3, above) were fitted with sliding doors to the ports so that they could be tuned to give reasonable matching to the cone resonance, the ideal position being one where the upper and lower resonances are of equal intensity. When considering the output on axis of cone with reflex loading, it should be remembered that the vent output is added to the general sound level in a room when it is in phase with the frontal cone emission, and that maximum vent output occurs at the vent resonant frequency.

The large enclosure C (4) cannot be tuned by small variations of port size, as the Q4 of the resonance is too flat. Trying to tune such a large enclosure is like giving an aspirin to an elephant for a headache. The fact that the cabinet cannot be easily tuned is its main virtue, as it means that there is no pronounced resonance. A standard vent area of 12 by 5 in. was adopted. The advantages of large size would be derived from other types, such as the FAS coupler previously described in this journal.

All vented enclosures are in fact Helmholtz resonators. Results are affected by the size and design of the enclosure, and many original ideas (such as were used for 5 and 6, above) have been put forward during recent years, particularly in America where conservation of space in the listening room appears to be a major problem. It is a fundamental fact that a small Helmholtz enclosure is

not so good for loudspeaker use as a large one, but it is demonstrably true that where space is limited results can be improved and resonances smoothed out by judicious design. Two special H-R enclosures have been used for an investigation into these possibilities.

The totally enclosed cabinet (7) was produced by simply closing the port of reflex cabinet B (3). This proved to be a retrograde step in every way, as size for size the results are inferior to the Helmoltz resonator type.

A true infinite baffle (8) was obtained by mounting the speaker under test in the wall of the test room, facing out, with the microphone suspended in the open Apart from the possibility of ground reflections, these conditions are superior to anechoic rooms. Fortunately, in our case, the ground obligingly slopes downwards on the country-side of the laboratory so that reflections are reduced to a minimum. Tests are, of course, dependent on good weather and absence of interference from aeroplanes, tractors, etc.; but the cackling of hens and geese in an adjacent field is not loud enough to affect the oscillograms of a loudspeaker with a fairly lusty voice.

The tapered pipe (9) enjoys a measure of popularity in England because of its efficiency, meaning its comparatively large acoustic output. For the benefit of those

not familiar with the system, a typical arrangement is illustrated in Fig. 1.

The exponential horn (10 and 11) used in these tests is shown in Fig. 2, along with a bicycle for comparison of size. Constructed in sheet steel, the complete horn weighs 21/2 cwts5 for a length of 5 ft. 6 in. with a mouth 4 ft. square. It can be shortened to 3 ft. 6 in. with a mouth 2 ft. square. The opening at the narrow end is 6¾ in. square. Only the crudest tests have been made here. and the results shown are

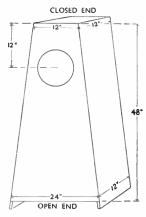


Fig. 1. Tapered pipe for 8-in. unit.

those obtained by simply mounting a speaker at one end of the flare. The requirements of a pressure chamber in the throat of the horn, and considerations of rate of flare, have been ignored. It is, of course, not possible to deal intelligently with horn loading without taking these points into account, but the tests show the effect of altering the size of horn, especially at low frequencies where it functions as a directional baffle.

The flare is absolutely exponential and is therefore superior to any folded horn which includes reflecting surfaces and straight sections which are not truly exponential.

³H-R is an abbreviation for Helmholtz resonator, a fundamental type of cabinet construction, modified by experimenters and manufacturers in an effort to achieve improved response from enclosures having very small cubic content.

⁴Q is an index of the breadth of the sound peak at resonance.—Ed.



Fig. 2. Exponential born used, with bicycle to indicate size.

Types of Test

It is proposed to deal mainly with low frequencies in the first place and, as the quality of the output wave is quite as important as the quantity (or sound level), it was decided to photograph oscillograms of the waveform at various frequencies with a standard input level of 1 watt to the speaker, set at 500 cycles, and a standard sensitivity input to the oscillograph. The curves of waveform as illustrated therefore show the output level from the various speaker systems, as well as the quality. Nonlinearity is usually the result of frequency doubling or trebling. It cannot be too strongly emphasized that the cleanest reproduction is always obtained from the speaker system which shows the purest waveform.

The waveforms can be taken as illustrating voltage levels, so that an increase from 2 to 4 volts would increase the height of a wave by 100%, and would represent a rise of 6 db in sound level.

Most of the tests were made in the open air, but some were done in the Test Room to provide a direct comparison with the 9 cu. ft. corner enclosure, which is a fixture. The conditions are stated in each case. For the response curves of Figs. 18 to 20, the input to the speaker was reduced to half a watt to avoid the trace over-running the edges of the tube unduly at the frequencies of resonance.

Waveform

The following oscillograms illustrate the results of the tests made. The letter "R" in front of a frequency number indicates cone resonance. Input 1 watt. Microphone

on axis. The same 8-in, unit was used throughout. The height of the waveform indicates the acoustic output level at the frequency specified, but the number of complete waves per picture (horizontally) has no significance.

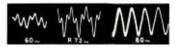


Fig. 3. 8 in, unit on 3 x 2 ft. 6 in. baffle placed in a corner of test room. Note severe distortion at 72-cycle resonance and enormous drop in output level at 60 cycles compared with Fig. 11.



Fig. 4. Poor results from 8 in. unit in small reflex cabinet A. Note low level of output and poor waveform below 90 cycles. Upper cone resonance occurred at 110 cycles. Corner position as Fig. 3.



Fig. 5. Greatly improved results from larger reflex B with much londer signals. Upper resonance now occurs at 80 cycles. Note the very good waveform at 50 cycles from the vent. Corner position as Figs. 3 and 4.

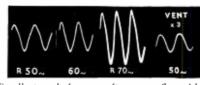


Fig. 6. Excellent results from 9 cu. ft. corner reflex, with very large output. The cone output at 50 cycles is the best of all the tests made. The upper cone resonance is down to 70 cycles — a drop of 40 cycles compared with Fig. 4. The vent output at 50 cycles is quite linear and the level was extremely high. The height of the wave shown should be multiplied by three to compare the acoustic level with all the others illustrated.



Fig. 7. The output level from the small H-R cabinet is rather low, but the waveform is quite sinusoidal at 70 cycles. There is of course distortion at the lower cone resonance at 50 cycles. The upper resonance occurred at 100 cycles but was free from distortion. Corner position as in previous tests. See Fig. 16 for effect of increasing the input to 2 watts. The performance is far superior to the reflex cabinet A, which is 40% larger.



Fig. 8. The same as Fig. 7., but taken in the open air for comparison. There is not much difference at 50 cycles but the output level at 80 cycles is rather higher. The illustration shows that reasonable indoor readings of loudspeaker performance at low frequencies can be taken provided the microphone position is near enough to the cone to avoid standing wave effects.



Fig. 9. For this test the 8 in. unit was mounted in a larger H-R cabinet. The acoustic output is much greater and the waveform

at 50 cycles is much improved. The cone resonances were at 40 and 85 cycles. The distortion shown at 60 and 70 cycles is probably due to the larger opening in front of the cone, which was actually designed for a 12-in. speaker. Result would no doubt be greatly improved by an adjustment here to suit an 8-in. speaker.

₩ 75

Fig. 10. A totally enclosed cabinet of $4\frac{1}{2}$ cn. ft. was obtained by closing the vent of reflex cabinet B. It is only necessary to show one waveform to prove that an enclosed space of such small capacity is not a very good proposition. The cone resonance is raised to 75 cycles and the results showed non-linearity at all frequencies below 90 cycles.



Fig. 11. True infinite baffle. It is very interesting to note the distortion at the cone resonance (70 cycles). As the frequency is lowered, the amount of distortion remains the same, but the intensity of the fundamental frequency goes down until a point is reached where the harmonic content is as great as the fundamental, and the output contains 50% of frequency doubling. If the frequency is taken still lower, a point can be reached where the fundamental disappears and only harmonics are heard, producing a "knock" instead of a note. It is quite obvious that a speaker with a low cone resonance is required for good results here.



Fig. 12. Tapered pipe. The output shown in front of cone is quite good. There was, of course, distortion at the lower cone resonance at 40 cycles (not shown.)



Fig. 13. Tapered pipe. Microphone 12-in. from open end. As with reflex loading, the low frequency wave shape is better at the open end of the air chamber than it is at the cone, a phenomenon which helps to improve general quality.



Fig. 14. Exponential born, 3-ft. 6-in. long, 2-ft. mouth. The acoustic output is high but the quality at 50 and 60 cycles is poor.

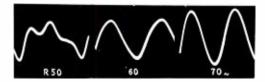


Fig. 15. Exponential born, 5-ft. 6-in. long, 4-ft. month. Note the enormous improvement at 50 and 60 cycles from longer and larger flare. The distortion at 50 cycles could be detected easily by ear, but at 60 cycles the sound was pure. The waveform here at 50 cycles is not so good as the 9 cu. ft. reflex but the over-all

efficiency is greater. It should however be remembered that this stare contains about 24 cu. ft. of air loading which is much more than is available under domestic conditions, judging by objections often raised to a mere 9 cu. ft.



Fig. 16. Small H-R. The effect of increasing the acoustic output by using 2 watts is shown here, and should he compared with Fig. 7. The distortion at 50 and 60 cycles is of course increased. but the quality is still very good at 70 cycles; it is in fact superior to the small reflex A at half the acoustic output.

Response Curves

The following eight oscillograms⁶ were all taken in the open air with the same 8-in. loudspeaker unit, and they are intended to convey a picture of the extraordinary variations which are produced by different methods of mounting. Fig. 18 should be used in forming an impression of the db levels involved.

A brief reference to each curve will suffice to draw attention to the main characteristics.

A. The response begins to fall off rapidly below about 200 cycles as a result of the small diameter of the baffle. The peak output in the region of 2,000 to 4,000 cycles is due to cone resonance.

B. The improvement resulting from 4½ cu. ft. reflex loading is evident here.

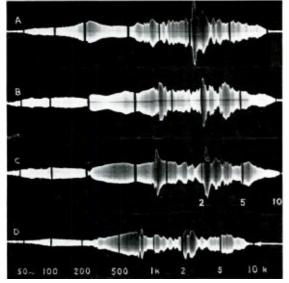
C. The inside of the reflex cabinet B of the previous test was hung from top to bottom with three or four sheets of soft cellulose material7 in order to reduce standing wave effects. A dozen or so lengths of wide surgical bandaging8 could be used with equal success. The response is levelled out in the region between 200 and 750 cycles where one would expect to find standing wave effects in a cabinet of this size. These resonances occur where the distance between parallel surfaces inside the cabinet is half a wavelength. Any form of interior draping could be employed. In fact, the user could perhaps reconcile his better half to the acceptance of such a reflex cabinet in the home by allowing her to use it as an airing cupboard for the "smalls"; the hot air so often generated by political broadcasters should assist the drying process. Incidentally, draping a 9 cu. ft. enclosure did not produce any noticeable effects. The wavelengths are of course longer and the frequencies of resonance correspondingly lower, and therefore less objectionable.

D. The response produced by the small H-R cabinet is interesting. As expected, the low frequency output is

"Readers should note that the previous illustrations are pictures of the waveform of a pure sound at a single frequency, such as 50 cycles. "Perfection"
would be a beautiful, sinusoidal waveform. The following oscillograms are
pictures of the entire audible frequency spectrum, taken by an ingenious
method developed by Mr. Briggs and described in detail in HIGH FIDELITY.
Spring, 1952. "Perfection", here, would be a band, extending from the lowest
to the highest frequency under examination, and of equal width, above and
below the center line, throughout the frequency range. The output of a good
amplifier will show such a picture (see HIGH FIDELITY, September-October
1952, page 40, Fig. 2). However, as Mr. Briggs' oscillograms show, the output
of a loudspeaker is quite another matter, being full of peaks and valleys which
correspond to changes in loudness. — Editor.

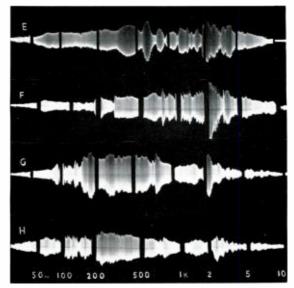
7 Suggested by Mr. F. H. Brittain of G.E.C. Research Laboratories, Wembley. — G. A. B.

8Suggested by Mr. L. B. Keim of New York. - G. A. B.





- B. Reflex cabinet B.
- C. Same as B but with interior draped with soft material.
- D. H-R cabinet 8-in. model.



E. H-R cabinet - 12-in. model

- F. Tapered pipe.
- G. Short exponential born 3 ft. 6 in.
- H. Long exponential born 5 ft. 6 in.

Fig. 17. Free-field response oscillograms of the same 8-in. unit mounted in various ways. Input 1/2 watt. Microphone 18 in. on axis.



Fig. 18. db equivalents for response curves.

not very strong. The most attractive quality is the substantial reduction in the resonant peak in the region of 2,000 to 4,000 cycles, which helps to produce a smooth tone in the treble.

E. The larger H-R cabinet improves the acoustic output at low frequen-

cies, as one would expect. An adjustment of the frontal cavity to suit an 8-in. speaker should produce pleasant results.

F. In considering the output from the tapered pipe it should be noted that only the frontal cone emission is recorded. When used in a listening room, the output is affected by the emission from the end of the pipe, especially at low frequencies, as with reflex loading.

G and H. A comparison is shown here between the 3-ft. 6-in. exponential horn with a flare of 2-ft., and the 5-ft. 6-in. horn with a 4-ft. diameter mouth. It is very difficult to produce reliable response curves with horn loading. For one thing, the microphone is further away from the cone when a longer horn is used, and one cannot expect a flare to present an equal wave at its mouth at all frequencies. It is nevertheless interesting to note the improved general level with the larger horn, and to observe that the bass response is maintained to a much lower frequency; at 40 cycles the output from the speaker is twice as high as that from the smaller flare. The cutoff with the short horn seems to begin at about 170 cycles; assuming the mouth of the flare cuts off at a quarter wavelength, this would mean a cut-off beginning at 140 cycles with a 2-ft. mouth. As a matter of interest, it can be reported that the long horn produced a very loud and pure note at 60 cycles, as judged by the ear, which is not bad for an 8-in. unit with normal suspension. Perhaps the most interesting points to observe are 1) that the main output from the flare covers a range of about three octaves; 2) that this efficiency range is lowered in frequency by using a longer horn with a wider mouth; and 3) in both cases the main output is below 1,000 cycles, whereas with baffle mounting it is above 1,000 cycles.

A response curve of the 9 cu. ft. reflex enclosure is not shown, because this would have been an indoor curve, which would be useless for comparison with outdoor results.

Axial Response

Attention should be drawn to the fact that the curves A to F of Fig. 18. were taken with the microphone at 18 in. from the cone directly on the axis, a position which tends to intensify the effect of cone resonances in the upper register and make them appear

Continued on page 126



Fig. 19. Axis response of 8-in. unit mounted in wall of test room forming true infinite baffle.



Fig. 20. Same as Fig. 19 with microphone 45 degrees off-axis.



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Ampex Portable Tape Recorder

SPECIFICATIONS (furnished by manufacturer): a portable tape recorder and playback assembly operating at either $7\frac{1}{2}$ or 15 ips. Frequency Response, at 15 ips: ± 2 db from 30 to 15,000 cycles; at $7\frac{1}{2}$ ips: ± 2 db from 40 to 10,000 cycles or ± 4 db from 30 to 15,000 cycles. Signal to Noise Ratio: over 65 db. Starting Time: instantaneous (tape accelerates to full speed in less than 0.1 sec.). Stopping Time: tape moves less than 2" after stop button is operated, when playing at 15 ips. Flutter and Wow: at 15 ips, less than 0.2% RMS. Rewind Time: about $1\frac{1}{2}$ minutes for 2,400-ft. reel. Weight (of model illustrated): 83 lbs. Price: \$985. Address: Ampex Electric Corp., Redwood City, California.

When it comes to professional equipment such as an Ampex, this "Tested in the Home" department has to walk with care lest it trip over its own big feet! You can't test an Ampex in the home. You almost get the feeling that the reverse is true: the Ampex tests the home—like a snooty cat deciding if her new domain is up to her standards.

We think that the crucial moment which determines whether you run the Ampex or it runs you comes right at the very first meeting. As you can see from the specifications above, the Ampex is a portable unit. So, when you unpack it, you face your first and perhaps greatest test. If you gather all your forces and bravely carry it into the house all by yourself, the chances are the Ampex will be your meek and obedient slave for ever after. If you fail,



Professional tape recorder and playback unit operates at $7\frac{1}{2}$ or 15 inches per second, has three heads, pushbutton control, and accommodates 2500 feet of tape on standard 10-inch reels.



All controls and connections are centralized on the right-hand two-thirds of the front panel. Functions are described in text.

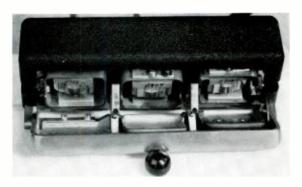
you'll get a psychosis or something and every time you look at the tape reels they will seem to smirk and whisper, "Hah! Big shot!" Very unnerving.

Anyway, we carried the Ampex in (but we refuse to carry it out again!) and ever since, we have been pushing buttons, getting wonderful tapes, and thoroughly enjoying the use of a remarkable piece of equipment. Remarkable because it does so many things so easily and so — well, professionally.

In the first place, all operations are controlled by push buttons. Four of them give you stop, start, rewind, and fast forward. A switch at the top of the push button grouping sets the speed to 7½ or 15 ips. To the left of the push button group is a take-up tension arm; this maintains tension and also serves as an automatic stop. Thus, to rewind or wind, you just push a button and let things go. At the end of the reel, when the tension arm feels the end of the tape go past, it stops the reels. The Ampex will then extract its customary toll of a couple of inches of tape; just why, we don't know, but it always does, and it takes an operator more skilled than we are to stop the wind or rewind process at the precise fraction of a second before the tape clears the reels.

Heads are, of course, erase, record, and playback; they are available as either full track or half-track (for recording two sound tracks on one width of tape), and you can even get an arrangement of full track erase and record heads plus a half-track playback head. Heads plug in as a unit and can be changed or adjusted easily.

When the head cover is pulled forward, the tape rides clear of the heads so that a wear on them is reduced to a minimum.



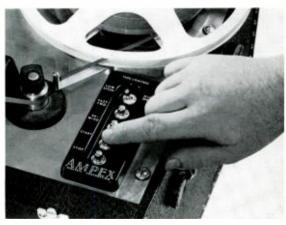
Three-head assembly provides erase, record, and playback functions.

Once you become accustomed to the front panel, it does not appear so ominous — and its flexibility is wonderful. It is dominated by the VU meter which indicates record level. There is a phone jack which permits headphone monitoring of input signal when recording or playback signal when playing back. Output connections are so arranged that the Ampex can feed either an amplifying system (such as a hi-fi installation) or a balanced studio line. Note, however, that the Ampex 400 itself does not incorporate a volume control on the output side . . . accustomed as we are to less professional equipment, we rather missed a playback level control.

Input connections permit direct connection of either microphones or other equipment such as hi-fi control units. Ampex states, incidentally, that "high impedance microphones are not recommended for use [because] the quality obtainable from [them] is not satisfactory for professional work". If such units must be used, the Ampex input circuit will have to be rewired.

The large knob in the lower right corner controls input, or record, gain. Sufficient gain is provided to operate from microphones having an output as low as -70 dbm, which is well below average. Above the record gain control is what might be called a function selector switch. It switches from playback to record; it also connects the meter so it will indicate bias and

Continued on page 122



This panel of push-buttons regulates all tape transport operations.

Fisher FM-AM Tuner

SPECIFICATIONS (furnished by manufacturer): an FM-AM tuner using the Armstrong circuit on FM; double limiters. Sensilivity: 5 microvolts for 30 db of quieting on 300-ohm antenna input, 2½ microvolts on 72-ohm input. Response: ±1 db from 20 to 20,000 cycles. Distortion: less than 0.04% for 1 volt output. Hum Level: 100 db below 2 volts output with volume control off, 90 db with volume control full on. Dimensions: 14¾ " wide, 8½" high, 9½" deep. Price: \$164.50. Address: Fisher Radio Corp., 41 East 47th Street, New York City, N. Y.



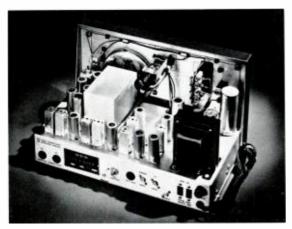
This FM-AM tuner has attractive, simple, and efficient panel.

In the March-April 1953 issue of HIGH FIDELITY, we "tested in the home" the Fisher 50-C preamplifier-control and the 50-A 50-watt power amplifier. The 50-R tuner is indeed a fitting companion for these two excellent units. The Fisher Corporation now has a complete and balanced hi-fi system. In each unit, attention has been paid not only to high standards of performance but to many small details which increase the flexibility and usefulness of the component.

For instance — those who read the article in the previous issue of HIGH FIDELITY on antenna installations for FM reception will recall that under certain circumstances, coaxial lead-in is indicated. It was stated in that article that when coaxial is used, a matching transformer must be used to change the impedance of the lead in from 72 ohms to the 300-ohm impedance design of most FM tuners. Fisher has foreseen this problem: connections are provided for either 300 or 72-ohm antennas. True enough, perhaps only one out of ten installations will use 72-ohm coax. It so happens that we use coax, and so we are one of those who appreciate this feature.

Another feature which we have not seen before is *variable* AFC. Most FM tuners of advanced design incorporate automatic frequency control, to facilitate tuning. Also, most such tuners incorporate a switch to cut out the AFC feature when necessary. And it is necessary to cut it out under certain circumstances: when a strong station is adjacent to a weak station. The AFC action will tend to pull the tuning action off the weak station and onto the stronger one. Fisher provides a continuously-variable control on the rear of the tuner chassis to adjust the amount of "pull" which the AFC action can exert.

Further flexibility is provided in connection with AFC because all AFC action can be eliminated by turning the selector switch on the front panel of the Fisher.



Rear view of chassis shows antenna connections (see text) at left.

This selector switch has, by the way, six positions: TV, PH, FM-AFC, FM, AM-SHARP, and AM-BROAD. The first two are accessory channels for television tuners, etc. The FM-AFC position provides FM with AFC; the FM position cuts out the AFC action. The AM-SHARP position provides sensitive, narrow-band AM reception which cuts through interference with unusual success. If an AM station is in the clear and not bothered with adjacent-channel interference, the selector knob can be turned to AM-BROAD so that the full frequency range transmitted by the station can be received.

Speaking of AM reception, the Fisher comes equipped with a small loop antenna for AM. It is usually sufficient but if greater sensitivity is desired, an external antenna can be used—and here again, Fisher provides two sets of AM antenna connections to achieve maximum results from either type of antenna. (A twin-lead FM antenna is also shipped with the set; it will be adequate when transmitters are nearby.)

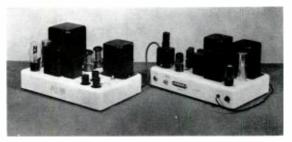
Tied in with the selector knob are a group of pilot lights at the extreme left edge of the dial. Cute trick of the week: the pilot light marked "FM" glows brightly when the selector is in the FM-AFC position and dims out a bit when the selector is switched to FM. The same thing happens on the two AM positions of the selector control.

As is apparent from the illustration of the front of the tuner, the dial scale is long and legible. The addition of a third "logging" scale along the bottom is a very real convenience in returning the pointer to precisely the right spot on the dial. The logging scale has 100 divisions, every tenth being numbered.

A very important feature of the Fisher for fringe area users is its high sensitivity on FM. We have an elderly FM tuner around the house which was once considered quite sensitive but it has seen a lot of use and has not been tuned up in a long time. Nevertheless, if a booster is used with this tuner, results are surprisingly good. The Fisher surpasses the booster-and- Continued on page 124

White Sound Amplifier System

SPECIFICATIONS (furnished by manufacturer): Two almost identical amplifiers, model 1010 (10-watt) and 1020 (25-watt) which may be converted to dual amplifier system by addition of plug-in C-101 crossover network. Following specifications are identical in both models when operated at 10 and 20 watts, respectively: Harmonic Distortion: less than 0.1 % Intermodulation Distortion: less than 0.5% Damping Factor: 32 to 1. Noise Level: 0.002 microwatt or 100 db below full out. Frequency Response: plus zero, minus 0.5 db from 2 to 200,000 cycles. Power Response: plus zero, minus 0.5 db from 20 to 50,000 cycles. Feedback: 20 db around four stages. Tubes, model 1010: three 12AU7, two 6V6, one 5V4; model 1020 is the same except two 5881 used instead of two 6V6. Prices: model 1010, \$119.00; model 1020, \$175.00; crossover network, \$24.50; complete system (two amplifiers plus network), \$299.00. Address: White Sound Inc., 105 W. Madison St., Chicago 2, Ill.



Dual system employs two amplifiers: a 25-watter for amplification of low frequencies (left) and a 10-watt unit of similar design (right) to carry the high frequencies. Note crossover network, plugged into left-hand corner of high frequency chassis.

Both these amplifiers are power amplifiers only and must, therefore, be used after phonograph preamplifiers and control units. Neither amplifier has any controls other than an input level potentiometer. Both amplifiers are well designed, neatly wired and carefully turned out, and both produce exceptionally clean and listenable amplification.

Novel feature is the plug-in crossover network, which separates the low and high frequencies *before* they reach the power amplification sections. Customary practice for some time has been to use a crossover, or dividing, network *after* a power amplifier, attaching two or more speakers directly to the dividing network.

A noticeable improvement can be effected if the crossover network is placed ahead of the power amplifier (between preamplifier or control unit output and power amplifier input). Each half of the network is then attached to a separate amplifier, and the speakers are connected directly to the amplifier output terminals.

Advantages are many; they have been described in detail in previous issues of HIGH FIDELITY (November-December 1952, page 84; January-February 1953, page 83). Result is cleaner sound, less distortion, better balance between low and high frequency speakers.

The White network plugs into the chassis of the 1010 amplifier. Connections are from preamp-control unit to input of 1010. Output of 1010 is connected to high-frequency speaker. Cable from network is connected to input of 1020 (or to input of another, existing amplifier of similar characteristics), and the output of the 1020 attached to the low-fre
Continued on page 124

Pickering Preamp-Control

SPECIFICATIONS (furnished by manufacturer); the model 410 audio input system is a self-powered preamplifier-control unit for use between magnetic phonograph cartridges, FM tuners, etc., and control-less power amplifiers. Controls, from left to right: 3-channel input selector; 3-position recording characteristic equalization; 6-position bass tone; 6-position treble tone; volume; and on-off switch. Inputs: two low-gain, for radio, TV, tape, etc., and one high-gain for magnetic phono cartridge. Equalization: for LP, AES, and old 78 rpm records. Tone Control Range: bass control has 5 positions of bass boost, with maximum of plus 11 db at 50 cycles; treble has one position of boost (4 db at 10,000 cycles) and 4 positions of cut, maximum droop being 14 db at 10,000 cycles. Intermodulation Distortion: not over 0.2% at normal output. Dimensions: 3 inches high by 131/2 inches long, requires minimum of 6 inches behind panel. Price: \$99.00. Address: Pickering and Co., Inc., Oceanside, L. I., New York.



Precision adjustment of sound is facilitated with this unit.

The manufacturer states in his literature that this is an "audio control center with emphasis on record reproduction". This is an important statement for, although this unit provides a fair degree of tone control over its two low-level inputs, it shows up best with phonograph records — and with records it shows up very well indeed. For example, it is not unusual to find bass tone control ranges of from minus 15 to plus 15 db at 50 cycles on standard hi-fi amplifier systems. The Pickering unit provides no bass cut and about 11 db of boost at 50 cycles. The treble tone control also has a rather narrow range when compared to the drastic boost and droop effected by some controls.

One might say that the Pickering 410 presumes moderately good sound sources to begin with. These it brings to as near perfect as possible before passing them on to a fine amplifier and wide-range speaker system. The manufacturer specifically states that this unit is not "intended to compensate for amplifier and /or loudspeaker deficiencies". Thus, the 410 will not eliminate static from AM radio, nor correct defects in phonograph records which should not have been released in the first place. It will provide a delicate and specific degree of control over normal program sources.

Continued on page 122



Five tubes are used in this preamplifier. Four are shock-mounted.

Wharfedale Super 8/CS/AL

SPECIFICATIONS (furnished by manufacturer): an 8-inch, wide-range speaker. Peak Power: 4 watts. Voice Coil Impedance: 10 ohms. Frequency Response: from 50 to 15,000 cycles. Cone Resonance: between 65 and 70 cycles. Flux density: 13,000 lines. Dimensions: 4" deep; baffle opening, 7". Price: \$19.20. Address: made in England. U.S. importers: British Industries Corp., 164 Duane St., New York 13, N. Y.



8-in. unit has large magnet.

For some reason, developmental work in England on speakers and cabinets has been, in past years, concentrated on small speakers. A well-known British publication, edition of 1950, contains only one or two mentions of 15-inch speakers, and a few references to 12-inchers - most of the book is devoted to 8 and 10-inch units. During the same period, Americans were busy working with 18-inch units as woofers. Thus one can expect a rather advanced degree of refinement from the better class of small British speakers. The Wharefdale Super 8/CS/AL lives up to these expectations. For instance, an American authority states that the cone resonance of an average 8-inch speaker can be expected to fall between 100 and 150 cycles. An inspection tag, attached to the Super 8/cs/AL, indicates that cone resonance of the unit we received was at 68 cycles. This was confirmed by our own checks.

In addition to low cone resonance, this unit benefits from higher-than-average flux density or magnetic force. This is made possible by a large magnet and careful construction. The result is good transient response — and that results in clean sound.

In the data sheet which accompanied the speaker were specifications for a reflex cabinet. Recommended outside dimensions were 30 by 16 by 17 inches, with a port 7 by 3 inches. We constructed such a cabinet and used it for listening tests, and were most pleasantly surprised at the performance of the small speaker. It was clean and smooth, with excellent presence and almost no noticeable peaks. In this connection, it might be mentioned that the speaker response curves published by Wharfedale are almost brutally candid; they show that in an infinite baffle, the sound from the Super 8/CS/AL is more nearly flat at 30° off-axis. On-axis, there is shown a rise above 4,000 cycles. Normally, the speaker enclosure would compensate for this rise.

Because of the low cone resonance, bass response was much better than might be expected. Even organ pedal notes rolled out of the little cabinet with surprising clarity. We admit that we helped matters by making the cabinet extra solid (¾-inch plywood plus ½-inch lining, braced with 2 by 4's) and made the **Continued on page 122

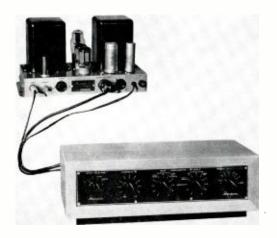
HIGH FIDELITY MAGAZINE

Waveforms Amplifier System

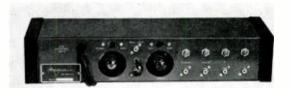
SPECIFICATIONS (furnished by manufacturer): power amplifier with remote control unit. Frequency Response: =1 db from 20 to 20,000 cycles. Power Capacity: 20 watts from 50 to 10,000 cycles. Harmonic Distortion: less than 1% total. Hum Level: 70 db below full output for complete system. Gain: 90 db for highlevel inputs, 110 db at 1,000 cycles for phonograph preamplifier. Feedback: 18 db overall. Damping Factor: 5 to 1. Inputs: 3 low gain, 1 high gain for phono. Outputs: 4, 8, 15, and 600 ohms. Tone Controls: bass variable continuously from minus 18 db to plus 17 db at 50 cycles, treble also continuously variable from minus 18 db to plus 18 db at 10,000 cycles. Also treble cut-off filter, continuously variable from 2,500 cycles to 20,000 (flat). External Circuit Connections: output jack from preamplifier to amplifier; also connection for tape recorder input; also provision for wiring in a noise suppressor. Tubes: three 12AX7, two 5881 or 6L6GA, one 5V4. Dimensions: amplifier 14" by $7\frac{3}{4}$ " high by $7\frac{1}{2}$ " deep; control unit, $15\frac{1}{2}$ " wide by $3\frac{1}{2}$ " high by $6\frac{1}{2}$ " deep over knobs. Price: \$199.50 complete (both units). Address: Waveforms, Inc., 333 Sixth Avenue, New York 14, N. Y.

There are several unusual features in this amplifier system, not the least of which is excellent transient response with its corollary: crisp, clean sound. Another one is the continuously variable treble cutoff filter. Most such filters are of the step type, whereas this one (for which a patent has been applied) permits the user to adjust the cutoff frequency to exactly the right amount for pleasant listening from every record. Cutoff filters should not be confused with treble tone controls; the latter provide a comparatively gentle slope or droop. The cutoff filter on the Waveforms is calibrated to indicate frequency at which cut begins. A control of this type is particularly valuable with old or scratchy records.

Still another unusual feature is the wiring to the input plug on the power amplifier. By changing connections, the amount of feedback can be varied from the 18 db normally used to no feedback at all. This permits increasing the gain of the power amplifier (probably at the sacrifice of some fidelity), but it is doubted that the need will arise except under most unusual circumstances. The system has ample gain to handle the lowest of low-output cartridges and more than sufficient power to drive any normal speaker system.



Power amplifier and control unit. Controls are, from left to right: input selector, loudness, bass, treble, and treble cut-off.



Switches above shock-mounted tubes control record equalization, turnover frequency and loudness feature on volume control knob.

Provision of external connections so that a noise suppressor can be attached easily is another good feature. This feature is in addition to still another one: an output-to-tape jack, which is connected *ahead* of both the volume *and* tone controls.

All input channels have level controls, so that all sound sources (FM tuner, TV, tape, and phono, etc.) can be balanced to produce the same volume.

The volume control is connected to a switch on the rear of the remote control chassis so that its loudness feature can be cut out whenever desired. Incidentally, this loudness control seems to produce a rather exceptional amount of bass boost at low volume levels. This helps to make listening at soft volume levels more enjoyable with this amplifier.

As can be seen from the photographs, the control unit cabinet is mounted on a wedge-shaped base so that the panel is tilted for easy visibility. Continued on page 121

University Corner Enclosure

SPECIFICATIONS (furnished by manufacturer): A corner enclosure for use with 12" loudspeakers. Dimensions: 38" high, 28 across the front, $16\frac{1}{2}$ from rear corner to front panel, $21\frac{3}{4}$ along back corner edges. Styles: available in three furniture styles: traditional, provincial, and modern, each in several wood finishes. Price: \$64.50. Address: University Loudspeakers, Inc., 80 South Kensico Avenue, White Plains, N. Y.

In examining a loudspeaker enclosure, many factors must be taken into consideration and carefully weighed. Some of these are: basic type or design, size, sturdiness of construction, price, and furniture style. The University corner enclosure shows a nice balance of these features and is particularly flexible from the "furniture style" point of view. The traditional model is available in cherry mahogany or cordovan mahogany; the provincial design comes in maple or fruitwood; the modern style can be purchased in cherry mahogany, blonde mahogany, or limed oak. This means that it will fit inconspicuously into almost any living room decor.

The enclosure design is primarily that of a bass reflex cabinet shaped to fit into a corner, having a total internal space of approximately 6 cu. ft. Internal construction is such that the design principle of a rear-loaded horn is blended with bass reflex design, providing an improvement in low frequency sound which the manufacturer states is

the equivalent of a 4 to 5 db increase in output.

Because the back of the cabinet is totally enclosed, the unit may be pushed flush into the corner. There is no need to keep it out from the wall a specified distance. Also, it does not have to be used in a corner, though low frequency response will be slightly better in that position.

The enclosure we tested was equipped with a University Model 6201 speaker—that's their coaxial model, which has a 12-in. cone plus the small 4401 tweeter coaxially mounted.



Compact corner enclosure comes in several furniture styles.

The enclosure may also be used with the less expensive Diffusione or the 6200 which are wide range but single-magnet speakers.

Examination of the fundamental factors listed earlier gave the University enclosure a clean bill of health. In listening tests, we kept in mind the price: about \$110 for a speaker and enclosure. Thus it is in the lower middle range, and the combination we tested was thought to offer a great deal in the way of even, pleasant listening at this price. We did not, and should not, compare it with systems costing one-fifth as much, nor with ones costing nearly ten times as much. Response was clean and brilliant; in our listening room, cutting down the tweeter output about one-third produced good balance. Low frequency response was unexpectedly smooth and, down to somewhere in the 40 to 50 cycle region, pure and without frequency doubling or other troubles.

Considering its price, this University combination is well worth listening to with care. And the variety of furniture styles and wood finishes will make it particularly appealing to the decor-conscious wife of a hi-fi enthusiast.

— C. F.

Fairchild Cartridges

SPECIFICATIONS (furnished by manufacturer): A moving-coil phonograph cartridge whose frequency response is essentially flat within ±2 db from 20 to 12,000 cycles with measurable output to 20,000 cycles. Impedance: approximately 70 ohms.

Output: approximately 3 millivolts. Hum Pickup: insensitive. Types Available: three types for lateral transcriptions, the only difference being in radius of stylus tip: 215A with 1.0 mil LP tip, 215B with 2.5 mil tip, and 215C with 3.0 mil tip. The 216A is for vertical transcriptions. Prices: \$37.50 for the 215 series, \$50 for the 216A. Address: Fairchild Recording Equipment Corp., 154th Street and Powells Cove Blvd., Whitestone 57, New York.

In a "Tested in the Home" report on Fairchild cartridges in the Winter 1951 issue of HIGH FIDELITY, we described them as follows: "The sound reproduction from phono-

graph records is extraordinarily clean, clear, and . . . well, the best word for it is 'bell-like'". After working with the new cartridge, we can find no reason to shade our enthusiasm. At the time of our first report, Fairchild cartridges were not too well known outside the professional field. They carried a high price which helped to keep them out of the home market.



Moving - coil pickup uses diamond styli.

Now, as announced in the previous issue of HIGH FIDELITY, the price has been brought down to a level where the qualities of the Fairchild series need reappraisal from the point of view of the average hi-fi enthusiast.

First, the Fairchild cartridges produce sound of unusual clarity and sweetness. Second, their compliance is high (higher in the new models compared to the older ones), and that means that the stylus can follow the grooves more readily. Mass of the stylus shank is low: low mass plus high compliance equal low record wear, improved tracking ability, less trouble with arm resonance, and better response at the extreme low and high ends of the frequency spectrum.

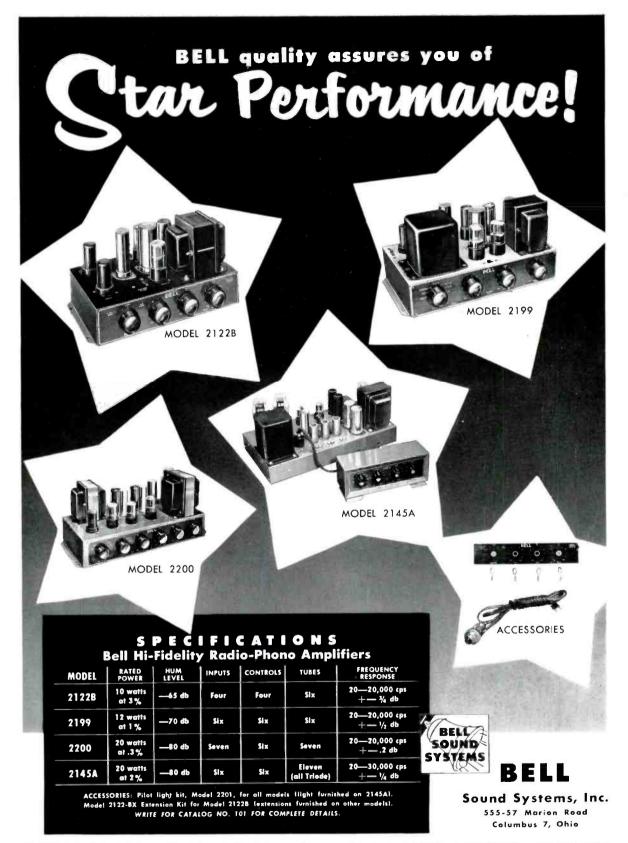
The significance of some of the specifications may need clarification. The low impedance (70 ohms) has two advantages. First, length of lead from pickup to preamplifier input is not critical. With cartridges of higher impedance, this lead should be kept as short as possible. Second, low internal impedance eliminates the problem of matching to a preamplifier insofar as preserving even frequency response is concerned.

Because of the very small coil used in the cartridge, the cartridge is not at all sensitive to hum pickup. Thus, the problem of being too close to hum producers such as turntable motors becomes insignificant.

The output of the cartridge is low, compared to other home-type units. At the time when our 1951 report was written, this was a matter which deserved careful consideration, because several of the amplifiers and preamplifiers then in use did not have sufficient gain to boost the low output of the Fairchild sufficiently to deliver full loudness at the speaker. Most pre-amplifiers now, however, have sufficient gain, and using a Fairchild is no more complicated than any other cartridge. But - attention should be paid to this matter of low output, for several reasons. If the amplifier has just barely enough gain, but no reserve, it means that it must be operated wide open — and then the noises inherent in many preamplifiers may become noticeable. Hum, barely audible at most times, may become objectionable. Further, if the amplifier or preamplifier-control unit incorporates a loudness control, its effectiveness may be negated by having to run wide open.

The answer here, and also in those cases when a preamplifier or amplifier simply does not have sufficient gain, is to use a transformer. Fairchild markets a simple but effective plug-in unit (model 826; price is \$8.75) which attaches easily between cartridge and preamplifier. The transformer should be mounted near the preamplifier. The 30-in, cable, attached to

Continued on page 121



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READERS' FORUM

Continued from page 39

78's, reissued as LP's, they would have the same playback curve as an old 78.

And so it was. Records which were impossible with the record compensator set at LP were wonderful when the compensator was set at one of the two 78 marks,

The results not only confirmed the scuttlebut and fact that many of the less expensive LP's are reissued 78's, but it was also interesting to learn that the "first quality" record we were using for comparison was also a reissue.

Many of your readers might be interested in the admonition, "Don't throw out your diamond, pre-amp and compensatorjust call a 78 a 78 even if it goes around at

> John H. Lyman Palo Alto, Calif.

Mr. James Hinton, Jr. High Fidelity Magazine

My dear Mr. Hinton:

Please, Sir, what's a "dodecaphonic com-

A. Stuart Holford Hudson, Ohio

My dear Mr. Holford:

Last part first: "compeer" signifies simply "companion" — as one cowbird to the other in Pogo. If you read Pogo you know what this means; if not, salvation is still possible.
"Dodecaphonic" means "twelve-tone." It

is a coined word (components: Greek dodeka (twelve) and phone (sound or voice), struck to provide an internationally acceptable term descriptive of the technique of composition first devised by Arnold Schönberg and since used in one way or another by various composers all over the Western world. Like many such technical coinings it contains the seeds of ambiguity, for the "phonic" has not the same significance as the "phonic" in such words as "monophonic" and "polyphonic", where the sense is "voice" or "voices", relative to contrapuntal procedure or the absence of it.

Briefly, the deal is this: In Western music we are accustomed to a scale system derived, ultimately, from ancient Greek modes. There are in use in the world hundreds of other scales, of course, but our musical instruments are designed to play and our ears attuned to hear musics based on these intervals, these relationships between tones.

Middle C on the parlor piano has a vibration rate circa 256 cycles per second. Double that figure and you get the C next above on the keyboard. We say that the distance between them is an octave, simply because we are used to having eight approximately equally spaced tones in a scale. You could have three tones or four or five or six or seven, and tune the piano accordingly. If you wanted 22 tones in the scale you would have to do some pretty radical revision of the piano's insides, though, or get somebody to build you a new one.

The original basis of Western music, then, was the so-called diatonic scale. If you play just the white notes between middle C and the C above you have played such a scale in the key of C major. If you play all

Continued on page 113

HIGH FIDELITY MAGAZINE



HARRY N. REIZES **Managing Director**

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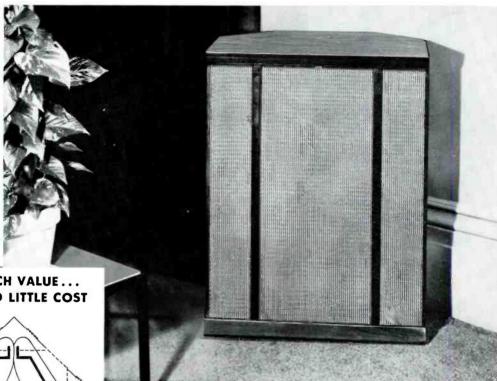
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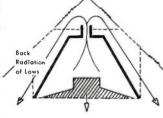
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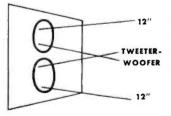


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READERS' FORUM

Continued from page 110

of the notes, white and black, you have played a chromatic scale; count up, there are twelve in all.

The black keys were put there to permit people to start on any keynote and produce a scale in which the intervals would be approximately even. They aren't, mathematically as a matter of fact, but this is another problem. The scale on the piano is adjusted, "tempered" it is called, in a complicated series of relationships. But there it is, and music has been composed for this tempered scale for a long time.

Now composers began quite early to violate the diatonic scale by throwing in notes foreign to the key they were supposed to be using. Bach did it. Beethoven did it, very freely indeed in his later works. Wagner, although he preserved a basically diatonic structure, garnished his music with such lavish use of chromatic intervals that they no longer seemed like dissonances at all.

Schönberg began his compositional life as a follower of Wagner, but he came to the conclusion that there was nothing much left to be said in tonal terms, no matter how heavily spiced with chromatism. He might have invented a new scale; instead, he developed a procedure that would preserve the notes available on existing instruments but free him of tonality.

His atonal theory rested on the assumption that all of the twelve notes of the chromatic scale are equal in value all the time. Obviously, if no note is foreign at any time, there can no longer exist such conventions as the key of C, the key of F minor, and so on.

To prevent chaos in music composed ourside of tonalities, he predicated a categorical ordering of the twelve tones of the chromatic scale. This tone-row, as it is called, was to be different each time, but it was to be stated clearly at the outset of a composition so that, no matter what its permutations might be later on, it would provide the listener with an intellectual reference point, the composer with a formal discipline, and the music itself with a structural backbone. The rights and wrongs of this theory have been debated ever since by able and impassioned advocates and prosecutors.

This all sounds very cold and cerebral, but the last thing Schönberg himself was seeking was a pure mathematics of music. He was seeking a formal procedure that would free him of conality and give him a fresh emotional vocabulary. But now there are many dodecaphonic composers, of every aesthetic stripe, every degree of strictness or laxity in applying the original rules laid down by Schönberg. Descended from Schönberg, from his pupils Alban Berg and Anton von Webern, and from the abstract theory itself are composers who use dodecaphonic procedures to write romantic music, composers who are not interested at all in "mood" and who exploit the purely rationalistic side of the idea, and composers who fall somewhere in between.

In this country there are composers as diverse in outlook and procedure as Milton Babbitt and Ben Weber and Ernest Krenek;

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READERS' FORUM

Continued from page 113

in France, René Leibowitz (whose music is rigorously atonal but who is eclectic enough as a man to conduct Offenbach well) and Pierre Boulez; and so on. They seek different things in music, yet insofar as they avoid tonality and base their compositions on rows of twelve tones, they are all "dodecaphonic compeers."

I hope that this has in some wise clarified rather than obscured the sense of the phrase you questioned. By the way, where did I use the expression "dodecaphonic

compeer"?

James Hinton, Jr. New York, N. Y.

We should have known better than to mention in the "Music . . All Around the Home" section of our May-June issue that no one had yet sent us pictures of a bathroom wired for music. The issue had hardly had time to reach our readers when we received the following telegram: - Ed.

STOP THE PRESSES REFERENCE STATEMENT MAY JUNE ISSUE NO ONE YET SENT US PICTURES OF BATHROOM WIRED FOR MUSIC IVE GOT IT STOP MAY NOT BE PLUSH BUT ITS CLOSE TO FLUSH PICTURE FOLLOWS

Capt. Blan Shattuck Fort Bragg, North Carolina



Music is where you find it.

BOOKS

Continued from page 31

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Continued on page 116

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BOOKS

Continued from page 114

The Herman Miller Furniture Book, by George Nelson. 116 pages, 1114 by 8½. Primarily illustrations. Cloth. Herman Miller Furniture Co., Zeeland, Mich. \$5.

The civilized high-fidelity enthusiast is as much concerned about the attractive appearance of his installation as he is about its fine performance. Thus he reflects not only the philosophy of the perfectionist, but his appreciation of harmony in both musical expression and marital relationship. Nor should the factor of appearance be overlooked by the man who must justify to his wife an investment in audio equipment which might otherwise be spent for a new spring outfit or a fur coat!

To this man the acquisition of *The Herman Miller Furniture Book* should prove to be an effective first move.

The book was originally prepared as a catalog for the use of interior decorators, which explains the seemingly inexhaustible supply of photographs (many accompanied by dimension drawings) illustrating cabinets. shelves, furniture pieces, and storage walls.

Thus, via THMFB, the matter of an expensive hi-fi installation can be broached as a project of beautifying the living room, or of replacing old pieces, already in disfavor with others which reflect the modern woman's way of life and taste in decotation. If that initial objective can be achieved, then the incorporation of what is necessary to provide fine musical entertainment becomes a logical part of the whole undertaking.

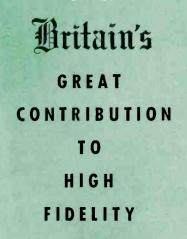
The total collection of furniture, groupings, and attangements illustrated include contributions from Charles Eames. Isamu Noguchi, Peter Hvidt, and O. M. Nielsen. The dimension drawings and the explanations contained in the very brief text will be particularly helpful to those who want to adapt the basic designs presented to their own particular requirements. — M.B.S.

Music Makers — The Careers and Personalities of Some Outstanding Musical Performers of Our Time, by Roland Gelatt. 286 pages, 5½ by 8½; 21 illustrations; index. Cloth. Alfred A. Knopf, New York. \$3.75.

What very famous conductor became so entranced by a dreamy slow movement he was conducting that he fell off the podium at Carnegie Hall? And which one got his start by having the guts to fill in when Toscanini, filling in for Stokowski, fell ill and couldn't appear? And which got his, rather late in life, through the generosity of his wife, a chorolate heiress, who hired an orchestra and a hall for his debut?

Any reader of Roland Gelatt's Music Makers could easily answer these questions. No. 1 is Sir Thomas Beecham. No. 2 is Eugene Ormandy. No. 3 is Dr. Charles Munch. Although the book goes deeper than this anecdotal level, it is liberally sup-

Continued on page 118



It is more than coincidence that Britain and the United States both have gained distinction for accomplishment in the field of sound recording and reproduction. More likely, it is because of the common objectives and understanding shared by members of the great engineering fraternity on both sides of the Atlantic. Each has strived to score over the other, but with a characteristic sportsmanship in the interchange of know-how and experience.

Britain already has scored well with the Collaro record changer. In England and on the European continent, the Collaro is more widely used than any other record player in the world. Having won the acclaim of Europe's most discriminating audio devotees, Collaro record changers are now well on their way to repeating this experience in America.

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BOOKS

Continued from page 116

plied with such entertaining data. The personalities briefly biographed are Ansermet, Beecham, Mitropoulos, Munch, Ormandy, Toscanini, Bruno Walter, Pierre Bernac, Kirsten Flagstad, Lotte Lehmann, Szigeti, Casals, the Budapest Quartet, Kell, Segovia, Casadesus, Gieseking, Myra Hess, Horowitz, Rubinstein and Landowska.

Young Mr. Gelatt (for vital statistics on him, see AUTHORitatively Speaking) trailed these notables all over Europe and America for his facts and their thoughts: Toscanini once ran for the Italian Parliament on the Fascist ticket (Fascists were socialists in those days). Segovia had a valuable 18th century harpsichord sawed up to make a guitar. Walter Gieseking thinks constant practicing spoils performances, by taking the spontaneity out of them. Myra Hess feels the same way about memorizing. Casals once said, after a finger injury: "Thank once said, after a finger injury: God, I'll never have to play the cello again!" And critic Virgil Thomson, 14 years before the fact, tabbed Charles Munch as a dead certainty to lead the Boston Symphony some day.

There is more serious matter, too, like Ernest Ansermet's accusation that modern composers (some of them, anyway) have dropped the ethos, the human meaning, from their music, making a game of composing. And there is sound and interesting guidance to what to listen for in performances by the great musicians sketched in these pithy short analyses. The writing is brisk, witty and literate. J. M. C.

The Story of Jerome Kern by David Ewen. 148 pages; 51/2 by 81/2. Cloth. Henry Holt and Co., New York. 1953. \$2.50.

Jerome Kern used to say he had an unerring method of determining when he had written a good song. After playing a new one through, he always looked up at the bust of Wagner which stared down at him from the top of his piano. If the bust smiled, he knew he had a good song; if it scowled, it was a failure.

It is not unlikely that the musically prolific Kern had the smilingest bust of Wagner in America. For 41 years he kept Americans stocked with an abundant supply of melodies to whistle. He composed more than 1,000 songs for over 100 Broadway and Hollywood musicals. When the final tabulation is made of the best of America's popular songs, Kern's Smoke Gets In Your Eyes, Yesterdays and the subtle All The Things You Are will surely be among them, as well as most of the songs from Showboat.

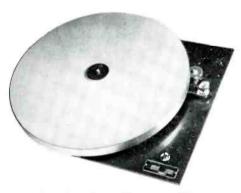
The modest Kern always contributed his success to a "little talent" and a "great deal of luck." Although Kern-lovers would probably disagree, they could hardly deny that had it not been for one stroke of Kern luck, there would be very little Kern music worth listening to. In 1915 Kern was preparing for a trip to England. On the evening of a scheduled midnight sailing, he decided to take a nap before going down to the pier. His alarm clock failed

Continued on page 121



AL KAUFMAN

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BOOKS

Continued from page 118

to go off, however, and Kern missed his ship—the *Lusitania*, starting its final voyage.

The Story of Jerome Kern is the 18th volume in Holt's Musical Biography series. Although interesting in an anecdotal way, it is poorly written and amounts to little more than a long thumbnail biography.

R. H. H., Jr.

AMPLIFIER SYSTEM

Continued from page 107

The designers of this system belong to the school of thought which believes that elaborate recording characteristic equalization controls are unnecessary. Given one or two basic turnover settings, the rest, rhey say, can be accomplished by tone control adjustment. Thus, there is on the back of the preamplifier chassis a switch which gives a 300-cycle turnover in one position, a 500-cycle turnover in the other. No other equalization is provided. Their circular states, "For most purposes the 500-cycle position, in conjunction with the treble control, will properly equalize for any recording characteristic, within 3 db."

There is much to be said for this school of thought; many a person (particularly wives of hi-fi addicts) won't go near a hi-fi rig because there are so many knobs to adjust.

Sum total of the Waveforms A-20-6 system is fine, clean sound with several plus values in the way of features which extend flexibility of application—and a possible minus value, from the point of view of some users, because of simplified equalization control.—C. F.

CARTRIDGE

Continued from page 108

the transformer, permits it to be easily located so as to avoid hum pickup.

One other point: the Fairchild exerts a fairly strong magnetic pull so that, if it is to be used with steel turntables, an extra layer of felt should be added to the turntable. Otherwise the pressure of the stylus on the record will be markedly increased. The pull, in our tests, was very noticeable when the cartridge rested directly on the felt of a steel turntable and slightly noticeable through a single record. Adding a layer of felt between turntable and record got the cartridge far enough away from the steel of the turntable. With non-magnetic turntables, there is no need for extra felt.

We checked this in a crude way: we used a little pocket letter-weighing scale which read up to two ounces. By attaching it with a series of paper clips and other equally scientific paraphenalia to the finger-lift projection on our pickup arm, we could measure the relative pull required to lift the arm (and cartridge) under various circumstances. In free air, it took less than ¼-ounce. With the cartridge directly on the felt of a steel turntable, it took just over 1¼ ounces of pull before the pickup would "break away." With a single LP on the turntable, it required ½-ounce of pull. With a thickness (3/32-in.) of felt plus a record, the pull was

Continued on page 122





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In Canada: Hallicrafters, Ltd., 51 Camden St., Toronto, Canada

CARTRIDGE

Continued from page 121

back to the less-than-1/4-ounce figure which was the lift required in free air.

We have, perhaps, gone into undue detail in this report, but readers have voiced misgivings about using a Fairchild—and those misgivings have arisen because of incomplete information about how to get the best out of a very fine and musical-sounding piece of equipment. Hence we wanted to clear up some aspects of how to use a Fairchild to best advantage.—C. F.

TAPE RECORDER

Continued from page 104

erase currents. Accurate control of bias current is important if high frequencies are to be recorded correctly at low tape speed.

Threading is a bit tricky and seems complicated at first, in comparison with "drop it in the slot" machines. — Another point: since the tape can be stopped with precision, even 'at high speeds, and since the heads can be exposed easily, editing is very simple.

There are accessories galore for the Ampex, including such devices as remote push button controls. The mechanism used in the portable unit is basic; add other equipment and you have studio console models and so forth.

The operation and maintenance manual is complete and detailed: 110 pages!
We can't possibly describe all the details

We can't possibly describe all the details of the Ampex — witness the size of the instruction manual — and if you ask us why should a non-professional, home hi-fienthusiast or music lover buy an Ampex, we can only answer by asking a question, "Why buy a Cadillac?" — C. F.

EIGHT-INCH SPEAKER

Continued from page 106

port tunable so we could exactly match speaker characteristics. However, such precautions are essential if best results from small speakers in small cabinets are to be obtained.

It should be noted that British Industries supplies two 8-inch models, of which the 8/CS/AL has the widest and best frequency response range. Wharfedale also recommends this speaker for use in two-speaker systems to carry the treble above a crossover of 1,000 cycles. — C. F.

PREAMP-CONTROL

Continued from page 106

It should be noted that the rone control curves themselves slope gently rather than abruptly. Turning the treble all the way off gives a first impression of drastic cutting. However, examination of the curves shows that the cut is not sharp but that it extends way down into the mid-frequencies (from 14 db down at 10,000 to about 4 db down at 1,000 cycles).

The record equalization control is simplified to three positions: AES, LP (which corresponds to Columbia-modified NAB), and 78. The last has a 300-cycle turnover point,

Continued on page 124

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The TITONE CERAMIC PICKUP needs neither preamplifier nor equalizer—thus offering a considerable saving. It is unaffected by moisture or temperature, and offers exceptional adaptability and sim-

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City...... Zone...... State...... Radio Shack Corporation, 167 Washington St., Boston 8, Mass.

PREAMP-CONTROL

Continued from page 122

boosts 15 db at 50 cycles and cuts 12 db at 10,000 cycles. These three curves may be considered fundamental; add to them the tone controls and some 108 variations are possible. This should be sufficient for most records

Both tone controls are of the step type (instead of continuous). Volume control is not compensated. The manufacturer advised us that they do not consider a loudness control desirable from the professional standpoint, since the bass tone control can be adjusted to balance lows against highs.

As can be seen from the rear view, there are one output and three input connections. Output is of cathode-follower type, so up to 100 feet of cable may be used between the 410 and the power amplifier. Three auxiliary AC outlets are controlled by the switch on the front panel.

Gain of the unit is sufficient to handle easily even extreme low-output cartridges, and the overall output is more than adequate for use with low-gain power amplifiers.

In conclusion, we have the feeling that this unit was designed with the smaller broadcast stations in mind where, in connection with good music programs, it would fulfill a specific need. Specifications are tight enough to meet broadcast requirements adjustments are possible over a relatively small but precise range, to permit exact balancing. The 410 will also be at home in many domestic hi-fi systems - where surrounding equipment, if we may call it that, is of equally high quality. - C. F.

AMPLIFIER SYSTEM

Continued from page 105

quency speaker. Crossover frequency of the network is normally about 600 cycles, but is available on request designed for any specified frequency. It is of sharp cut-off design. having a 24 db per octave slope.

When the 1010 is used without the filter network, a dummy plug replaces the filter

Additional factor of interest: two amplifiers with a filter network give better results with monaural listening; they are a necessity for binaural listening - and conversion is nor difficult — C. F.

FM-AM TUNER

Continued from page 105

and-old-timer combination. Perhaps more significant is the fact that the booster does not help the Fisher to any marked degree. which constitutes a Kudo to Fisher design.

A sensitive "inverted-V" tuning eye

makes accurate tuning easy.

On the back of the tuner chassis are two AC outlets which are controlled by the master on-off switch on the front panel. Note that the tuner can be used with the 50-A power amplifier without requiring the 50-C preamplifier-control unit in the middle, though the latter will provide tone controls and compensated loudness control as well as preamplification for magnetic phonograph cartridges. The tuner's phono channel does not include preamplification.

One final feature is a "test jack" on Continued on page 126

AIR-COUPLER PERFORMANCE

"Can you send me a performance curve on the Air-Coupler? I listened to one briefly some time ago, and I thought it was the finest quality I have ever heard. But when I consulted a friend of mine who is an audio expert, he advised me against buying an Air-Coupler. He said it is obvious to anyone familiar with audio theory that it cannot give satisfactory has reproduction."

We couldn't send a performance curve on the Air-Coupler in response to that letter. Nor do we want to argue with anyone who pre-judges speakers without hearing them. We have never published curves made in an anechoic chamber or in free air, because we have never heard of anyone who wants to listen to music under such conditions.

However, we did answer that letter with some very specific information on what we believe to be the most conclusive way so far devised to test bass reproduction—and under home listening conditions, with your own ears. Simple as it is, this is the most severe test that can be made on loudspeakers. It is also a method of obtaining from an Air-Coupler such magnificent musical reproduction as you have never heard from phonograph records. As far as we know, only the Air-Coupler can pass this test. Here is the way:

Get permission from your church organist to make a tape recording of organ music during a choir rehearsal. Do it with the very best recorder you can obtain. Set the gain just below the point of overloading on the lowest frequencies, and leave it there. Then feed that tape into your audio system, and listen to the speaker you want to test.

Why use organ music recorded on tape? Because the full dynamic range is recorded on tape made in the manner described, while the dynamic range of phonograph records is severely limited to keep one groove from running into the next. You will be absolutely astounded to hear how speakers fail to reproduce low frequencies from such a tape. Some just quit. Others make a fluttering sound like a startled pattridge.

But the Air-Coupler will give you perfect reproduction of every note you heard from the organ when you were making the tape. We recommend this rest because we believe you will find it the most striking demonstration of speaker performance you have ever heard. It is the simplest, most conclusive way to settle any doubts you may have yourself, or any arguments presented by others, as to the amazing capabilities of the Dual Air-Coupler, or the new Compact Air-Coupler.

PRICES ON G. A. AIR-COUPLERS & NETWORKS

Send 10c for the G. A. Network Data Sheer, showing types for all standard speakers at 14 crossover points from 85 to 2,200 cycles, priced complete at \$11.50 to \$26.50, and prices and dimensions on the Standard and Compact Air-Coupler.

To Improve Any Audio System:

Use the VAC Control

Variable Audio Crossover Control

Provides continuous variation of crossover frequency, plus individual volume level adjustment in two-speaker systems, using two, separate amplifiers.

Complete parts and detailed assembly instructions

Control Contro

Critical listeners agree that the finest reproduction calls for 1) a bass speaker, and a dual speaker (or middle-range speaker and tweeter) with 2) a high-output amplifier for the bass, and a separate amplifier for the middle and high range.

Such an ideal installation can, and should, give truly superlative performance provided — and here's where so many fine systems fall short — the crossover frequency is exactly correct, and the speakers are in exact balance as to their separate volume levels. The General Apparatus VAC Control was developed for exactly this purpose. It can be installed in two minutes, for it merely plugs in between the preamplifier and the two power amplifiers. Here's how it works:

FIRST: it provides a calibrated, continuously-vatiable audio crossover control for any frequency from 90 to 1,100 cycles. The use of a continuously variable control is the only way to determine the correct crossover point for a given combination of speakers in a particular home installation. The arbitrary choice of a fixed crossover may or may not be correct for your system. It should be determined by listening, after your installation has been completed, by adjusting the crossover until it sounds exactly right. The VAC provides this essential adjustment. SECOND: precise balance between speakers requires that each one be adjusted individually, without changing the other. The VAC provides these essential adjustments.

THIRD: it is necessary to use vacuum tubes in a device of this kind to avoid power loss. Otherwise, the control circuits introduce losses which reduce the input to the amplifiers. The VAC provides a maximum voltage amplification of 5 times.

FOURTH: the VAC Control is inexpensive, since it is furnished in kit form. As the accompanying views show, it is a simple matter to mount the parts and wire them. Detailed drawings and instructions are clear and specific enough for beginners.

FIFTH: because the VAC Control is so completely flexible, it will not only give you the exact crossover frequency and speaker balance for your present system, but it can be readjusted to suit any changes you may want to make later.

FINALLY: If you now use only one amplifier, you can change to a dual system very easily. Use your present amplifier for your bass speaker, and add a VAC Control and an inexpensive 10-watt amplifier for the middle and upper range.

RECOMMENDED EQUIPMENT: The VAC has a high-impedance input (470,000 ohms) so that it can be fed from any good preamplifier. The high-impedance output channels are matched to any of the standard types of power amplifiers. Two 10-watt amplifiers can be used, unless you prefer extra power to drive the bass speaker. An ideal combination of speakers is an Air-Coupler for the bass, with a coaxial speaker or single-cone speaker and tweeter for middle and high frequencies. Or if you use your present speakers, you can expect a very marked improvement in their performance.

DELIVERIES: Early orders for VAC kits can be filled from stock, and every effort will be made to keep this shipping schedule.

SPECIAL INFORMATION: If there is any question about the use of the VAC Control in your particular installation, write to our Information Service Department.

PRICE: The complete parts for assembling the Variable Audio Crossover Control, including all hardware and hammertone-finished aluminum chassis are \$39.90. You may add 75c for delivery and insurance, or shipment will be made express collect.

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Advanced developments by TapeMaster make it easier and more economical now for recordists to enjoy the advantages of professional high fidelity record and playback.

The new TapeMaster HF-500 is single speed (7.5" per second). It provides full range response 30 cps to 15,000 cps. Illuminated professional VU meter gives level indication in both record and playback positions. Has internal amplifier and 6" extended range speaker. Can be switched to external amplifier and speaker. Inputs for microphone and radio phono. Uses Brush professional head.

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Model HF-200 Tape Recorder. Similar to above, but is dual speed and has magic eye in place of VU meter. Uses Shure wide range head. Net, \$227.50 (Prices slightly higher West and South)



FM-AM TUNER

Continued from page 124

the rear of the tuner chassis. Primary purpose of this connection is to facilitate servicing and final checking at the end of the production line, but it can also be used to advantage in every day listening, particularly in fringe areas. By connecting a DC voltmeter across pins 1 and 3 (1 being ground), the voltmeter will serve as a sensitive tuning indicator. True, the Fisher has a tuning eye which is entirely adequate for most listening. On weak stations, however, its action is barely noticeable. If a directional yagi-type antenna, with rotator, is used as it should be in fringe areas - the addition of a voltmeter "tuning indicator" will make possible exact positioning of the antenna for optimum results.

To give a specific example: we used a three-element directional antenna. Maximum reading across pins 1 and 3, on our strongest station, was 5.6 volts. By rotating the antenna, this reading could be reduced to 0.72 volts. The hiss between FM stations produced a reading of 0.58 volts. A very faint station was tuned in; barely audible voice kicked the meter to 0.62 volts. Rotating the antenna brought the meter to 0.70 volts and gave clear reception of the program. The antenna position was critical; 10° off beam would drop the program back into the "hiss".

Care in design and production are evident throughout. For example — both main and sub-chassis are shock-mounted; entire construction is completely shielded, even to a bottom plate on the chassis. Small points, perhaps, but significant - and particularly in those difficult installations.

In conclusion, nice going, all around. — C. F.

BRIGGS

Continued from page 102

worse than they actually sound. The two curves of Figs. 19 and 20 will illustrate the enormous difference between axis and offaxis response.

It would seem possible to listen to the output shown in Fig. 20 without aural distress, and it is in fact nearer the average performance of the speaker than that shown in Fig. 19.

In the next article it is hoped to deal with a 12-in, speaker on similar lines,

I should like to acknowledge the collaboration of Mr. E. M. Price, M.Sc.Tech., in the tests with oscillograph which are illustrated.

The following explanation of the term "flux density" is quoted from "Loudspeakers" and "Sound Reproduction," two well-known books by Mr. Briggs. - Editor.

It is possible to attain maximum flux densities without much difficulty, and limitations are now set by saturation of the mild

Continued on page 129

HIGH FIDELITY MAGAZINE

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The A-100 provides amplification to permit the use of magnetic pick-

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BRIGGS

Continued from page 126

steel parts. With a 1-in. centre pole, saturation occurs at 14,000 lines, and it is not economically possible to exceed this figure without reducing the size of the gap. With a 14-in. centre pole and normal gap dimensions, saturation starts at 9,000 lines.

The cost of magnets increases rapidly when higher flux densities are involved. The flux density does not go up in proportion to the increase in weight, and after a certain performance is attained, each increment of 1,000 lines becomes more and more difficult to achieve. This accounts for the comparatively high prices charged for loudspeakers with high flux density.

For instance, a flux density of 13,000 lines on a 1-in. pole may give 54,000 lines total flux with a given depth of gap, bur the same flux density with a 134-in. centre pole can produce 145,000 lines total flux. A much bigger magnet is, of course, involved. Expressed in the sordid terms of shillings and pence if the 1-in. pole magnet costs 30 shillings, the 134-in. pole magnet would cost 55s. Increasing the flux density in the latter case to 17,000 lines with a total flux of 190,000 lines would increase the magnet cost to 100 shillings!

SME

Continued from page 97

Local Chapters of the Society of Music Enthusiasts

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MODEL RP-T

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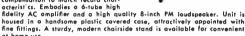
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ADVENTURERS

Continued from page 57

put Bartok on records because my father's music gains so much by good recording. I have heard a lot of his music now and I know what he is saying and how it should sound on a good phonograph. I'm prejudiced, of course, but to me it is the most thrilling music I can imagine."

Despite this, Peter Bartok records, occasionally, the works of composers other than Bartok. He also does the engineering for several small recording companies that lack engineering departments.* Bartok label, in addition to 20 works by Bela Bartok, the fitm has produced chamber music by Berg, Beethoven, Mozart, Liszt and others. Notable are quatters of Scarlatti, Tartini and Boccherini, on one disk, musical gems which have been endowed with superb performance by the New Music String Quattet, and engineering by Bartok that is in the same league. A Bartok recording of Hungarian Folk Songs, sung by Leslie Chabay, was singled out by Audio Engineering magazine as the outstanding vocal record of 1952, and Variations on the Prelude "Weinen, Klagen", by Liszt, has been called by one critic "the most faithful reproduction of piano sound on record."

Probably the most popular, at least the best selling, item in the firm's tiny catalog is Bartok's The Miraculous Mandarin, played by the New Symphony Orchestra; Tibor Serly, conductor. A color-splattered baller suite, it makes an excellent introduction to Barrok, Peter believes, and can be followed by Concerto for Orchestra and Music for Strings, Percussion and Celesta. Neither of these latter two has yet been recorded by Bartok, but are available on other labels. The first is good on Columbia, and Mercury has an excellent version of the second. London has a brilliant new recording of Bartok's Bartok's own second-best Dance Suite. seller is the Viola Concerto, with William Primrose as soloist.

Where other recording companies have issued Bartok music, Peter will not duplicate these works unless he feels he can do it better. Yet he works on the theory that everything can be improved. At present his willing to defer to another label, but within five years he expects to have all the major compositions of Bartok on Bartok Records.

"I am so serious about improving the recorded sound that someday I hope to move my business out into the country," he says. "In the city everything's working against me. Sounds intrude from below and above. There are interruptions, and more noise until the ear almost forgets what it is listening for. I feel that a serious recording engineer, somewhere out in the quiet country-side, could work a great improvement in the quality of sound he puts in the final record." He hasn't yet found a good country site, however.

Although Peter will insist (with a sad rocking of the head) that he has made some bad records, the charge can be reduced to "disappointing" rather than first degree "bad." Yet he does get quite a few complaints from the customers, although not on

Continued on page 134

*These may be identified by the use of 629 cps as the turnover-point in their recording-characteristic.



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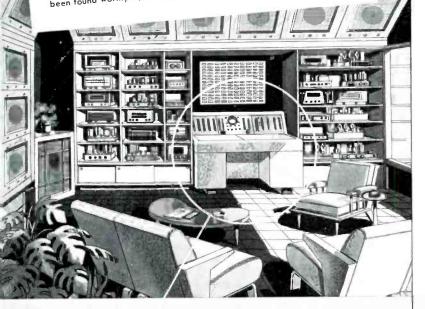
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make this a truly outstanding unit.

ADVENTURERS

Continued from page 132

record quality. Many of these people who buy Bartok records, and make the enterprise possible, demand to know why in the devil Peter is so wasteful with the surface of a 12inch long-playing disk. On some sides, they complain, there is room for an additional 10 to 15 minutes of music. One gentleman, and he had a good Scottish name, declared in a letter to the firm:

You left so much good record space unused that it took my stylus a minute to travel across the expanse of silence and get into the automatic stop groove.'

The fact is, Peter believes that not more than 16 minutes of highest fidelity recording can be put on a 12-inch side, and he has steadfastly refused to go beyond this limit despite his awareness that today's resurgence of classical music has been brought about by the longness of the long-playing record, and anything that shortens the LP is going to be questioned and criticized.

"I am not selling minutes of 'music," he "I am selling high quality musical recordings." Whether or not this explanation has soothed the customers is not yet known, but a few friends of Bartok Records have urged Peter to fill up the disk a little more, or contrive some way to make them look full, without sacrificing a single hard won cycle per second from the enviable flat 18,000.

It is the music of Bela Bartok which furnishes the drive behind the skill of Peter Bartok. It has been, in effect, a communication, leading to greater understanding of the father by the son. And the recording of this music has become an exciting evangelism for Peter. It is deeply satisfying to bring the musical thought of his father to thousands of persons for the first time, and from these make a growing audience for that controversial man, both humble and defiant, who is regarded by many as the greatest musical genius of the twentieth century. Out of sentiment, perhaps, Peter - a bachelor still lives in the small apartment once occupied by his father and mother at Eighth Avenue and 57th Street in Manhattan, the place where Bela Bartok, dying, placed the last notes of his life on music manuscript paper.

WTIC

Continued from page 62

home a hand-wound talking machine which he planned to give Aunt Lena for Christmas. Bob craved one so long and loudly that the senior Smith finally yielded. Then Bob went out and bought his first record. It was the 'Sextet" from Lucia di Lammermoor. The vocal version cost more than he had, so he got the Creatore Band transcription instead, for \$1.25. He still has it. Next year he began earning money - with a paper route in Germantown, Pennsylvania, and for seven years his weekly six-dollar pay check went into the purchase of Red Seal recordings. He got to be such an authority that when his high school music teacher

Continued on page 136

HIGH FIDELITY MAGAZINE

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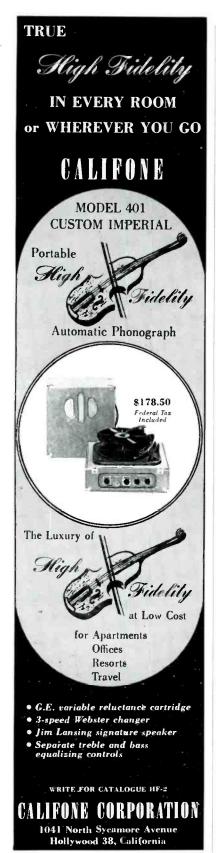
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WTIC

Continued from page 134

broke her leg one spring, Bob took over the music appreciation class.

After graduation, he went to New York and sang in two of Sam Schubert's operettas, The Student Prince and The Prisoner of Zenda, before getting his real heart's desire, a job at the Victor Talking Machine Company, in the artist and repertory department. This was glory and power. He sat with a stopwatch on a high stool and coached Serge Koussevitzky. If he felt the lack in his home library of a certain artist's recording of a particular aria, he set the wheels in motion and the public - and Bob Smith - had a new musical treat. (In defense of his selections, most of the titles he put in the catalogue are still there.) Finally, he became NBC's director of auditions, and for 15 years worked in radio without ever speaking into a mike.

It was during this time that he met Leonard Patricelli, who was program manager of WTIC and came regularly to network head-quarters in search of talent. What he wanted was new singers; Bob selected some for him. (Among them were Robert Merrill, Eugene Conley and Winifred Heidt.)

Patricelli, at the time, was trying to persuade The Travelets Insurance Company to sponsor a weekly operatic program. The advertising men wouldn't believe anyone but Italians cared about opera. And they wanted non-Italian business, too.

In November 1945, Patricelli visited Smith's New York apartment, chatted briefly about his record collection, then suddenly asked if he would come to Hartford every Sunday and take over the "Your Box at the Opera" program. Bob, in addition to his vast operatic lore and record collection, possessed another useful asset, the name of Smith. The Travelers began to listen. The program went on the air; letters rolled in. Fewer than 20 percent of them were signed with Italian names. The Travelers was convinced. And Sunday, June 28, 1953, marked Bob Smith's 400th consecutive weekly broadcast.

For two and a half years Smith left New York City at 9 every Sunday morning and took the 2:13 back every Sunday afternoon. Finally he got tired of lugging 78 rpm albums and so had his library — 80 packing cases of them — shipped to Hartford. Shortly afterward, he followed them.

In his new home, records cover virtually every wall. He has over 20,000, including some invaluable foreign recordings, early recordings of celebrated voices, and disks long out of circulation.

Smith has introduced over his program the voices of many European artists — for instance, the Danish tenor Helge Roswaenge, whose high E flat has never been heard in this country except on "Your Box at the Opera," and Tagliavini, Del Monaco. Gueden, Koreh, Sigurd Bjoerling and Tassinari

Last February, when WTIC-FM began its noon-to-midnight music schedule, Smith was made music director. So far he has lost twenty pounds, but not one ounce of his enthusiasm for music. To assist him, two new auditioning studios for checking and timing records have been installed, with high-fidelity speakers and turntable units,

Continued on page 138



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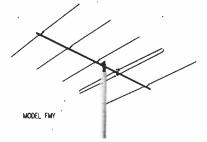


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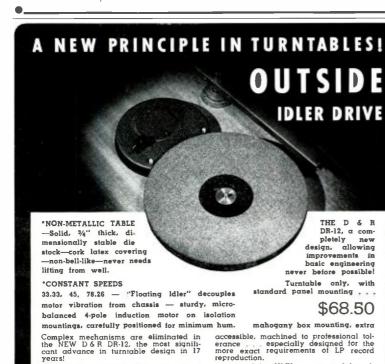
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WTIC

Continued from page 136

and large files for the new music libraries. The station now has seven Magnecotd taperecording units, one Travis Tapak and two Presto 8-DG's, all mounted on a Presto console. In addition, there's another console base for remote control and switching turret.

Each Presto has its own 92B amplifier, 160B equalizer, microscope, VU meter and bridging input selector-switch with nine positions. Dual four-watt fluorescent lamps provide illumination for cutting and stroboscope operations. The 500-ohm outputs of the amplifiers feed directly to the 1-D heads. The 8-ohm outputs are bridged with 500-ohm primary transformers to voice coils of speakers mounted directly over each recorder.

The versatility of the 8-DG studio is its outstanding feature. The close proximity of a switching console, microphone and turnables as well as a tape recorder, makes it possible to cut complete shows, dub from tape to disk, disk to tape, console to tape, console to disk, or console to disk and tape simultaneously. The first two months the Presto 8-DG's were in use, more than 400 recordings were made; the tempo has held.

When WTIC-FM went on the air in February it had new Grey viscous-arm playbacks with equalizers and GE reluctance pickups. The diamond styli are taken out once a week and cleaned. With proper use, each lasts a couple months of steady playing. Standard operating procedure is followed in equalization; a regular four-position equalizer with the line good up to 15,000 cycles. The station engineers felt modest about their set-up until lately, when they inspected a large New York FM station and discovered they had some refinements in Hartford that the big city hadn't caught up with.

What does the future hold for WTIC-FM? Well, there's a monthly program guide in the works. It will list not only the daily schedule but include the names of the artists and the recording company. There'll be no ads, and it will be sold at cost. There is no thought of charging a subscription fee to help defray the costs of the FM operation. Nor is there going to be any effort to sell time. If any advertising is accepted it will be of the "guest in the living room" variety; advertisers will be selected on a prestige basis in keeping with the program, no jingles, free offers, nor repetitive sales pitches.

The people at the station profess to have no idea how much it is costing to carry on this program of "Good Music"; nor do they know how many people listen. All they know is that they themselves like good music; they feel that there's a large appreciative audience; and they have the opportunity to make it available. "After all," they ask, "if we don't, who will? We have the records; we have the station."

"Who listens?" Leonard Patricelli repeated our question. "That's not the point. We feel it's a good idea; so we do it." If must be nice to have that kind of money; but it is estimated that there are 150,000 FM sets in the listening area; and there is that undecided question on who gets Television Channel 3. A lot of music lovers are certainly plugging for WTIC-FM.

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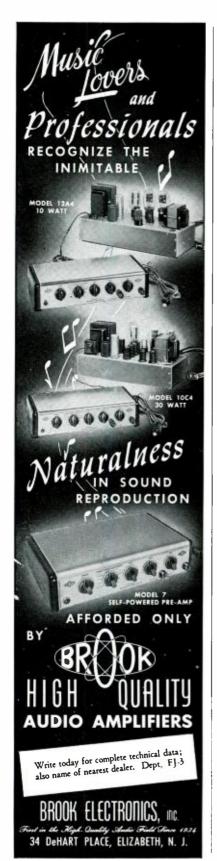
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EMI

Continued from page 64

microgrooves by at least five to one. I expressed surprise at this disparity; Americans, I explained, are inclined to put the shellac record in the same category as the Model T Ford. I acknowledged the Englishman's congenital antipathy to change. Even so, it seemed hardly possible that a rear-guard demand for 78 rpm shellacs could account for all those presses at Hayes, busily turning out an obsolete product eight hours a day. But I had neglected to consider the export market.

export market.
"You must remember," my guide explained, "that in several of our most active markets — West Africa, for example — the majority of buyers don't even play their records electrically. Where the wind-up, acoustic gramophone still dominates the scene, microgroove is out of the question."

And to help prove his point he showed me

Continued on page 142

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PILOT

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EMI

Continued from page 140

a nearby press which was stamping records bearing an exotic and (for me) unreadable label. I gathered that this overseas market for shellacs will endure for many years. The EMI people are not going into premature mourning over the demise of the 78 rpm. Quite the contrary. The present shellac record presses at Hayes, which were imported from America in the early 1920's, will be replaced before long with new and more efficient English-made presses — which attests to EMI's faith in the future of what they term the "standard play" shellac.

Vinyl records are pressed in an adjacent room equipped with special anti-dust ventilation — a contemporary, fluorescent-litenclave surrounded by reminders of the past. The dozen or so presses now in operation will certainly be augmented as the demand for microgroove records grows. At present, 45 rpm disks are made on modified to-inch shellac presses; the 33's on new presses designed by EMI. As befits a precision product, there is no assembly-line tempo in the manufacture of microgroove records. Workers at Hayes produce an hourly average of 35 microgroove records per press as opposed to 70 or more shellacs.

The West African record buyer's influence is felt again in the nearby testing room, where disks drawn at random from the presses are examined for possible defects. Among the various kinds of testing equipment in use is a long array of heavyweight acoustic pickups, similar (only heavier) to those used in Africa, the Near East and Asia. All shellacs manufactured at Hayes must successfully weather the hard treatment that these weighty test pickups impose. I am happy to report that the microgrooves are treated in gentler fashion.

It has been said that EMI could stop making new recordings tomorrow and still conduct a profitable business on the strength of its 55-year backlog of record classics. Whether literally true or not, this proposition indicates the lofty value set on the repository of recordings stored in the vaults at Hayes. Some 250,000 masters are distributed among the three vaults. Masters of records currently in the catalogues are housed in a vault accessible to the electroplating department. Masters of deleted records are relegated to the original HMV vaults, tucked away in a corner of the old 1907 building and protected by heavy iron doors that are barred to all but a very few trusted employees. The lower vault of the building holds the masters of electrically recorded disks, the upper vault the masters of records made by the acoustic process. The latter date back to the founding of the Gramophone Company in 1898, and the vault in which they are kept is the holy of holies at Hayes, the storehouse of priceless historical mementoes, where Caruso's original 1902 Milan recordings jostle Tamagnos of 1903, Melbas of 1904, and Pattis of 1905. This great vault - with its narrow aisles, its towering shelves, its musty air of disuse is supercharged with the aura of phonographic history. During the war the collection was dispersed for safety's sake (and no

Continued on page 155

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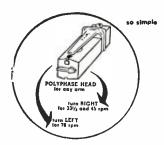
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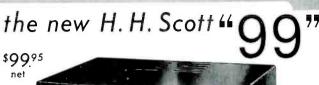
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IN ONE EAR

Continued from page 49

But the surrounding fabric is not representational, and, after all, a barn dance expressed musically is not necessarily musically different from a barn dance as it takes place in a barn, or wherever barn dances do take place. The point is that Mossoloff introduced sounds - or noises - that would be considered completely extra-musical by most composers and certainly by most listeners.

Five years after The Iron Foundry, in 1935, Mossoloff fell into disrepute and was expelled from the Union of Soviet Composers on charges of unspecified "disgraceful behavior in restaurants and other public places," and his noise-making career came to a close. But there were other pieces not very far from the same representational tradition. Honegger's Pacific 2-3-1 made an orchestra sound like a locomotive - or, rather, like a whole transcontinental express train - and a film was made in France that showed its progress up grades, through valleys, and across plains.

George Antheil's Ballet Méchanique, less specifically representational in intent, was danced by a corps of pistons, cams, and gears; and Marc Blitzstein's symphony, The Airborne, brought the Wright Cyclone (I think it was) to the orchestra. Fortunately this trend towards literal delineation of programmatic or quasi-programmatic material had reached its high-water mark and receded before anyone had a chance to draw similar inspiration from, say, the atomic destruction of Hiroshima.

Non-representationally, and less spectacularly, John Cage began to experiment with rhythms and sonorities off the beaten track, and received a great deal of public notice - at least in the press - for his

Continued on page 140

Professional Directory

Continued from page 147

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HIGH FIDELITY MAGAZINE

IN ONE EAR

Continued from page 148

pieces for "prepared" piano. In the Cage vocabulary, a piano is prepared by inserting between the strings a variety of screws, hairpins, paper shims, nails, blocks of wood, and wads of this and that, the object being to obtain, without the difficulty and expense of manufacture, an instrument that will yield new sonorities, and without complaining too much. The notation of the music is conventional, but the pitches and sound-textures produced are most definitely not. Strings are muted and stopped, and rhe pitches and qualities and sympathetic vibrations yielded when the keys are struck are, to put it mildly, unexpected - except, presumably, by the composer. Middle C, for instance, may yield a vaguely A-flat plonk; the D above it, a shimmering, highpitched twang of uncertain vibrational value; and so on. The variations that can be obtained by "screwing a piano," as Cage calls the preparing process, are unlimited. If not beyond mathematical computation, they at least give the composer a range of possible effects far wider than he could expect or possibly obtain from any normal, or unscrewed, keyboard instrument.

Lately, members of what might be called the Cage school have become interested in spatial" music, in which certain numbers, or quantities, of sounds are produced at stated intervals. The pitch is not what matters. Some importance is attached to the register of the sounds (that is, their highness or lowness) but the main point is rhythmic. All the other considerations of conventional music are, so to speak, pulverized. Morton Feldman, who composes in this aesthetic, avoids conventional notation entirely and writes his music as a sort of vertical graph, thus avoiding any implication of traditional harmony or counterpoint.

The reductio ad whatever-you-please-tocall-it of this kind of thing is a composition, by Cage, of which the score consists of notations for turning the dials of radios on and off, upward and downward in volume, and through various tuning bands. Time being what it is, even these days, even if the exact place of performance is the same each time the score is performed, such a piece will obviously never sound the same twice. This evanescence, it is said, is at least part of the point, or joke. It can be argued that the result is, by definition, music, since pitches and rhythms are involved. The audience is not supposed to listen to the actual sounds that the radios emit; the music is thythmic - spatial - in design,

Somewhat less exotic, though weird enough, in all conscience, are a variety of straight electronic devices for which music has been written. These instruments the theremin, the Ondes Martenot, and the ondoline among them - are all primarily designed to produce amplifications of cyclic hums controlled in frequency (and, hence, pitch) and intensity by a trained performer. Lucie Bigelow Rosen has performed all over the country on the theremin, under the auspices of one of the largest concert managements, and the wail of the Martenot waves (named after their - or its - inventor) was

Continued on page 153



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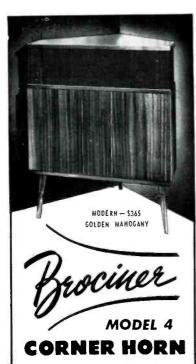
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IN ONE EAR

Continued from page 149

heard in concerts by the Boston Symphony that included Oliver Messiaen's exotically sonorous mystico-religious Turangalila-Symphony.

More interesting, and quite possibly more significant, are experiments with tape recorders such as those being conducted in France by Pierre Boulez and Pierre Schaeffer and in this country by Vladimir Ussachevsky and Otto Luening. Briefly stated, the idea is that the composer assembles on tape the sounds that are to be his compositional materials and then arranges them into meaningful patterns. The procedures are far too complicated to examine here; a full description must wait for another story. But the implications are enormous. Here at last is a way for the composer to escape from the limitations of performers and present his ideas directly to the listener. No interpreters are necessary, or even possible. The composition is the performance; the performance is the composition. When the final splice is made, the final bit of sound superimposed, the work is finished. To obtain a performance you need only throw switch.

So what? (I might as well say it.) This is a tough nut to crack, but rhere is meat in it. It is very easy to scoff at such goings-on as patently absurd and refuse to think about them further. But once you permit yourself to think about the basic problems involved, you are all at once way, way over your head in very deep philosophical - or, at least, semantic - waters. After all, what is music? If a bushman stamping his feet and chanting gibberish is making music, why should such a carefully notated work as Cage's work for radios be denied the patent?

TURNTABLES AWEIGH!

Continued from page 47

microphone. The second is for feeding any program into the recorder. And the third is for listening in on any program source or either channel with earphones or a monitor speaker. Each of these three sections has its own selector switch and volume knob.

Then there are six switches arrayed below, to select groups of speakers to receive the programs. These line up as follows: officers, crew, troops, mess, monitor and everybody. There is also a recording level indicator.

Fourteen knobs, six switches and three dials in all - but still pretty compact and clearly organized.

Behind the panel, which can be lowered on a hinge, are seven plug-in preamplifiers and line amplifiers, so constructed that none can be plugged into the wrong position. All the preamps use a common power supply.

To power the big new multi-speaker network the planners turned to a potent 50watt amplifier especially designed by the Navy's experts three years ago. It was inended primarily for use with public address systems in shore stations, but future shipboard use of this sort also was visualized.

A big, heavy duty unit, the amplifier is Continued on page 154



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TURNTABLES AWEIGH!

Continued from page 153

appropriate for several reasons. It is the only military amplifier, according to Paul Weber, that makes any attempt to reach down to the lower frequencies. Its range is specified as 100 to 7,500 cycles, the same as that of the new speakers. It has tone control flexibility. It has low distortion—the maximum specified is 5 percent but this was set very conservatively and the actual amount is said to be only half that. And it is designed to deliver a full 50 watts steadily, a necessity when 75 to 100 speakers may be drawing upon it.

Nobody would want it at home, because it's about 18 inches high, 14 deep. 2 feet wide — and hot. But for the new entertainment system it's fine.

Two of these amplifiers — one for each channel — will occupy a rack near the control center. For an extra large speaker network more can be added.

Two small but important details remain to be accounted for. The pickup to be used is a dual magnetic cartridge, and the styli are to be replaceable diamonds. Up to an ounce of stylus pressure will be allowed. The more pressure, the better, from the pitch-and-roll standpoint, of course, and they don't worry about record wear much in the Navy.

The new entertainment system will reach much farther into a ship than its predecessors. Eight or ten speakers is about the maximum at present, but the new systems may embody as many as 150. Biggest speaker installation now in sight — about 120 — will be in the giant new carrier Forrestal. Such big ships probably will rate two control units and extra amplifiers. Practically every off-duty area of the ship will be reached.

And all new ships from here on in presumably will be outfitted. Then the audio experts will rely on the systems themselves to do a selling job, for they hope to build up a demand for the new equipment in old ships, too. One category they are eager to get into is the transports, with their burden of troops fighting homesickness.

The Navy is rather skittish about publicizing trade names, and it is by request that none are mentioned in this article. The major components are all made by well-known manufacturers. An eastern company is building the control units and amplifiers, and when this was written the first control unit had not yet been completed. But deliveries are expected this fall, and the hope is to have some of the new systems seaborne by next summer.

JUNIOR-FI

Continued from page 48

has a right to. It was mounted on a slab of heavy plywood screwed across the front, a port was cut out after much prayerful calculation, the whole interior lined with half-inch Ozite rug padding, and the result called a bass reflex.

The amplifier is a six-watt Heathkit. It delivers plenty of volume with a quality distinctly listenable, though nothing to make

Continued on page 156

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model B-209 for
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BOZAK model B-199A for true-pitch robust bass (30-cycle Resonance)

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EMI

Continued from page 142

wonder!), but it was reassembled after V-E Day, and I am told that not one precious master was lost or destroyed in the process.

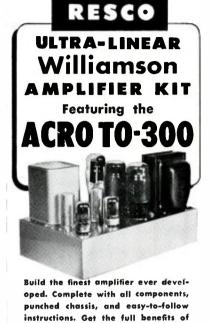
If the acoustic vault at Hayes epitomizes a glorious past, the recording studio at Abbey Road is very much of the present, and indeed of the future. I quickly learned that since my last visit to Abbey Road, in 1947, many new developments had taken place. Outwardly, there appeared to be no changes in the large No. 1 Studio, where Sir Adrian Boult and the London Philharmonic Orchestra were recording Elgar's Wand of Youth Suite No. 1.

In the recording room, however, everything had been modernized. Six years ago all EMI recordings were engraved in wax on the same weight-propelled turntables which had done duty for decades. Soon after that, EMI began to record on tape; indeed, this company pioneered in tape research during and after the war, and it claims to be the only recording company in the world which manufactures all its own tape and tape-recording equipment. But though EMI's tape program dates back some time, it goes without saying that the tried and true method of wax recording was not quickly discarded. For several years it was standard Abbey Road practice to record simultaneously on wax and tape. About a year ago, however, the convenience of tape finally won over the last of the traditionalists, and the wax recording turntables were relegated to the relative ignominy

of the laboratory where original tape recordings are "dubbed" onto disks.

If the equipment at Abbey Road has changed, the care lavished on the recordings themselves is still of the old, justifiably renowned quality. EMI has refused to adopt that "quick and easy" approach to recording which the advent of tape has unfortunately fostered in some quarters. Though direct recordings are no longer made on wax, the scrupulous attention to detail which that difficult medium necessitated is still much in evidence. Time and again, at the recording session which I witnessed, the same short movement from Elgar's suite was recorded, then rejected. As the several takes were made, the recording engineer and the assisting musical adviser gave voice. Beckmesser-fashion, to their dissatisfactions -"Bassoons a bit weak there." "Too much horn in that place," "Let's try for better balance in that fortissimo next time." Sometimes these deficiencies were rectified at the control panel, by boosting or attenuating one of the two microphones employed (a Telefunken "Neumann 49" and an RCA ribbon mike), but more often they were corrected by Sir Adrian and his players. Whenever possible, recording engineers at Abbey Road prefer to resolve problems of balance musically rather than electronically.

All told, it took about an hour to record four-minute movement from the Wand of Youth. No one seemed to think this an inordinate amount of time. Abbey Road recordings, I was given to understand, have always been made in this slow, painstaking fashion. The implication was that they always will be. And that is one tradition well worth perpetuating.



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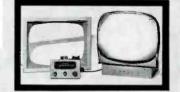




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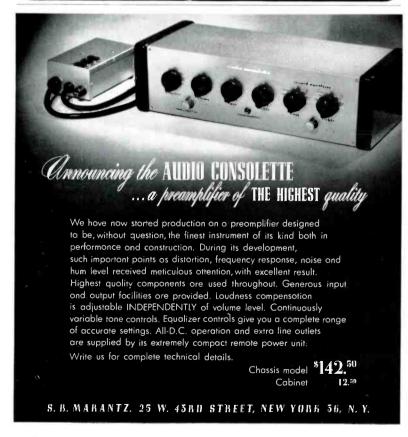
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JUNIOR-FI

Continued from page 154

Mr. Klipsch jealous. There's room on the shelf for a more pretentious amplifier, and in due time, no doubt, the present one will be replaced.

The RCA record player was chosen because it was cheap, adaptable and easy to operate. Some thought was given to the Columbia three-speed player in the same price range, but the idea was abandoned mainly because three speeds can lead to complications in record supply. With the RCA, the daughter is committed to playing 45's, but, since anything she's likely to want to listen to for some years will doubtless be available on the little disks with the big holes, she's well content and life seems simpler all around.

The end result, while not held forth as a high-fidelity job in any sense of the word, sounds good enough to take some of the curse off the juke-box type of material heard around our house at certain times. The speaker section serves an incidental purpose which I can hardly afford to admit was in my mind from the beginning: standing alongside my Altec, it makes a darned good second speaker during WQXR's binaural broadcasts.

TRINAURAL

Continued from page 44

that it might be advantageous to have them for off-stage effects.

Multiple - channel recording presented special problems, and Reeves is not wholly satisfied with the results, particularly in the case of some of the short features made in the field. Recording a whole symphony orchestra at the Oyster Bay laboratory (where Cinerama was largely developed) turned out to be difficult. The sound proved too thunderous in the relatively small quarters, and the orchestra had to be moved to the tennis courts outside. The scenes of speedboat racing in Florida were photographed without pickup equipment, the plan being to add the sound, synthetically, later. The results were unlife-like, so the technicians finally got some speedboats to race around in Long Island Sound, while seven separate pickups recorded the noises.

Cinerama's sound is, by all odds, the best heard in the theatre at this writing. The orchestral effects are startlingly life-like, although sometimes the volume level seems to get out of control and one is in danger of becoming deafened. Most modern theatres are fairly well designed acoustically, and Reeves sees little trouble in that direction, but realizing that the new method is still in a state of development he figures that Cinermama's sound can undergo a 90 percent improvement.

Hollywood, on the other hand, needs more than that. At the moment rhe customers are getting sound-placement, which is advertised as stereophonic sound, but isn't. There's not much doubt that the real thing will be coming along sometime in the future, but that raises another problem. What on earth will Hollywood call it then?

NEM; TORNOVER



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DIAMOND NEEDLES

\$1050 PLUS POSTA

No doubt you have learned by now that the needle in your record player is not permanent. It is tipped with either sapphire or osmium metal which should be changed after about 20 hours of playing, in order to protect your valuable records.

This means that if you use your record player on an average of an hour a day these needles need replacing about every three weeks at a cost of between \$1.50 to \$3.50. Because of this frequent needle changing you have of course learned how to install a new one when required.

Why not, then, retip your present replaceable needle with a genuine diamond. One that will give you at least 1000 hours of high fidelity, distortion-free record playing pleasure with the comforting assurance that your costly records will remain undamaged — particularly those long-playing micro groove records, so finely grooved and sensitive to a worn stylus?

Send us your replacement needle assembly now—today. Let us retip it with the highest quality genuine diamond stylus—exactly the same kind that we make for leading radio stations the country over. Save the difference between \$10.50 for 1000 hours of playing and up to \$3.50 for 20 hours. And also save because you deal directly with a leading manufacturer of diamond styli for broadcast use who is in a position to offer the lowest price available for diamonds of this quality.

Our diamond tips are unconditionally guaranteed and are made for long-playing or standard records. Send check or money order for \$10.50 plus 25c for return postage with your needle assembly or complete cartridge if you cannot remove the replacement needle assembly (except Pickering non-replaceable type) to:

THE TRANSCRIBER CO.

Diamond Styli Manufacturers

172 Green St. Dept. H Boston 30, Mass.

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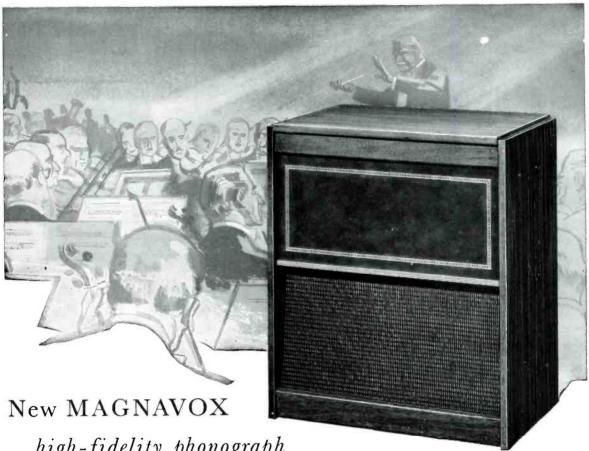
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York Furniture Corp.

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Listening Post....

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- . FOUR HIGH-FIDELITY speakers (two high-frequency and two base speakers) give complete acoustical reproduction of 50 to 12,000 cycles!
- THREE-SPEED record changer plays records of all three speeds and sizes, automatically!
- PIANISSIMO PICK-UP has a floating dual-stylus that is equipped with two scratch-free osmium tips!

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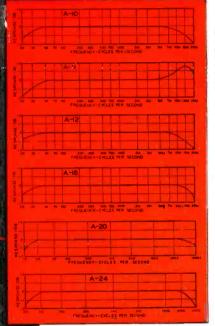
HIGH FIDELITY MAGAZINE



ULTRA COMPACT UNITS...OUNCER UNITS HIGH FIDELITY.... SMALL SIZE.... FROM STOCK

UTC Ultra compact audio units are small and light in weight, ideally suited to remote amplifier and similar compact equipment. High fidelity is obtainable in all individual units, the frequency response being \pm 2 DB from 30 to 20,000 cycles.

True hum balancing coil structure combined with a high conductivity die cast outer case, effects good inductive shielding.



Type No.	Application	Primary Impedance	Secondary Impedance	List Price
A-10	Low impedance mike, pickup, 50 or multiple line to grid 3	0, 125/150, 200/250, 33, 500/600 ohms	50 ohms	\$16.00
A-11	Low Impedance mike, pickup. 5 or line to 1 or 2 grids (multiple	0, 200, 500 alloy shields for low h	50,000 ohms oum pickup)	6.00ء
A-12	Low impedance mike, pickup, 5		80,000 ohms overall, in two sections	16.00
A-14	Dynamic microphone to one 3 or two grids	0 ohms	50,000 ohms overall, in two sections	17.00
A-20	Mixing, mike, pickup, or mul- 5 tiple line to line 3	0, 125/150, 200/250, 33, 500/600 ohms	50, 125/150, 200/250, 333, 500/600 ohms	16.00
A-21	mixing, low impedance mike, 5 pickup, or line to line (multiple	0, 200/250, 500/600 alloy shields for low	50, 200/250, 500/600 hum pickup)	18.00
A-16	Single plate to single grid 1	5.000 ohms	60.000 ohms. 2:1 ratio	15.00
A-17	Single plate to single grid A 8 MA unbalanced D.C.	As above	As above	17.00
A-18	Single plate to two grids. 1 Split primary	15,000 ohms	80,000 ohms overall, 2.3:1 turn ratio	16.00
A-19	Single plate to two grids 8 1 MA unbalanced D.C.	15,000 ohms	80,000 ohms overall, 2.3:1 turn ratio	19.00
A-24	Single plate to multiple line 1	15,000 ohms	50, 125/150, 200/250, 333, 500/600 ohms	16.00
A-25	Single plate to multiple line 1 8 MA unbalanced D.C.	15,000 ohms	50, 125/150, 200/250, 333, 500/600 ohms	17 00
A-26	Push pull low level plates to 3 multiple line	30,000 ohms plate to plate	50, 125/150, 200/250, 333, 500/600 ohms	16.00
A-27	Crystal microphone to mul- : tiple line	100,000 ohms	50, 125/150, 200/250, 333, 500/600 ohms	16.00
A-30	Audio choke, 250 henrys @ 5 MA	6000 ohms D.C 65 henr	s @ 10 MA 1500 ohms D.C	12.00
A-32	Filter choke 60 henrys @ 15 MA	2000 ohms D.C., 15 hen	vs @ 30 MA 500 ohms D.C	10.00



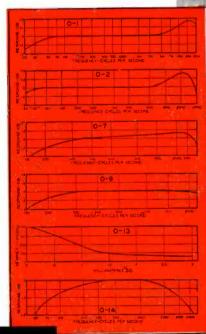
TYPE A CASE 11/2" x 11/2" x 2" high

UTC OUNCER components represent the acme in compact quality transformers. These units, which weigh one ounce, are fully impregnated and sealed in a drawn aluminum housing $\sqrt[6]{a}$ diameter...mounting opposite terminal board. High fidelity characteristics are provided, uniform from 40 to 15,000 cycles, except for 0-14, 0-15, and units carrying DC which are intended for voice frequencies from 150 to 4,000 cycles. Maximum level 0 DB.



OUNCER CASE '%" Dia. x 1 %" high

Type No.	Application	Pri. 1mp.	Séc. Imp.	List Price
0-1	Mike, pickup or line to 1 grid	50, 200/250 500/600	50,000	\$14.00
0-2	Mike, pickup or line to 2 grids	50, 200/250 500/600	50,000	14.00
0-3	Dynamic mike to 1 grid	7.5/30	50.000	13.00
0-4	Single plate to 1 grid	15,000	60,000	11.00
0-5	Plate to grid, D.C. in Pri.	15,000	60,000	_11.00
0-6	Single plate to 2 grids	15,000	95,000	13.00
0-7	Plate to 2 grids, D.C. in Pri.	15,000	95,000	13.00
0-8	Single plate to line	15,000	50, 200/250, 500/600	14.00
0-9	Plate to line, D.C. in Pri.	15,000	50, 200/250, 500/600	14.00
0-10	Push pull plates to line	30,000 ohms plate to plate	50, 200/250, 500/600	14.00
0-11	Crystal mike to line	50,000	50, 200/250, 500/600	14.00
0-12	Mixing and matching	50, 200/250	50, 200/250, 500/600	13.00
0-13	Reactor, 300 Hysno D.C.;	50 Hys3 MA. D.C.,	6000 ohms	10.00
0-14	50:1 mlke or line to grid	200	1/2 megohm	14.00
0-15	10:1 single plate to grid	15,000	1 megchm	14.00





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