SME: Invitation to Music Listeners

See Page 25
FULL DIMENSIONAL SOUND
Lifts “HI-FI” to a new HIGH

—thanks to the finest in modern sound recording methods and equipment

“FULL DIMENSIONAL SOUND” is an apt description of the tonal perspective that gives these fine records the true balance, depth and full tonal range of the original live performance.

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Remember—Audiodiscs and Audiotape are made by audio engineers, for audio engineers. Their consistent uniform quality is the result of more than a decade of experience by the only company in America devoted solely to the manufacture of fine sound recording media—both discs and tape.

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...including audiotape for the original sound

...and audiodiscs for the master recording

*Trade Mark
You'll have the feeling a new dimension has been added to sound when you hear the TRi-PLEX, so clean, clear and complete...so utterly realistic...is the reproduction of all the music on the records of today. No obsolescence, either, for performance now comprehends the full range of the human ear.

The Jensen TRi-PLEX consists of ultra high, high and low frequency units completely assembled with crossover networks, balance and level controls in a back-loading folded horn cabinet. Completely assembled and laboratory tested. Available in blonde or mahogany.

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for full-dimension bass

Everyone knows a long horn with a large mouth will provide magnificent bass, but space and decor generally forbid. Such performance is available now in the new Jensen Back-Loading Folded-Horns...compactly folded into beautiful cabinet designs. No corner is required, but design takes full advantage of corner augmentation if one is available. Models for 12" and 15" speakers in blonde or mahogany.
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BRITAIN'S FINEST HIGH-FIDELITY AMPLIFIER
THE HEART OF YOUR MUSIC SYSTEM...
DISTORTION CERTIFIED TO BE ONLY
ONE TENTH OF ONE PERCENT!
COSTS ONLY $192.00 NET
FOR AMPLIFIER
AND
PRE-AMPLIFIER

LISTEN... AND COMPARE!
EXAMINE TOP AND BOTTOM CRAFTSMANSHIP
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THERE'S A POWERFUL
DIFFERENCE!

WHARFEDALE
SUPER 12 CS/AL
A single extended range speaker that outperforms many multi-speaker combinations!
A complete range of speakers is available for every application... all built by Wharfedale Wireless Works under the personal direction of G. A. Briggs, world-renowned audio engineer

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Aluminum voice coil... extended range without "peaking"
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Costs only $61.95 net
Send your name for free fact sheet telling why it will perform so well in your home.

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THE AUTHENTIC R-J ENCLOSURE - only slightly larger than the speaker itself!

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A Cordial Invitation from BRITISH INDUSTRIES CORP. to SEE and HEAR BRITAIN'S FINEST AUDIO EQUIPMENT at the AUDIO FAIR

Place: Hotel New Yorker
Time: October 29th to November 1st

Here is an opportunity to witness a thrilling demonstration of High Fidelity Sound... The Garrard, the world's finest record changer, playing through the Leak "Point One" Amplifier with a Wharfedale Loudspeaker housed in the revolutionary R-J Speaker Enclosure!
HEAVY DRIVE SHAFT: A unique feature! Exclusive with Garrard! Drive shaft for 33 1/3, 45 rpm and 45 rpm is heavy, thus obtaining more consistent quality at critical low speeds. Worn and warped eliminations.

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

CONJUGENT START-S-OP-REJECT LEVEL: Start, stop and reject lever are combined and located conveniently away from tone arm.

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

HEAVY DUTY SILENT A-POLE MOTOR WITH ABSOLUTELY NO RUMBLE: Speed maintained throughout a wide variation in line voltage. There is no appreciable speed variation operating unit "cold" with a full load or "hot" with one record, regardless of weight, thickness or diameter of records.

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

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

PULL-AWAY IDLER WHEEL: Avoids flattening or drive wheel when changer is not operating.

PRE-AMPLIFIER: Perfectly meshed to insure constant smooth action and years of service.

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

WATCH-LIKE CONSTRUCTION: All parts are precision made, tastefully assembled and simple to adjust. A complete stock of replacement parts is readily available to all Garrard owners.

GARRARD WORLD’S FINEST RECORD CHANGER

WEIGHTED DRIVE: A unique feature! Exclusive with Garrard! Drive shaft for 33 1/3, 45 rpm and 45 rpm is heavy, thus obtaining more consistent quality at critical low speeds. Worn and warped eliminations.

RECORD PLAYER MODEL: Garrard RC-80

AMPLIFIER: Garrard RC-80

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

IF YOU CANNOT ATTEND THE AUDIO FAIR, MAIL COUPON: Garrard Sales Corporation, Dept. No. 46F, 164 Duane Street, New York 13, N. Y. Please send me literature on British Industries High Fidelity Sound Equipment.

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GREAT SYMPHONIES BECOME GREATER
by listening to AMPEX

Yet this, the finest of all recording methods, is within reach of your school, orchestra or conservatory.

Used by many of the nation's leading symphony orchestras and great musicians, AMPEX tape recordings allow rehearsing performers to hear an immediate playback — to note the interplay and balance between their instruments — to hear the errors that need correcting — and finally to hear and recognize their own best performance.

Magnetic tape is the first recording medium to be practical for music education. You can clip and save a minute of practice recording; you can save an entire performance. Or for practice and rehearsals, one tape can be erased and reused hundreds of times; it costs nothing to reuse the tape.

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

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

For further information, write Dept. H

If you plan for tomorrow, buy an AMPEX today

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AMPEX ELECTRIC CORPORATION • 934 CHARTER STREET • REDWOOD CITY, CALIFORNIA
THE MAGAZINE FOR MUSIC LISTENERS
Volume 2 Number 3
November-December 1952

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CHARLES FOWLER, Editor
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AS THE EDITOR SEES IT

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

Unfortunately, perhaps, we derive a certain enjoyment from not doing what is expected of us. Hence we resolved not to write a significant editorial. But, since all people are no as perversive as we (the editorial we certainly makes for peculiar sentence structure, doesn’t it? . . . another custom we shall have to break sometime) we cast around for a valid excuse for not being significant.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Octaves from 3,500 cps. though those extending beyond the range of human hearing, are reproduced by two high-frequency drivers (E-V Models 13Q and SP-657), which complement each other for maximum efficiency and clarity.

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

Since the PATRICIAN will be played at sound levels acceptable in the living or music room, E-V has developed in this instrument a reproducing characteristic which augments tones between 3,000 and 5,000 cps., offsetting human ear discrepancy at low sound pressures. The result is a naturalness of reproduction unparalleled in the art.


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

Dimensions: 60" H x 41" W x 17 1/2" D

Weight: 400 lbs. net, 470 lbs. shipping

Price: List, $1,312.50; Audio-philic Net, $726.50

Electro-Voice Inc.,
425 Carroll Street, Buchanan, Michigan
Export: 13 E. 40th St., New York 16, U.S.A. Cables: Arlab
Audio engineers and audio enthusiasts all agree that the quality of any sound reproducing system is the sum total of all of its components units. One weak link in the chain dooms the entire system to mediocrity.

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

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

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

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

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

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

Browning announces the new RV-31 FM TUNER for those who expect the exceptional

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

Here’s what has been added:

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

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

BROWNING Laboratories, Inc.
Winchester, Mass.

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

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

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

**Model 2122-B**

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

**Model 2200**

Superlative quality in a medium-priced unit. Power output 20 watts at less than 3½% distortion — peak power, 35 watts. Frequency response plus or minus 1/2 db from 20 to 30,000 cycles. Seven inputs. Equalizer switch for all types of records; separate, continuously variable bass and treble; and compensated volume control afford unequalled listening pleasure.

**Model 2145-A**

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

**BELL SOUND SYSTEMS, Inc.**

555-57 MARION ROAD, COLUMBUS 7, OHIO

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

In Memoriam

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

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

The Odor's Stale of Whisc Away the Musc

Editor! The nagging pencil on your desk Meseems intent to masc a portion of my tasc, Pervert my spelling smugly by an arabesc.

Alone a cap has given me the nerve to asc — (That is, a Fasc therefrom of whisxy) lets me ris.

The gnashing tusc, the duscy wrath where does not basc

An editorial clemency: What's wrong with disk?

We have put on a minor search for support for our left-handed attitude, but without success. The dictionary, usually one of our best friends, set us back with this brief comment: "Disc n. 1. disk." We shall endeavor to accept defeat in a sportsmanlike spirit, and will henceforth spell it, "disk." Readers are ased to bear with us, however, and not get diskouraged if an occastional disc keeps in for the next noup of issues. Habits are hard to break.

Ailing but not Dead

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

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

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

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

Continued on page 13

Exquisitely Designed

and finished all over, this versatile enclosure can be used against a flat wall or as a corner enclosure. A 6' true exponential horn and large mouth opening give full, uniform reproduction of the low frequencies. When used with the Jim Lansing two-way speaker system, the smooth, more even highs produced by the Konstical Lens, make this a truly outstanding unit. A single D150 speaker may also be used, since the cone speaker operates as a direct radiator above the acoustic crossover. See and hear these truly incomparable speakers at your audio dealers today.

Jim Lansing
JAMES B. LANSING SOUND, INC.
2439 FLETCHER DRIVE, LOS ANGELES 28, CALIFORNIA

Incomparable! these 2 magnificent new enclosures by Jim Lansing

A rear-loaded corner-console enclosure

A full-front-loaded corner enclosure

Arnie Lipkin in Mahogany, Perga blend one

Unity grey.

Full front-loaded corner enclosure

The two basic methods of loading loud speakers on the low end have been incorporated in this magnificent horn enclosure in a unique way. Both low frequency units are fully and uniformly loaded to well below 35 cycles. The uniform full-base response is blended smoothly into the higher frequencies with the revolutionary Jim Lansing Konstical Lens.
"The Revere Tape Recorder has given the truest reproduction of my voice I have heard. It is a remarkable instrument."

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

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 TAPE RECORDER

A proud achievement of recording brilliance! To hear the new Revere "BALANCED-TONE" Tape Recorder is an unforgettable experience. Each delicate sound, every musical note, is reproduced with amazing depth of tone, breadth of range, and height of realism heretofore obtainable only with professional broadcast equipment. Yet, it is extremely simple to operate. Note these outstanding features incorporated in the new Revere:

- "Balanced-Tone" Control provides professional, high fidelity tonal quality.
- Exclusive Index Counter permits instant location of any part of a recorded reel.
- Automatic Key-Controls record, play, or stop recorder instantly.
- High Speed Forward and Rewind Lever—no backlash or tearing of tape.
- Add to these such important advantages as two full hours of recording on each reel, lightweight portability, magnificent styling, glamorous beauty, low price—and you'll agree the new Revere "BALANCED-TONE" Tape Recorder is in a class by itself. See it at your dealer now!

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

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NOTED WITH INTEREST

Continued from page 11

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

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

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

Oh! For the Simple Life!

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

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

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

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

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

Dept. of Further Information

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

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

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

Continued on page 21
For, it is a fact, that of the thousands of AUDAX users, more than 70% bought the AUDAX POLYPHASE, even though they already owned other makes of pick-ups.

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

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

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

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

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

AUDAK COMPANY
500 Fifth Avenue New York 36
"Creator of Fine Audio-Electronic apparatus for over 25 years."

"The Standard by Which Others Are Judged and Valued."
Readers’ Forum

SIR:

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

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

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

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

I think it would be well worth your while in reader interest. Even after building the amplifier, several of my friends have gone to the trouble of obtaining the pamphlet from Iliffe & Sons Ltd., at three and sixpence merely because it covered so much more ground and explained possible difficulties.

I think you will find many interested in the preamp and tone control, especially if it can be built with easily obtainable tubes.

Englewood, Colorado

D. M. Bender

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

SIR:

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

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

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

It seems that there are a few companies that consistently produce smooth, quite pressings, while others are spotty from one lot to another. Since it has been demon-
But how will this pickup sound better to you . . .?

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

**COMPLIANCE:**

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

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

The Fairchild pickup cartridge is of the MOVING COIL design, the only true linear transducer. Every Fairchild cartridge is equipped with the finest diamond stylus. No other material is acceptable.

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

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

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

Continued from page 15

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

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

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

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

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

Karl C. Thomas
State College, Penna.

Sir:

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

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

Continued on page 19
Perfect tracking of records and virtual elimination of tone arm resonances are only two advantages of this versatile, specially-designed arm — the finest yet developed! It satisfies every requirement of LP reproduction, permits instant changing from 78 r.p.m. to LP (micro-groove) or 45 r.p.m. and assures correct stylus pressure automatically. GE or Pickering magnetic pickup cartridges are interchangeable and slip into place quickly and easily. Maintains perfect contact with bad records, accommodates records up to 16" in diameter.

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

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

GRAY RESEARCH

and Development Co., Inc., Hilliard St., Manchester, Conn.
Division of The GRAY MANUFACTURING COMPANY-Originators of the Gray Telephone Pay Station and the Gray Audograph

ROOM 503, HOTEL NEW YORKER

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

www.americanradiohistory.com
READERS' FORUM
Continued from page 17

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

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

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

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

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

Alex P. Hull, Jr.
Charlottesville, Virginia

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

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

Fred W. Finlay
Kansas City, Mo.

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

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

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

Continued on page 98

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

604C SPECIFICATIONS:

Power rating . . . . . . 35 watts (50 watts peak)
Network impedance . . . . . . . . . . . . 16 ohms
Maximum diameter . . . . . . . . . . 15N, inches
Maximum depth . . . . . . . . . . . . . . . . 11\(\frac{1}{2}\) inches
Weight with network . . . . . . . . . . 40 pounds

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

9356 Santa Monica Boulevard, Beverly Hills, California
161 Sixth Avenue, New York 13, New York

ALL THREE SPEAKERS ARE GUARANTEED TO REPRODUCE ALL OF THE TONES FROM 30 TO 22,000 CYCLES!
Unquestionably the greatest new contribution in years to reproduced music enjoyment

modern Classics in sound by newcomb

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

There is nothing, short of live music itself, to compare with the brilliant, clear, full-bodied tones of the Classic 25, the star of this amazing new series of fine amplifiers. Its galaxy of features include a remote control beautifully finished in rich, brushed brass, a dramatic accent to even the most tastefully appointed interiors. Distortion is reduced to the lowest limits of measurement, yet reserve power has not been sacrificed. Frequency response extends from below 10 to over 100,000 cycles. New "Audi-balance" achieves perfect balance of output tubes in seconds. Exclusive "Adjust-a-panel" extends control shafts instantly for cabinet mounting. Six inputs are provided for radio, TV, tape recorder, crystal and magnetic (2) pickups. "Fletcher-Munson" compensated volume control maintains perfect aural balance. A crossover selector simplifies attainment of correct playback response, includes foreign and domestic frequencies and the new A.E.S. standard.

Send for our catalog describing all 8 completely new amplifiers priced from $39.50 to $269.50 audiophile net.

Write Dept. W for catalog C-20M
New Sound Studios

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

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

West Coast Audio Show

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

For Two-Eared Listeners

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

Erratum: Dividing Networks

A small, but very important, change should be made in Fig. 5, page 74 of HIGH-FIDELITY Vol. 2, No. 2: The two coils at the left are correctly labeled L1, both the coils at the right should be labeled L2 — one now being incorrectly tagged L1.
hallicrafters  Super Fidelity

A NEW PRECISION TUNER AND AMPLIFIER
COMPLETELY ENCASED FOR TABLE USE OR CUSTOM INSTALLATION

Sensation of the Audio Fair!
Now...Great "Command Performance" Music in Your Home!
Every Sound Humanly Audible...
Distortion-Free, without A.F.C.

AM-FM TUNER (ST-83)
Hallicrafters Super-Fidelity AM-FM Tuner enables you to hear every sound audible to the human ear...
"like a complete orchestra giving a Command Performance in your own home!"

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

AMPLIFIER (A-84)
The most critical ear will find Hallicrafters Super-Fidelity Amplifier the perfect "mate" for your AM-FM Tuner. Guaranteed frequency range, 10 to 100,000 cycles per second, at 10 watts.

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

Write Today hallicrafters

WORLD'S LEADING MANUFACTURERS
OF PRECISION RADIO AND TELEVISION
CHICAGO 24, ILLINOIS

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

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

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


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

Continued on page 128
Pickering diamond stylus pickups and related components are the exclusive choice of musicians and lovers of music who insist upon the finest. Engineers acknowledge Pickering audio components as the best available. In every test and performance comparison, they demonstrate their superiority; recreating all the music pressed into modern recordings with the fidelity and realism of a live performance.

Pickering components are created for listening pleasure by Audio Engineers who know music and who know the tastes of discriminating listeners.

Pickering diamond cartridges have no equal. The wear and fracture resistance of the diamond styli in these cartridges is many times greater than that of styli made of sapphire, the next hardest material. Because resistance to wear preserves the precise shape of the stylus point, the life and quality of your valuable record collection is insured.

Don't impair the musical quality of your priceless records.

Use Pickering diamond stylus cartridges...they not only wear longer but, more important, they preserve the musical quality and prolong the life of your record library.

By all measures, Pickering diamond stylus cartridges are more economical.

Pickering & Company, Inc.
Oceanside, L. I., N. Y.
SME
The Society of Music Enthusiasts

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

Organization

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

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

Officers

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

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

Memberships

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

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

The Society's Official Organ

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

Dues

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

Past, Present, and Future

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

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

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

The immediate work ahead is to get chapters started. Here again, dozens of groups are awaiting publication of the By-Laws and the Chapter Charter Agreement so that
they can apply formally. Complete information will be published in the first issue of the *Baton*, and individuals joining the Society will be advised (if they so request) of the existence of Chapters in their respective cities.

A second phase of work ahead is a study of the membership applications to determine the type of program material which will be of most immediate interest. Once again, reception of the idea of the SME has been extraordinary: almost every group or concern which has been approached in regard to the SME has volunteered full cooperation in the preparation of tapes, disks, and other program materials for distribution among the local chapters.

By-Laws of the Society of Music Enthusiasts

**Article I: Name**
The name of the organization shall be: Society of Music Enthusiasts.

**Article II: Aims**
The purpose of the Society is to:

- Stimulate interest in the subject of music in all its forms for the benefit of all persons everywhere whether of not members of the Society.
- Encourage a better understanding of the creation, interpretation, rendition and reproduction of music through programs of planned educational and related activities, demonstrations and discussions.
- Provide for the exchange and development of information and knowledge pertinent to the aims of the Society among its members, chapters, and other organizations.
- Provide members of the Society guidance in the technical means of attaining "high fidelity" reproduction of music.

**Article III: Structure**
The organizational structure of the Society shall be as follows:

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

**Article IV: Officers**

- The executive officer of the Society shall be a Managing Director appointed by the sponsor, Audiocom, Inc.
- The elected officers of the Society shall comprise:
  - A National Chairman who shall preside at meetings of the National Council and see that all Society directives and all valid resolutions of the National Council are carried into effect.
  - A Vice-Chairman who shall assist the National Chairman with his work and who in the absence or disability of the Chairman shall perform the duties and exercise the powers of the Chairman, and will perform such other duties as the Chairman or National Council shall prescribe.

**Article V: Terms of Office**

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

**Article VI: Membership**

- Membership in the Society shall be open to all citizens of the United States and all persons of any nationality considered. Continued on next page
friendly to the United States Government. Membership in the Society will be approved by the Office of the Managing Director upon fulfillment of all requirements prescribed by the Society and the Managing Director. 

Section 2: Memberships shall be authorized as follows:

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

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

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

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

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

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

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

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

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

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

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

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

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

Article VII: DUES

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

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

Section 3: Persons who are members of the Society and who later subscribe to High-Fidelity Magazine shall be entitled to full membership in the Society at the rate of $2.00, upon new renewal of annual membership in the Society and for as long as subscription to High-Fidelity Magazine shall be continued.

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

Article VIII: CHARTER

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

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

Article IX: OFFICIAL ORGAN

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

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

Article X: ELECTIONS

Section 1: Election of national Society officials shall take place biennially and shall be administered by the Office of the Managing Director.

Article XI: QUORUM

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

Article XII: VOTING

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

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

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

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

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

Article XIII: BY-LAWS

Section 1: Resolutions of the National Council concerning amendments to the By-Laws of the Society shall require an affirmative vote of two-thirds of the members present at a meeting at which there is a quorum.

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

Article XIV: VACANCIES

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

Article XV: RESIGNATIONS

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

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

Article XVI: LIMITATIONS

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

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

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

Article XVII: CHECKS

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

Section 2: Checks drawn against the Society's funds as charged by the Comptroller shall be signed by the Managing Director, and countersigned by an officer of Audiocom, Inc.

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

Article XVIII: ADDRESS

The mailing and business address of the Society is: Society of Music Enthusiasts, Great Barrington, Mass. This address shall be the official headquarters of the Society.

Continued on page 121.
How to Plan for
LIVING MUSIC
in Your Own Home

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

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

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

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

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

By MILTON B. SLEEPER

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

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

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

It is the purpose of this article to present a new ap-
proach to the problems of planning a home music in-
stallation, not as a substitute for purchasing equipment

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

**PLAN FOR A HI-FI SYSTEM**

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

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THE COST OF A HI-FI SYSTEM

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

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

One word of warning at this point: Don’t plan on buying hi-fi equipment at a discount. You probably won’t have much luck anyway, because the trade prices don’t allow the dealers enough profit to give away very much of it. If you find a way to get a substantial reduction on some item, the chances are that it is an obsolete model that is being closed out because it has been superseded by something much better.

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

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

**Initial Figure $______ First Estimate $______ Final Estimate $______**

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THE BASIC HI-FI FACILITIES

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

This point is stressed because so many people allow themselves to be persuaded into buying complete FM, record, and tape equipment only to find, after they have had it in use a few months, that they were actually interested in just one or two of these sources of music. Then they wish that they had put all their investment into what they wanted most. If you are in doubt on this point, take time to acquaint yourself with the various pieces of
equipment, so that you will understand what each one can do, and how much entertainment it will contribute to you.

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

While television is not primarily a source of musical entertainment, it is included here for consideration. An increasing number of people feel that TV is properly part of a custom installation, and they want to use the hi-fi system for reproducing the sound channel.

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

1. FM BROADCAST RECEPTION

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

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

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

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

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

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

FM TUNER $ _______ ANTENNA $ _______

2. MUSIC FROM PHONOGRAPH RECORDS

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

The elements of a hi-fi system specifically related to records are the turntable or record-changer, tone arm, pickup, and stylus. A turntable plays only one record at a time. Practically all turntables are adjustable as to speed for 33, 45, and 78 rpm. If you are going to use long-playing records only, at 33 rpm., you may want a turntable rather than a changer, because it is hardly necessary to have a changer when each record side lasts 20 minutes or so. Furthermore, if you plan to have a very fine system, you may be sure that its bass response will show up the slightest mechanical rumble. Hence, it is advisable to get a turntable.

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

The best way to decide between a turntable and a changer is to have both. An increasing number of installations
are being equipped in that way, and it is an excellent plan.

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

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

The best advice is to choose a pickup consistent in performance and price with the overall quality of your system. If you are going to use it principally for popular 78 records, a crystal pickup will probably be quite adequate. But if you are hoping for superlative reproduction from the best recordings, you must select your pickup accordingly. The foregoing applies to the choice of a pickup for use with either a turntable or changer.

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

**Turntable $____ Record Changer $______
Tone Arm ______
Pickup, Semi-Permanent Stylus $_____
Pickup, Diamond Stylus $_____

### 3. A SECOND PHONOGRAPH

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

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

**Second Phonograph $______**

### 4. TAPE RECORDER AND PLAYBACK

Of all audio equipment, tape machines vary most widely in design, performance, and price. You can get a little battery operated unit, light enough to carry on a strap over your shoulder, that gives moderately good reproduction, or a professional model that is flat above 15,000 cycles and is portable to the extent that it has handles so that two men can carry it a short distance. There are excellent models intended for permanent installation priced from $100 to $3500. A few are playback machines only, but most perform the dual functions of recording and playing back.

From the foregoing, it is clear that you must know just what you want to do with a tape machine before you buy it. Both audio quality and price depend to a considerable extent upon the tape speed. Most machines have two-speed drives. A machine operating at 1½ and 3½ inches per second will record speech at moderately good quality, but music is only fair. At 3¼ and 7½ ips., speech is excellent, and music is equal in quality to the reproduction capabilities of moderately-priced audio systems. If you want the very best recordings — and they can be practically equivalent to the original speech, music, or sound effects — then you will require a machine that operates at a tape speed of 15 ips. With such a machine you will need a microphone of top quality, and a real high-fidelity system to reproduce everything that is recorded on the tape.

This brings up again the importance of consistent quality in all associated components. For example, inexpensive microphones are supplied with machines operating at 1½ and 3½ inches. Nothing would be gained by using a $150 microphone with such a tape recorder, nor is there any advantage in playing the tapes on a three-way loudspeaker system.

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

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

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[www.americanradiohistory.com](http://www.americanradiohistory.com)
The Speakers

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

Room Acoustics

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

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

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

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

Compatibility

There are several ways in which to produce binaural records. The one chosen here is especially planned to yield complete compatibility with existing records and record players. The BN series is recorded outside-in at 33 1/3 rpm. It may be played back successfully on an ordinary phonograph with a single cartridge, the same as any LP, one band or “ear” at a time, until such time as a binaural phonograph conversion is made. After conversion, the binaural arm still can be made to play ordinary records simply by raising one of the two cartridges off the record.

The Invisible Clock

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

Using loudspeakers instead of earphones changes binaural sound at once from a tinkerer’s hobby into a potentially popular medium. But it also complicates the technical approach: we must abandon any idea of microphone spacing at six inches, and build a new technique which correlates the spacing and positioning of the recording microphones with those of the reproducing loudspeakers. This means that the makers of a recording must keep their spacing of microphones down as nearly as possible to measurements which can be duplicated in a living room. The eventual fine adjustments, however, must be made by the owner of the living room and the loudspeakers. To help him place the latter just right, we have made a test disk—a binaural recording of a grandfather clock. When the listener has his speakers placed and spaced exactly right against one wall of his room, a phantom clock will seem to be ticking precisely halfway between them. All our BN records will be made to reproduce properly through speakers placed according to the test record.

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

Binaurally as monaurally, disks have certain advantages over tape for home listeners, in convenience, in economy, in plain availability. The future of binaural is up to the record companies. They have had opportunity to discover, through microgroove, that if they but furnished the records, the customers would contrive or acquire equipment to play them on. Once the equipment exists in quantity, the FM-AM broadcasters and tape-machine makers will also begin to benefit.
TRACTION has grown up that, to express the absolutely last word in true swank, a home-music installation must be built into the walls of its owner's dwelling. This is unfortunate. Plenty of people with adequate wealth and taste to want and acquire the best in equipment do not happen to own the houses they live in. Hence their equipment must be detached, movable. Some dwellers in apartments and rental houses do not even have — shudder if you will — corners wherein to put separate speakers. Below are two views of a one-box installation designed and owned by Chicagoan Ken Schmid and good-looking enough to suit anyone. It contains a Meissner tuner amplifier, a 15-in. Altec speaker, a Webster changer with Pickering cartridges, all housed in a modified Drexel buffet. The speaker chamber encloses 9 1/2 cu. ft., yielding good bass. On the opposite page is something much vaster, contrived by Gerald Shirley, of Televex. An idea of its size may be obtained by scaling it against the record albums visible in the lower picture. At that, it is not a self-contained music system. It houses equipment which feeds a Brociner-Klipsch corner-horn speaker not shown in the photographs, although mounted in the equipment-
cabinet are two 8-in. PermoFlux speakers, for monitoring or use with non-musical TV material. The cabinet itself is fabulous. Of English harewood veneer, it was designed by Tommi Parzinger, made by Hofstatter's Sons, Inc., New York, and cost $3,000. It is 8 ft. long. Perhaps it is unfair to describe it as a mere cabinet; it could almost be called a containment policy. The components it houses are: a Browning RJ-20-A FM-AM tuner; a Brook amplifier; a Rek-O-Kut turntable with Pickering arm and Pickering diamond cartridges; Webster changer with triple-play GE cartridge, diamond styli; a Radio Craftsmen TV chassis with 24-in. tube; a Masco tape recorder, and an RCA 16 mm. sound-movie projector. To get the full picture, a reader should also visualize the 100-ft. TV-FM mast with rotor in the back yard. One of the two tuning-eye tubes, visible at the right, indicates station-signal strength! Concealed in a slot above the TV tube face is a 36-in. movie screen which can be pulled down like a window-sash. Below the screen are AC outlets to power the projector and an input for its own audio amplifier. The whole giant box moves on rubber rollers. A novel accessory: the remote-control “Com-muter” made and sold commercially by Televex at $2. It is simply a remote switch by which a TV commercial can be rendered instantly soundless, hence the name: commercial muter. More modest ventures into the rectilinear are shown on the following page, the top item being a product of Audio Arts, Chicago, the icwter of Los Angeles'
Kierulff. One gives positional unity to loudspeaker, TV screen and tuner and would have to be fed broadcast or recorded music by tuner and record player elsewhere. The lower picture suggests the elsewhere — where else but at the chairside? Actually, this particular arrangement would not be ideal. If the radio tuner's amplifier were housed with speaker and TV tube, it would be too far from the tuner. If it were housed with the radio tuner, the TV tuner's audio output would have to be led across the room to the amplifier and back again to the loudspeaker. In the chairside cabinet, Kierulff has made one of a number of compromises (there is no real solution to the problem he faced). He chooses to let the radio station hunter stand up, makes the record-lover squat for his music. Perhaps Kierulff theorizes that the lady of the house is usually the greater radio user, hence should be spared having to grovel for her music. Another possible arrangement, which sometimes traps the unwary, is to give the record player top position—and a hinged lift-lid. This has interesting party possibilities, since a guest always puts a highball down on the lid just as the host lifts it.
Complications have set in . . .

Below is a view of what has been referred to (in awed whispers) around the office for a fortnight as The Thing. The Thing is the creation of A. J. Leftwich, Jr., a Florida resident. As a result of life in the bracing air of the Gulf Stream breezes, he has developed the magnificent elfrontery which enables him to claim that he contrived The Thing for the benefit of the little woman, probably the least likely story heard on these premises since the associate editor got the word that the Dodgers would take the Series in straight games. On the gold-blonde mahogany face it presents to a flinching world, The Thing bears 19 control knobs, 62 push-buttons, 2 dials, 3 miscellaneous switches, 4 plug-in sockets, 12 pilot lights, colored red, green and amber, and a clock, wired to turn programs on and off. The little woman, it may be deduced, is not actually very little, since the cabinet housing The Thing is a full 4 ft. tall and topped with a lift-lid which exposes two record changers, a Webster and a Seeburg. Other sound sources contained in its innards include a Bogen R602 AM-FM tuner, an RCA 6T short-wave radio (audio out) and an RCA 9T77 TV receiver (the picture tube being housed elsewhere, together with a GE 1201D master speaker. Every room in the Leftwich menage has a built-in loudspeaker, all fed by The Thing). Seated at the controls of The Thing, Mr. Leftwich can operate two audio amplifiers, through the six knobs paired in the lower corners. The five knobs in between enable him to select and channel his sound sources. Above the left set of amplifier controls are those which adjust TV volume, contrast and brightness. When desired, the TV audio-detector output can be switched to one of the high fidelity amplifiers. One switch permits him to cut TV sound, silencing objectionable commercials (a growing practice, apparently). Four banks of push buttons arrange for the conveyance of sound to the various rooms in the house. The monitor-speaker, top left, allows him to temper said sound for the room's occupant. In case nobody but him wants to listen, a contingency which might just possibly arise, there is a jack-socket for earphones. Finding suitably varied knobs for all these functions, Mr. Leftwich reports, proved to be quite a chore, but he got them. Next he plans to acquire a tape recorder, which, through some unaccountable oversight, The Thing still lacks.

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

Some audio enthusiasts really don't want to hide the working parts of their rigs. Others can't. One of the two is LCDR Palmer McCurdy, a Navy engineer officer, who has set up in his quarters the attractive and functional rig shown at the left. It comprises a Heathkit tuner, a pre-amp and equalizer, a Partridge-Williamson amplifier, a three-way network (375 and 2,000 cps.) feeding a University tweeter, ten 6-in. cones and a Jensen P-12P in an air-coupler.
"Take a TV set, two Concertones, a Jim Lansing speaker plus a Brook amplifier and a Brooks FM tuner, plus a 16-in. Rek-O-Kut turntable, plus a fairly large tape and record collection and you can imagine how crowded our 12 by 25-ft. living room was, and why the law was laid down from headquarters to 'do something about it'."

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

"I had tried corner cabinets for all but the tape recorders and the turntable, but that didn't help much. Obviously, I had to expand in another direction. Your various articles on ways and means of expanding couldn't apply here unless I got rid of Mama's piano, so I was more or less on my own. Then my eyes lighted on our screened-in side porch. This was one of those dinky affairs, really too narrow (10 ft.) to use much and, besides, the porch was cut into by the living room fireplace chimney. Why not close in the porch, cut a large archway through the side wall of the living room from the fireplace to the rear of the house and use all that porch space? Solid walls could be installed where the screens were, the floor could be raised to the level of the living room floor, and windows arranged at each end of the room.

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

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

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

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

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

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

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

The equipment chosen represents many months of search and trial. I wish you could hear it."
all this is NOT but a dream

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

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

THIS IS the story of a high fidelity system.

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

Second, though the system be beyond the means of most, so too are the sleek cars designed for Indianapolis. Yet the Ford owner would do well to examine the engineering of these super-cars. And, though the installation to be described here employed two $700 speaker systems, the same principles can be applied to two lowly 12-in. units, with a marked improvement in sound.

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

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

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

Selection of Equipment

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

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

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

Two Complete Speaker Systems Used

As a result of his tests, Mr. Burke recommended more than one speaker system if possible, since "Elaborate music is most eloquently sounded when emitted simultaneously from several points." With a multi-speaker system, the listener can be bathed in a sea of musical sound, particularly effective for orchestral music, even when reproduced at low levels. So to the basic system we add a second Patrician four-way loudspeaker system.

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

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

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

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

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

Speaker Balance Controls

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

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

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

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

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

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

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

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

**Architectural Considerations**

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

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

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

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

**Matching the Decorative Scheme**

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

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

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

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

**Installation and Ventilation**

The three power amplifiers were mounted side-by-side below the turntable and record changer in the end wall of the living room beside a convenient lounge. Since the heat generated by three heavy duty power amplifiers for best coverage with different loudspeaker positions. The first speaker was placed in a corner at the living room end. The second was set into the back wall of the room at the junction of the living-dining room sections—a position favored by the owner for aesthetic reasons, and which acoustical studies proved to be entirely satisfactory musically, in spite of the fact that the speaker then directly faced the front wall which consisted of concave glass and wooden surfaces.

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This luxurious modern living room was the decor into which the finest of home music systems was to be installed. The illustration below shows the room before the installation was started. Even when complete — with two four-way speaker systems, three amplifiers, and a complete control panel, the only visible change was the addition of a single speaker cabinet in one corner, skillfully blended with the interior finish: note the small picture at upper right. The control panel, turntables, and FM-AM tuner (left) are normally completely hidden behind flush panels.

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

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

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

Minimizing Hum

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

Accessibility of Equipment

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

In every possible way, panels and shelves were designed and constructed to harmonize with the functional theme of the design. In fact, the entire system can be completely concealed, with the single exception of one corner speaker. In view of this concealment, a small neon glow lamp was mounted in an inconspicuous external spot to give a prominent, albeit discreet, indication that the equipment was turned on.

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

Conclusion

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

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

Now we can only wonder what the "ultimate" will be like which we may be privileged to install in—-1957? That is the challenge of the future: to see how outmoded we can make a 1952 installation, judged by 1957 standards.
WHENEVER one talks about unusual applications of recorded sound in this country, the name of H. Lynton Fletcher immediately springs to mind. Mr. Fletcher has been a BBC engineer, announcer, producer and, during the war years, was Recorded Programmes Director for the Corporation. He is Chairman of the Association of Professional Recording Studios and a director of a London company specializing in sound recording.

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

A "talking tape" consists of a length of plastic tape (up to a maximum length of 24 inches) embossed on one side with a recorded message, and a stiff card, small box or commodity package, to which the tape is attached by knotting one end and threading through a small hole in the card or container. When the tape is fitted to the card or container the message can be played by simply running the fingernail down the embossed side of the tape. Apart from advertising matter, the immediate application is for Christmas and greeting cards. Tapes are normally supplied to the trade in hanks containing approximately 250 tapes, each tape being embossed with the required recorded message and marked for cutting and knotting. The manufacturing process is covered by patents, and details are not released at present.

THE HISTORY of magnetic recording has been written innumerable times in recent years but one might justifiably ponder what the Danish engineer Valdemar Poulsen, who exhibited his magnetic wire recording machine at the Paris Exposition in 1900, would think of today's developments in the field. The full impact of magnetic recording, particularly tape systems, is now striking the British market and in the current issue of a popular radio periodical here at least fifteen advertisements of magnetic recorders appear. It need hardly be added that the price and technical quality of these units vary over a wide range. A good quality domestic tape recorder costs around $200 to $225 and the professional type recorders, with 15 and 30 ips. tape speeds, are priced from $1,680 upwards.

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

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

It has been my privilege to attend many technical meetings with him and at one week-end conference I
recall long discussions, lasting until the early hours of
the morning and restarting even before breakfast! The
fruits of such willingness to talk about the problems
of sound reproduction and how best to solve them are
seen in his remarkable QUAD amplifier and Corner Rib-
bon type loudspeaker, which in combination produce a
sound-quality that has to be heard to be believed.

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

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

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

**My Attention** was directed the other day by a
BBC friend, Mr. Wheatley, to the wording that accom-
panies an old print in St. Sepulchre's Church, Holborn,
London:

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

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

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

Brandenburg Concertos No. 2 in F and No. 4 in G
London Baroque Ensemble; Karl Haas, cond.
WESTMINSTER WL 5113. 12-in. 13. 17 mins. $3.95.

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

BACH

Cantata No. 4: Christ lag in Todesbanden
Anny Felbermayer (s); Alfred Uhl (t); Hans Braun (bne). Choir and Orch. of the Bach Guild; Felix Prohaska, cond.
BACH GUILD BG 511. 12-in. 23. 30 mins. $5.95.

Cantata No. 203: Phoebus and Pan
Anny Schlem (s); Diana Eustari (a); Herbert Reinhold (t); Gert Lutze (t); Karl Wolfram (bne); Gerhard Niese (bne). Choir and Orch. of the Bach Guild; Helmut Koch, cond.
BACH GUILD BG 514. 12-in. 42 mins. $5.95.

Cantata No. 205: Aelius Appeased
Anny Schlem (s); Diana Eustari (a); Gert Lutze (t); Karl Wolfram (bne). Choir and Orch. of the Bach Guild; Helmut Koch, cond.
BACH GUILD BG 515. 12-in. 42 mins. $5.95.

Cantata No. 210: O bolder Tag
Magda Laszlo (s). Vienna National Opera Orch.; Hermann Scherchen, cond.
WESTMINSTER WL 5138. 12-in. 40 mins. $5.95.

Our best Bach has come from these two companies. The five cantatas here will enliven music-lovers' sentivity while defating music-lovers' pocketbooks. The two church cantatas, No. 4 and 140, have been recorded elsewhere, but not in this coupling. 140

ought to be compared to a very different, more stately concept of Scherchen on Westminster WL 5132, the vocal honors of the two in conflict and the sound — very good in both cases — representing two methods of adjustment. No. 210 and 205, exhilarating stuff, receive a properly informal presentation and tingling sound, plus a touch of anticipatory echo. The opening chorus of Phoebus and Pan, with its snarling, clamorous winds establishing the impudent atmosphere, ought to be played to everyone who equates Bach to the giganticism of the Mass and the St. Matthew Passion: and such a Bachite will find in Aelius Appeased six innings of unflagging sport. The other secular cantata, No. 210, a wedding cantata not to be confused with the better-known No. 202, is a series of very high solos for soprano and orchestra, sung with beautiful distinction — in spite of difficulties with its calisthenics — by Magda Laszlo, accompanied by a superbly delineated small orchestra, and recorded with glistening exactitude. Phoebus and Aelius are also on Renaissance X 42 and 43, unfortunately not received for comparison with the Bach Guild records. — C. G. B.

BACH

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

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

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

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

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

D. R.

**BACH**

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

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

**PERIOD** SPLP 547. 12-in. 18'/2, 18'/2 mins. $5.95.

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

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

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

D. R.

**BACH**

*Missa Brevis No. 1 in F Major*  
*Sanctus No. 1 in D Major*

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

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

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

Swabian Choral Singers, Stuttgart; Same orch. and cond. as above.

**RENAISSANCE** X 45. 12-in. 36 and 4 mins. $5.95.

Bach composed four so-called "short Masses" (Missa Breves) consisting of the Kyrie and Gloria only, thus lacking the Credo, Sanctus, Benedictus and Agnus Dei portions of the full Mass. While the identity of the person for whom he wrote them has never been determined with certainty, it is believed that he composed them about 1737 for Count Franz Anton von Sporck. Since the Count was a Catholic, it is unlikely that he knew any of Bach's Protestant church music. For that reason, Bach unhesitatingly drew upon his tremendous store of cantatas, drawing from them various ones of the more worthwhile movements and transforming them into these Masses. Thus, very little, if any original music was composed for these works. That in no way lessens their value, since Bach exercised excellent judgment in choosing the movements. The A Major Mass especially is outstanding for its depth of feeling. The "Qui Tollis" section of that work reveals its origin in a cantata through the "personal" nature of the writing. The music given to the soprano soloist has a warmer and more intimate feeling than one ordinarily finds in a "Qui Tollis".

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

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

D. R.

**BEETHOVEN**

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


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

There are now eight editions of the work, six of them imposing in various ways and different degrees. The product of the factors of interpretation and sonic reproduction gives particular prominence to three: Gieseking-Karajan on Columbia ML 4533, Backhaus-Krauss on London LL 417, and this one. Young Mr. Badura-Skoda's tempi in entering this competition is justified by the results, although to those familiar with Dr. Scherchen's orchestral style this will appear as the conductor's interpretation — introspective, a little deliberate, carefully defined and dynamically exuberant. The spotless formations of Gieseking are not in Badura-Skoda's province, neither are the affectionate warmth of Backhaus and Krauss. Badura-Skoda and Scherchen are blessed with superior overall sound. The ratio of piano to orchestra seems perfect. Orchestral detail is finely etched, the string pattern always distinct, and the woodwinds are voluptuously shaped and never obscured although permitted no unoward eminence. Piano-tone, top and bottom, loud and soft, is very close to reality.

C. G. B.

**BEETHOVEN**

*Coriolan and Egmont (Overtures)*

Philadelphia Orch.; Eugene Ormandy, cond.

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

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

C. G. B.

**BEETHOVEN**

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

Barylli Quartet.

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

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

C. G. B.

**BEETHOVEN**

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

Barylli Quartet.

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

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

C. G. B.

**BEETHOVEN**

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

Barylli Quartet.

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

In the Fifth and Eleventh Quartets, noted above, the Barylli are found less convincing than other versions, but in the immeasurably greater Fourteenth their record is the one to have. Not that their
excellent interpretation is the best — Budapest on Columbia and Pascal on Concert Hall having in different ways a more affecting eloquence — but the synthetic mean of playing plus recording dividied by two is strongly in the Barylli favor because of the exceptional sound granted to them by their engineers. The achievement of this sound is to be at once spacious and analytic — to grace the hearer with an opulent, rounded tone and simultaneously bare the speech of each instrument in clarity. The sound’s richness stimulates the aesthetic responses; and the revealed linear interplay, as if a separate spotlight were on each subject against a velvet background, is an intellectual and emotional excitant found rarely in the concert hall and present in only a few painstakingly supervised recordings. The vitality of reproduction has a musical value, a physical impact, of its own: the listening experience is personally felt as if the listening nerves were uncovered and vulnerable to the penetration of music in echelon, and from unprecedented directions.

C. G. B.

**BEETHOVEN**

**Romance No. 1 in G Major, Op. 40**

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

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

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

C. G. B.

**BEETHOVEN**

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

Egon Petri, piano.

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

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

C. G. B.

**BEETHOVEN**

**Sonata for Violin and Piano No. 5 in E Flat Major, Op. 12**

Zino Francescatti, violin; Robert Casadesus, piano.

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

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

Max Rostal, violin; Franz Osborn, piano.

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

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

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

C. G. B.

**BEETHOVEN**

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

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

DECCA DL 9655. 12-in. 21, 24 mins. $5.85.

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

C. G. B.

**BERG**

**Lulu**

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

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

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

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

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

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

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

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

A. F.

BERNSTEIN

Three Dances from Fancy Free—See Walton

BLOCH

Israel Symphony
Soloists of the Akademie Choir; Vienna State Opera Orch.; Franz Litschauer, cond.

VANGUARD VS 423. 12-in. 35 mins. $5.95.

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

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

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

J. F. I.

BRAHMS

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

Curtis Quartet.

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

This is apparently the first commercial musical record whose two sides total more than an hour's duration. One hears frequently the objection that very long records distort as the stylus approaches the spindle; that is, as the linear speed diminishes; and there is some truth in the objection. Fortunately such distortion is so gradually graduated that it is not noticed if a record is played in the normal progressive manner. It can sometimes be made obvious if one jumps the stylus from the circumference to a place near the center. It is also true that such a distortion is much less obvious than a kind seldom mentioned, and present in 50 percent of records: that caused by the erratic speed compelled by eccentricity. Until our records are perfectly centered we need hardly dread the lesser fault of reduced efficiency near the center.

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

C. G. B.

BRAHMS

Trio for Piano, Clarinet and Cello in A Minor, Op. 114
Mieczyslaw Horszowski, piano; Reginald Bell, clarinet; Frank Miller, cello.

DECCA DL 7524. 10-in. 23 mins. $3.85.

Trio for Piano, Clarinet and Cello in A Minor, Op. 114
Trio for Piano, Violin and Horn, in E Flat, Op. 40

Franz Hollerschek, piano; Leopold Wiach, clarinet; Franz Kwarda, cello; Walter Barylli, violin; Franz Koch, horn.

WESTMINSTER WL 5146. 12-in. 23, 28 mins. $5.95.

Styles more divergent would be hard to imagine. Perhaps the silky melancholy of the tender Horn Trio will attract the preference of music-lovers to the Hollerschek et al Clarinet Trio. This is at once dark, moody and thapsodic, less emotionally stable than the Decca, which has more rhythmic sharpness and brightness, plus Kell's cooler tone and spryer enunciation. The Miller cello is very persuasive, too, and the Decca interpretation is the one preferred per se here. Recording values are good in both cases, Westminster more cushioned, to match the playing. A version on Lyricor (19) less subtly stylized than these, is supported by a strong and lifelike sound, and is paired with the Mozart Clarinet Trio.

C. G. B.

BRAHMS

Variations and Fugue on a Theme by Handel, Op. 24
Julius Katchen, piano.

LONDON LS 552. 10-in. 26 mins. $4.95.

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

C. G. B.

BUXTEHUDE

Three Choral Cantatas
Margot Guilleaume (s); Ernst Max Luehr (bs). Musikrunde Hamburg (Ruth Meuller, dir.); Instrumental Ensemble of the Bach Anniversary, Hamburg. Marie-Luise Bechter, Director and Organist.

Vox PL 7430. 12-in. 24, 15, 57/16 mins. $5.95.

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

However unsuccessful he may have been in his human progeny, though, Buxtehude holds his own in his musical creations. The cantata, Erbarm Dich Mein, O Herr Gott is an example of that body of German sacred music from which Bach himself derived his style. But even if it were not for its historic importance, the work stands on its own as a moving piece of music. One need hear nothing more than the melancholy opening sonata, with its halting rhythms, to
realize that this is no mere scholarly exercise, but rather a touching emotional experience. The performance is pervaded by an over-all feeling of poise which seems exactly right for the music. Margot Guillaume imparts to all her solos, which are actually chorale melodies, a very satisfying warmth of tone. Especially noteworthy is her handling of the final chorale, a piece which she renders movingly and with a convincing, and cation-exposition, leading up to its expression, thanks to the fine acoustics and balance, and to the excellent direction. The bass, Ernst Max Luehr handles his big voice well in both cantatas, although a slightly warmer tonal quality might have been welcome.

One inconsistency must be noted, however, in the repetition of this melody by the chorus. Motivated perhaps by the desire to sound "authentic", the soprano in the chorus sing with a certain "whiteness" of tone, the justification for which is lessened by the fact that the melody has just been sung in the fuller, "modern" manner by the soprano soloist.

In the shorter cantata, Faustwahr, Er trug unsere Krankheit, this same inconsistency is present, but to a somewhat lesser degree. Nevertheless, one cannot help but admire the feeling and texture of all of the chorale portions; the individual lines are heard more clearly.

The bass, Ernst Max Luehr handles his big voice well in both cantatas, although a slightly warmer tonal quality might have been welcome.

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

DEBUSSY

Pelléas et Mélisande

Suzanne Danco (s), Flora Wend (s), Hélène Bouvier (ms), Pierre Moller (t), Heinz Rehfuss (bne), Dettif Olsen (bne), André Vourssin (t), L'Orchestre de la Suisse Romand et chorés; Ernest Ansermet, cond.

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

Irène Joachim (s), Emile Rousseau (s), Leila Ben Sedira (s), Germaine Cernay (ms), Jacques Jansen (t), B. H. Etcheverry (bne), Narcin (bne), Paul Cabanel (bs). Orchestra with Yvonne Gou- vauet and Chorus; Roger Désormière, cond. RCA Victor LCT 6103. Three 12-in. 2 hr. 53 mins. 13 secs. $17.16.

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

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

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

Now, for the first time, devotees of Pelléas et Mélisande have a chance to choose between two full-length recorded performances. The virtue of this production is that it can be an easy one, for each version has surmounted comprehensions that are denied the other. Some devoted and affluent admirers will probably buy both — the London so that they can hear every note in the score reproduced as clearly as anything on records; the Victor so that, by dint of love and imagination, they can overcome the barrier set by an outmoded reproduction and so experience a supremely fine performance.

The Victor issue is a Collector's Label pressing of the performance that was available before the war on 78's. Then it had little competition — an older set of excerpts on Columbia (with Hector Dufranne, who sang the first Golaud, back in 1902, lending his distinguished presence) and a handful of excisions on Polydor. Even in the light of present recording standards it is far from impossible technically, and the performance is magnificent.

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

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

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

The cast is best described as competent. Suzanne Danco does not operate very easily in the narrow borderland between song and speech that is Mélisande's. She ends by singing operatically much of the time, and the fact that the singer is not a great vocalist is thus much more evident.

Nevertheless, one cannot help but admire the feeling and texture of all the chorale portions; the individual lines are heard more clearly, thanks to the fine acoustics and balance, and to the excellent direction. The bass, Ernst Max Luehr handles his big voice well in both cantatas, although a slightly warmer tonal quality might have been welcome. One inconsistency must be noted, however, in the repetition of this melody by the chorus. Motivated perhaps by the desire to sound "authentic", the soprano in the chorus sing with a certain "whiteness" of tone, the justification for which is lessened by the fact that the melody has just been sung in the fuller, "modern" manner by the soprano soloist.

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vigorously in execution, though technically secure. The work itself is sententious, with a tendency to become boring unless performed with more bravura than is present here. Other handicaps include dull piano sound and occasional tape flutter. A good recording by Magaloff is available on London LL 352, a better one, stylistically, by that unique pianist, Simon Barere, on Remington 195-85. J. F. I.

LOEWE

Ballads

Ancient Music of the Church: Schütz, Hammerschmidt, Pecorin, Monneverdi

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

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

D. R.

MAHLER

Songs of Youth (Lieder aus der Jugendzeit)

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

Some of the songs in this cycle have already appeared, with orchestral accompaniments, on Vanguard’s previous issues, VRS 412/413 and VRS 421. This release uses the original piano accompaniment Mahler provided and they seem to be, generally, more effective in this form. Felbermayer and Poell are again the soloists, and the performances are notable for the high standard of artistry and vocalism of both singers and for sympathetic and knowing support from Graef at the piano. Vanguard’s sound is clear and resonant, the balance reasonable, though the piano might be a trifle closer. J. F. I.

MOZART

Concerto for Violin No. 1 in B flat Major

(K 207)

Concerto for Violin No. 2 in D Major

(K 211)

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

Concerto for Violin No. 7 in D Major

(K 271a)

Rondo in C

(K 373)

Adagio in E

(K 261)

Rondo in B Flat

(K 269)

Aida Strucki, violin, in the Concerto. Gustav Swärdström, violin, in Rondo and Adagio. Tonstudio Orch., Stuttgart; Gustav Lund, cond. PERIOD SPLP 548. 12-in. 26, 7, 7, 5 mins. $5.95.

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

C. G. B.

MOZART

Concerto for Violin No. 4 — See Prokofiev

MOZART

Quintet for Clarinet and Strings in A Major

(K 581)

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

The sixth LP of a work irresistible to clarinetists and listeners is as much tapestry as narrative. As such it has no peer for its seductiveness of tone, propriety of contrast, lofty serenity of line, homogeneity of style and lambent glow of subdued color. It is chamber-music playing of detached perfection, gorgeous, unique and of questionable application to the tough core of this Quintet. Acknowledging perforce that the larghetto in this playing has an ethereal flotation invulnerable to cavil, the hearer may find the persistent restraint of the quicker movements too placid, or languid even delicately fatigued. It is not inconceivable that this may be regarded as a discreet and tender emasculation, operated with boundless good taste. It would be wise to compare it with the warm romanticism of the Westminster edition, or the crisp manliness of the Decca. Sound in itself is satisfactory here, but the accompanying hum is a hindrance to the pure absorption of all this purity.

C. G. B.

MOZART

Sonatas for Piano and Violin No. 24 in C

(K 296)

No. 25 in G

(K 301)

No. 28 in E Minor

(K 304)

Paul Badura-Skoda, piano; Walter Barylli, violin. WESTMINSTER WL 5150. 12-in. 16, 12, 13 mins. $5.95.

Sonatas for Piano and Violin No. 20 in E Flat

(K 58)

No. 29 in A

(K 305)

No. 35 in F

(K 377)

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

These are in succession to Nos. 17 and 39 on WL 5109, and the three discs perhaps signal the unassuming inception of what unquestionably will be a notable series if continued. For years the touchstone for the Mozart Piano-Violin Sonatas has been the Kraus-Goldberg performance for Parlophone, six of which are in Decca DX 103, very fine, but with considerably less vital sound than these newer recordings wherein — especially in 5109 and 5145 — the two instruments present a consummate tonal integrity. Not much sonic display is possible for the pair in concert if they are balanced: we can never expect the intoxicating reward which follows the unloosing of an orchestra in our premises, we always have an apprehension that the engineers will try to escape the limitations imposed by the essential nature of the duo. Here we have no more than a real violin and a real piano, interpreting unique music with unforgotten and serene simplicity, in linear ease and dramatic reticence, and so securely adjusted to each other that the proportions seem instinctive.

C. G. B.

PEIKO

Moldavian Suite — See Prokofiev

PROKOFIEV

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

†Mozart: Concerto for Violin No. 4 in D

(K 218)

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

Salvage of the Prokofiev from '87 was truly imperative; no more phenomenal exhibition of imperturbable musicianship by a fiddler existed on records. The original sound was satisfactory and the LP sound is an improvement. This side is recommended as a definitive performance. The Mozart, in spite of its considerable beauties of execution, emerges aurally vitiated in a muddy recording. C. G. B.

PROKOFIEV

Winter Holiday

†Peiko: Moldavian Suite

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

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

C. G. B.

ROSSINI

Semiramide and Italian Woman in Algiers

(Overtures)

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

Impressively supple and cohesive orchestral playing of an interpretationuntouched by any search for inner values is supported by
Decca's ripest orchestral recording, quite first-class after the edge has been removed from the violins. This is a juicy plum in the valuable "4000" series — corresponding to Columbia's "AAL" — of works averaging about ten minutes per side.

ROSSINI

Six Quartets

The New Art Wind Quintet.

CLASSIC CE 1010. Two 12-in. 1 hr. 19 mins. $11.90.

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

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

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

J. F. I.

ROSSINI

William Tell

Graziella Sciutti (s), Rosanna Carteri (s), Miti Truccato Pace (ms), Mario Filippeschi (t), Tommaso Soley (t), Antonio Pirino (b), Giuseppe Taddei (bne), Giorgio Tozzi (bs), Plinio Clabassi (bs), Fernando Corena (bs), Mario Zorgniotti (bs). Chorus and Orch. of Radio Italiano, Turin; Mario Rossi, cond.

CETRA-SORIA XTV 1232. Four 12-in. 2 hrs. 45 mins. $25.80.

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

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

C. G. B.

RUBINSTEIN

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

Oscar Levant, piano. Philharmonic-Symphony Orch. of New York; Dimitri Mitropoulos, cond.

COLUMBIA ML 4599. 12-in. 39 mins. $5.45.

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

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

J. F. I.

SCARLATTI

Sonatas, Vol. II

Kathleen Long, piano.

LONDON LL 524. 10-in. 24 mins. $4.95.

Sonatas, Vol. III

Fernando Valenti, harpsichord.

WESTMINSTER WL 5139. 12-in. 54 mins. $5.95.

These are continuations of series which we may assume will go on until public interest tires. No use comparing harpsichord (for which Scarlatti wrote) with piano, especially since only one little Sonata, 1. 10, is common to both instruments on disks. Miss Long has a fetching, charming and expert primness, and it is doubtful that Valenti's peer exists as an expositor of the flash of these works. Recording is good in both records, brilliant on the Westminster, whose volume must be reduced for verisimilitude.

C. G. B.

SCHUBERT

Impromptus, Op. 90 and 142

Sonata for Piano No. 10 in A, Op. 120

Paul Badura-Skoda, piano.

WESTMINSTER WL 205. Two 12-in. 160 mins. $5.95.

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

C. G. B.

Gérard Souzay: a Frenchman showed Teutonic romantic intensity.

SCHUMANN

Dichterliebe, Op. 48

Pierre Bernac (bne); Robert Casadesus, piano.

COLUMBIA ML 2210. Two 10-in. 29 mins. $4.00.

Dichterliebe, Op. 48

†Wolf: Four Songs

Gérard Souzay (bne); Jacqueline Bonneau, piano.

LONDON LL 535. 12-in. 9 mins. $5.95.

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

C. G. B.
SCHUMANN

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

Joerg Demus, piano.
Westminster WL 5142. 12-in. 33 1/3, 6, 9, mins. $5.95.

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

SMETANA

Richard III, Op. 15 and Misc. other works

Various soloists (unnamed) and Czech Philharmonic and Broadcasting Orch.
Symphonic S 1, 2, and 5. 12-in. $5.95.

The performances are attributed to the Czech Philharmonic Orchestra, the Chorus and Orchestra of the Czech National Theatre, the Czech Broadcasting Choir and Orchestra, and some unnamed soloists.
In this critic's experience the records contain the nadir of LP sound. The following faults occur and some never abate: distortion, opacity, insufficient volume, inconstant pitch, variable characteristics, lack of fortissi, falsification of timbre, microphonic flutter, absence of differentiation and even occasional resemblance to the agitation of broken glassware.
C. G. B.

SPOHR

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

Stradivari Records Chamber Music Ensemble in Grand Nonette; Alice Howland (s); David Weber, clarinet; Leopold Mittman, piano, in Six Songs. Stradivari STR 609. 12-in. 28, 21 mins. $5. 95.

A captivating little period piece by Spohr, a composer once considered the equal of Beethoven and Mozart. Time has rather exploded the myth since, apart from an occasional performance of one of his many violin concertos, practically nothing remains of his music.
This is a most cunningly constructed composition, with sweet appealing tunes, and written most gratefully for the instruments involved. The instrumentation is a little unusual - the scoring is for violin, viola, cello, bass, flute, oboe, clarinet, bassoon and horn - yet the meshing of these voices is wonderfully contrived. It cannot be easy to play, yet, from this delicate, relaxed and beautifully balanced performance, it sounds that way.
The six songs for mezzo-soprano, have a rather period air about them, with their uncomplicated vocal line and the use of the clarinet to simulate the sound of birds, brooks and winds. They are sung (in German) by Alice Howland, with just the right amount of, for want of a better word, charm. The Stradivari engineers have capably transcribed the sound on both sides - especially successfully with the Nonette.
J. F. I.

STRAVINSKY

Suite Pour Petit Orchestre No. 1
Suite Pour Petit Orchestre No. 2

The Little Orchestra Society; Thomas Scherman, cond.
Decca DL 7549. 10-in. 12, 13 mins. $3. 85.

A most enjoyable and rewarding disk, which is remarkable for the vivacity and lucidity of Scherman's exposition of both suites - very spirited, polished orchestral work - and, even more so, for the wonderfully clean, live and shining sound Decca's engineers have captured and etched on this record, one of the finest feats from any American studio in the past year.
The coupling is ideal, the wryly humorous and satiric Stravinsky suites make a perfect companion for the early, rather jazzy, Stravinsky-influenced music of Hindemith.
The performance is marked by the startling interior definition of instrumental voices, the result of Scherman's ability to maintain a perfect orchestral balance. The curious, almost laughing timbre of the brass, is vividly and cleanly delineated. The kettledrum sequence and hiss furiously, but also precisely, and little bells tinkle with amazing fidelity. To all these sound virtues, Decca has added unusually quiet surfaces. This is an exciting release.
J. F. I.

TCHAIKOVSKY

Swan Lake (Complete Ballet)

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

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

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

WALTON

Four Dances from Façade
Bernstein: Three Dances from Fancy

Free

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

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

WEBER

Der Freischütz and Oberon (Overtures)

New York Philharmonic-Symphony Orch.; George Szell, cond.
Columbia AAL 19. 10-in. 9, 9 mins. $2.55.

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

WOLF

Four Songs — See Schumann

MISCELLANY

ENCORES BY ZINO FRANCESCATTI

Friedman Bach-Kreisler: Grave; Kreisler: Allegretto (in the style of Niccolo Paganini); Préludium and Allegro (in the style of Paganini); Minute (in the style of Pergolesi); Londonerry Air; Poulenc-Heifetz: Presto in B-flat Major; Valle-Heifetz: As pd

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

Zino Francescatti, violin; Artur Balsam, piano.

**COLUMBIA ML 4534.** 12-in. 42 mins. $5.45.

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

**RICHARD TAUBER FAVORITES**

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

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

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

Typical Tauber performances . . . stylish, artful, with masterly phrasing and a considerable dash of the well-known Tauber vocal "charm". Originally issued in the early 1930's, the recordings show their age quite badly. Balance is poor, the singer being on top of the mike, the orchestra very much in the background. Orchestral sound tubby and very enclosed; inferior surfaces.

**HIGHLIGHTS**

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

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

**LONDON LS 503.** 10-in. 24 mins. $4.95.

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

**SACRED ARIAS BY THE GREAT MASTERS**

Haydn: With Verdure Clad (from The Creation); Mendelssohn: Hear Ye, Israel! (from Elijah); Bach: My Heart Ever Faithful (from the Cantata No. 58 for Pentecost); Bach: Sighing, Weeping (from the Cantata No. 27); Handel: I Know that My Redeemer Liveth (from The Messiah).

Eleanor Steber (S). **Columbia Symphony Orch.; Max Rudolf, cond.**

**COLUMBIA ML 4521.** 12-in. 31 mins. $5.45.

A generally disappointing record. Not only does the style of these wonderful arias elude Steber, but she has trouble with the tessitura of some and sings the texts of most without regard for their meaning. The orchestral accompaniments under Max Rudolf's direction seem excessively careful and subdued. The sound is good enough, but the balance is deplorable. The singer is so close to the mike, that in the Bach Sighing, Weeping, I expected to see her emerge from my speaker and land in my lap.

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

**MUSIC OF THE LITURGY IN ENGLISH**

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


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

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

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

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

**D. R.**
three times nine

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

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

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

So was Westminster’s.

So was RCA Victor’s.

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

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

Westminster’s Ninth utilized Dr. Hermann Scherchen, beloved of hi-fi enthusiasts, conducting the Vienna State Opera Orchestra and the Weiner Singakademie chorus. His soloists were Magda Laszlo (s), Hildegard Reesselmajdan (c), Petre Monteaneu (t) and Richard Staden (bs).

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

Mr. Farkas, a London executive entrusted with publicity, among other functions, never has refused a battle in his life, and didn’t now. “Proclamations,” wrote the doughty Mr. Farkas, for the benefit of all reviewers, “will issue forth stating that at long last the great 9th is available by the illustrious Maestro ……..” Mr. Farkas disdained such proclamations. The vocal portions of the London Ninth, he affirmed, with a flick of his shift-key, “NEVER HAVE BEEN BETTER PERFORMED ON RECORDS AND IN ALL LIKELIHOOD NEVER WILL BE.” Moreover, he pointed out, the London version was “COMPLETELY FREE FROM TAMPERING WITH CONTROLS IN ORDER TO ESTABLISH FALSE DYNAMIC EXCITEMENT.” The latter dig was directed, seemingly, not at the illustrious Maestro A——o T------i, but at those sinister characters, the sound-engineers of W------r, gentry famed for an uncanny knock with trumpets and drums.

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

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

J. M. C.
THE MUSIC BETWEEN

By EDWARD L. MERRITT, Jr.

The Lyric Stage

In the past two years, the only Broadway musical considered worth recording by Decca, originator of the original-cast show-album idea, has been The King and I, graced by the late beloved Gertrude Lawrence. Columbia, which shares primacy in the field with Decca, did a perfunctory job on A Tree Grows in Brooklyn and devoted itself, apart from this, to show-albums "reconstructed" from past stage performances by vice president Goddard Lieber- son, a past-master at this unusual art. Capitol, to make clear that it was in business, put out Top Banana. Only RCA Victor, for some reason, seems to have gone scouting optimistically among the early-1952 offerings. It is a pleasure to report that its effort (more specifically, that of its "pop" artist-and-reperatory chief, Hugo Winterhalter) was rewarded. It came up with one tolerably amusing set, Paint Your Wagon, one very good one, Wish You Were Here, and one absolute top-notch job, New Faces of 1952, easily the best show-album since Gypsy and Dolly. Later, we may expect more, disk-wise, of the 1952-53 season. Simon Rady, Decca's sage show-album chief, admits to being excited about the prospects, which is a very good omen indeed. Last time Rady reported excitement was when a pair of gentlemen named Rogers and Hammerstein checked in with a musical set in the wide open spaces. Something about a place named Oklahoma.

Wish You Were Here
RCA Victor LOC 1007. 12-in. $5.72.
Original cast, featuring Sheila Bond, Jack Cassidy, Patricia Marand, Sidney Armat. Orchestra and ensemble directed by Jay Blackton. Book by Arthur Kopit and Joshua Logan. Music and lyrics by Harold Rome. Camp Kara-Free; Goodbye, Love; A Social Director; Shopping Around; Mix and mingle; Could Be, The Light Fantastic; Where Did The Night Go; Certain Individuals; They Won't Know Me; Summer Afternoon; Don Jose of Far Rockaway; With You Were Here; Relax; Flattery.

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

New Faces of 1952
RCA Victor LOC 1008. 12-in. $5.72.
Virginia Boyer, June Carrell, Robert Clary, Allen Conrey, Virginia de Luce, Michael Dominick, Alice Ghostley, Ronny Graham, Patricia Hammerlee, Eartha Kitt, Joseph Lautner, Carol Lawrence, Paul Lynde, Bill Mullikin, Carol Nelson, Rosemary O'Reilly and Jimmy Russel, with orchestra and chorus conducted by Anton Coppola. Words and music mostly by Ronny Graham, June Carrell, Arthur Siegel, Sheldon Harnick and Michael Brown. Orchestra arrangements by Ted Royal.

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

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

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

Paint Your Wagon
RCA Victor LOC 1006. 12-in. $5.72.
James Barton with Olga San Juan and Tony Bavaar. Orchestra and chorus conducted by Franz Allers. Music by Frederick Loewe. Lyrics by Allen J. Lerner.

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

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

If you like such tunes as I Talk To The Trees, They Call The Wind Maria, I Still See Elita, or Carino Mio, you’ll find the authentic original here for you, and you’ll probably be beguiled with the voice and style of the young tenor, Tony Bavaar, as we were.

Robertta (Music by Jerome Kern. Lyrics by Otto Harbach)
CAPITOL L334. 10-in. $3.98.
Gordon MacRae and Lucille Norman with Anne Triola, with orchestra and chorus conducted by George Greeley.

COLUMBIA CL 6220. 10-in. $3.00.
Juan Roberts, Jack Cassidy, Kaye Ballard, Portia Nelson, Stephen Dougall and Frank Rogier, with orchestra and chorus conducted by Leibman Engel. Produced by Goddard Lieberson.

Lovely To Look At (Robertta)
MGM E 150. 10-in. $3.00.
Kathryn Grayson, Red Skelton, Howard Keel, Marge and Gower Champion and Ann Miller with Carmen Dragon and The MGM Studio Orchestra. Additional lyrics by Dorothy Fields.

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

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

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

Motion picture fans will probably make their choice the MGM disk, for it is produced directly from the sound track of the movie. It bears eloquent testimony of the fact, too. There is more than one spot where the tape has been edited to provide a musical whole, and the editing leaves something to be desired. Overall the sound has the overblown, brassy characteristic of so much of Hollywood’s music and the end result is a strange grotesque of the really lovely melodies of Jerome Kern. So far as the individual performances go, there is really little to praise. Perhaps the most interesting is the duo appearance of the dance team of Marge and Gower Champion who do very nicely with I Won’t Dance. They are, however, no Astaire and Rogers. Red Skelton is completely lost, which unfortunately we cannot say about Kathryn Grayson. As a Hollywood star, she is given headline billing with Mr. Skelton and Howard Keel. As a vocalist she deserves oblivion, provided this example is a true demonstration of her talents. When one realizes the amount of really natural talent and the good songs to be found in this country, it is hard to understand why such a tentative performance, replete with scooping, flatting and vocal simpering needs to be immortalized on wax. When a company is made by a film and Gordon MacRae’s companion, Lucille Norman, one is seriously tempted to paraphrase Hamlet’s sad farewell to Ophelia, saying, leave her to Ted Mack.

E. L. M.

Melodious Miscellany

Andre Kostelanetz and his Orchestra
COLUMBIA ML 4546. 12-in. $5.45.

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

Familiar music has long been the forte of Mr. Kostelanetz and his orchestra. Together with his long list of popular favorites, the conductor has recorded a great deal of the lighter music of Tchaikovsky, of which this disk provides a notable example. One could hardly call the reading of the Romeo profound in any sense of the word, but it is a brilliant delivery of well known music. The brilliance, of course, comes from a virtuoso orchestra and a knowledgeable balance for recording. When it comes to recorded sound, the conductor knows what he wants and he seems to get it over and over again.

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

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

COLUMBIA ML 4481. 12-in. $5.45.

Gershwin: Cuban Overture; Mine (from Let’s Get Married); Highlights (from Porky & Bess); Love Walked In (from Goldwyn Follies).

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

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

One peculiar error has crept into the liner notes for this record. The author credits Mr. Kostelanetz with a first performance of the Cohen Overture. Actually, the fact is that this work was recorded first by Paul Whiteman and his orchestra, with Ray Long and Ray Karges, a good many years back. For those who are detail-minded, check the 1942 edition of The Gramophone Shop Encyclopaedia, page 179. There you will find that Decca Records released the Overture in an Album of George Gershwin Music, Decca Album D-51, the individual disks being numbered D-29053/4.

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

Romantic Reveries
COLUMBIA AAL 18. 10-in.
Virgil Fox at the organ of The Riverside Church, New York.
Wagner: Bridal Chorus (from Lohengrin); Tchaikovsky: None But The Lonely Heart; Hugh McAmis: Dreams; Grieg: Ich liebe dich (I Love Thee); Gounod: Berceuse (from Jocelyn); Mendelssohn: Wedding March (from Midsummer Night’s Dream).

Music for Meditation
COLUMBIA AAL 20. 10-in.
Virgil Fox at the organ of The Riverside Church, New York.
Handel: Largo (from Xerxes); Vienne: Scherzo (from Symphony No. 2, Op. 20); Bach: Air for the G String (from Suite No. 3 in D Major); Sullivan: The Lost Chord; Dvorak: Largo (from the New World Symphony); Elgar: Pomp and Circumstance March No. 1 in D Major.

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

The history of recorded organ music, unfortunately, has been marred by the very obvious difficulties found in recording. For the organ seems to present practically insurmountable problems in pickup, problems tough beyond those involved in the handling of any other instruments. The tremendous amount of air turbulence present in any loud passages matched against soft, the great presence of the bass register, the acoustics of public halls and churches, all these factors combine to face recording engineers with a multitude of headaches. The success of Columbia’s technicians in solving these riddles is amply set forth in these two disks.

Here we have all the brilliance, depth and scope of a great organ. The actual performance of Virgil Fox, in the vernacular of the jazz fan, lifts one. With the exception of the atmospheric Dreams by Hugh McAmis, this is all very familiar music. Music, indeed, known almost by heart by everyone music lover, and generally presented in a more or less perfunctory fashion by most performers. Nor so by Mr. Fox. Listening to these organs...to this pleasant introduction to old friends. This playing gives us a fine example of the organ as it should sound, and reminds us of the reasons for the music’s popularity.

Audre Kostelanetz: saucy vs. chil steel.

For those who enjoy the organ at its best, we should mention another notable recording by the same company. In direct contrast to much of the music on the two Fox disks, Columbia has provided us with a thrilling example of ensemble playing in the organ concert of Francis Poulsen. This record is played by E. Power Biggs with the slickly disguised Boston Symphony Orchestra directed by Richard Burgin. It is an amazing tour-de-force—in fact, a favorite demonstration record with some very astute high fidelity installation men—and its recent appearance on a list of recordings which do not sell leads one to believe that the general reputation of organ music needs a serious reexamination. If you enjoy the organ, this is a fine time to see how well it can sound in your own home. The three disks we have mentioned here deserve your attention.

Curtain Call
DECCA DL 7018-7019. Two 10-in. $3.85 each. DU 1500-1507. Eight 10-in. 78 rpm.
Ted Lewis, Eddie Cantor, Jimmy Durante, Sophie Tucker, Bing Crosby, The Andrews Sisters, The Ink Spot, The Mills Brothers When My Baby Smiles At Me, Wear A Hat With A Silver Lining, The Time To Fall In Love, Makin’ Whoopee; Start Off Each Day With A Song; Inka Dinka Doo; Some Of These Days; Life Begins At Forty; I Surrender Dear; Where The Blue Of The Night Meets The Gold Of The Day; Bei Mir Bist Du Schon; In Apple Blossom Time; If I Didn’t Care; Do I Worry?, Tiger Rag, Paper Doll.

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

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

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

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

Sauter-Finegan Orchestra
RCA Victor 45 rpm 47-4866, 47-4867, 47-4927. $0.89 each.
Dundie-town Fifers; Across The Rainbow; Stop! Six Down! Relax! Think!; April in Paris; Moonlight on the Gauges.

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

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

This does not add up to monkey business. Both men have sound musical backgrounds: Sauter attended the Juilliard School, Finegan the Paris Conservatory. They have a fine ear for unusual tonal effects, and RCA Victor’s engineers are clearly on their side. Prize item so far is Dundie-town Fifers, a really fascinating arrangement based on the old tune, Day of Jakab. For our money, this is the kind of thing they should do more of.
REGRETTABLY, we grownups tend to forget how
important it is for children to be independent.
Indeed, their constant insistence on independence
so frequently gets them into trouble in the adult world
that there is a temptation for us to resent it, wish it out
of existence. Yet it is vital and desirable, one of the most
powerful factors in the process of learning. Youngsters
learn most eagerly when they can choose and experiment
most freely and actively. This makes phonograph rec-
ords an excellent medium of learning. They convey,
nowadays, a considerable variety of experience. Give chil-
dren a supply of good disks, plus access to the family
record shelves and perhaps to the lending facilities of their
local library, and the results can be impressive. Here
are experiences that they can "turn on" when they wish
and go about the business of extending their musical
and literary horizons at their own pace, in their own way,
and without age level ceilings to stop them.

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

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

Parents who are really concerned about the quality of what their child hears will not record for him—any more than they would for themselves—without first listening to them, if this is feasible. Beware of some of the high sounding “educational” patter dished out by some companies and be slow to compromise on what you consider good standards in such things as quality of recording or a direct and nonpatronizing narration in story-records. Be especially suspicious of the practice of employing all sorts of tricks to catch the listener’s attention so that he will swallow the story painlessly. A good story, if it is right for the child, needs no such shenanigans; it can stand on its own merits. Trapping the child into such experiences shows little respect for his intelligence and belittles the story. Relevant and tastefully modulated sound effects can heighten a story’s dramatic quality, but they should never get in its way. In discussing such standards, we are not talking about children’s interests, but rather about the way in which these interests can be met. For example, any cowboy record may drive us out of the house, but this needn’t keep us from realizing that there are good cowboy records and poor ones. Since Junior is almost certain to have some of the unbearables around, be sure that there are also a few good ones on hand. Here the youngster’s particular cowboy hero must be considered. Capitol gives us Hopalong Cassidy, RCA Victor has Roy Rogers, Columbia is represented by Gene Autry and Decca explores the wide open spaces with The Lone Ranger. For the child with a yen to do some completely independent record-shopping, from time to time, most comer drug stores are conveniently full of 25-cent records. He cannot go far wrong, for instance, buying Little Golden Records (produced by Mitch Miller in conjunction with Simon and Schuster’s Little Golden Books). These feature absolutely straight renditions of standard children’s songs. The surfaces, of course, are terrible, but children seem to like them just the same.

Records for the Very Young

For a long time, Young People’s Records and Children’s Record Guild have done a tremendous business in catering to the crowd of youngsters up to about six or seven years of age and they have been willing to reach out and try new ideas with some excellent results. (They have had their duds, too, so again be sure to listen first!) Among the more recent ones which appeal to children are CRG’s Let’s Help Mommy and The Fog Boat Story. In the latter, sounds and movements of tugs and freighters are dramatized, with music that has a pleasant modern flavor. There is also Train To The Farm, with its songs about animals, plus much soundmaking. Grandfather’s Farm is one of their earlier ones, still well received because of its singable folk songs. To go back further, if your child has not heard YPR’S But Muffin Can Hear and A Walk In The Forest, these should be under his Christmas tree. The former is Margaret Wise Brown’s story about a little dog who got a cinder in his eye, and it is outstanding for its superb narration. The latter, by Marie Hall Ets, is a fine example of sensitive musical accompaniment to a simple but literary story. Both are classics. Hot off the griddle is Mercury Childcraft’s The Night Before Christmas, backed by Fratty The Snowman and who else but Rudolph, The Rednosed Reindeer. This is good. The Eagle And The Thrush (CRG) is directed to elementary school age children, but the fours and fives who listened to my copy were fascinated by this beautiful old Indian legend that tells how music was brought to earth.

Mother Goose

Mother Goose is always a reliable standby. The most recent series done by a large company is MC’s set of six records, which just about takes care of Mother Goose. MC has also just released two of the most delightful records of the year in Father Gander and Modern Mother Goose, a collection of nonsense lyrics set to fascinating and bewitching music by Curtis Biever. Sensitive orchestration provides a fine musical experience here and the whole family will probably find it hard to lose the tunes. Jack Russell does an excellent job in catching the spirit of the songs, sometimes tender, again spoofing and high-going.

Records About Real Experience

An intelligent approach to tapping children’s interest in the life around them can be credited to Columbia for their new series, Billy the Kid (25, in which the listener gets acquainted with the intricacies of the take-off and landing of a real airplane from the inside of the pilot’s cabin; Hope And Ladder No. 99, where the drama and excitement of a real fire is caught by on-the-spot recording, and Tugboat Peter Moran. This last is a remarkably good job of giving a sound-picture of the busy life of a tugboat. This is authentic stuff and by its directness and unembellishment frees a youngster’s imagination. Columbia also has its baseball disks (6-in.) again depending on the real thing by having famous players give the low-down on the positions they play. I recently sat by while three fathers listened spellbound to the entire series,
which had been given to the son of one of them. That should be recommendation enough.

**Documentary and Folklore**

A new line dealing with factual material was presented this year by Enrichment Records in cooperation with Landmark Books: *Christopher Columbus Voyages*, *The Pony Express*, *California Gold Rush*, *Landing of The Pilgrims*. The subject matter appeals to the older child and we may hope for more of this type of production—with a little more imagination directed to the background support. The idea is sound and the producers are to be commended in their intelligent handling of the material. One of the most important ways to get a feeling for history is through folklore. Record companies have long drawn on this source. Directed to children especially is Tom Glazer’s fine work for YPR. His beautiful *Twelve Days of Christmas* is a holiday necessity. Earlier records by Glazer are *Going West and Concertina*, both collections of folk songs. On the humorous side (and there are far too few) is Bud Ives’ *Animal Fair* (Columbia). This came out over a year ago, but do not miss it. Folkway’s catalog of authentic ethnic recordings has a great deal to offer older boys and girls and, of course, our Library of Congress has a great reservoir of American folklore recorded on the field, and is especially valuable for the student. MC has recorded *Folk Songs Of Our Land and Folk Songs Of Other Lands*. In the latter, both English and original French or German words of familiar and lively folk songs are sung.

**Music**

The pickings are thin in the field of straight music recorded for young folks. Fortunately children lend their ears to the family favorites, and this is good. We should never minimize what they pick up, so doing, for youngsters have a disconcerting way (to us oldsters) of doing half a dozen things at one time and missing out on precious little. There is, thank goodness, no such thing as age level in music. We can never tell what will appeal. It is important, however, not to get too active in “culturing” the child. It has to work the other way around, so—the less talking, the better. YPR has a group of records devoted to music, among the best being *Round And Round*, (an introduction to the fugue, of all things) and *Rondo For Batutto*. Haydn’s Toy Symphony (RCA) has its modern counterpart in YPR’s *Concerto For Toys And Instruments*, both are tops. MC’s recent *Great Music For Children* is a fine selection of familiar classics. Vox also has its series on great composers—Schumann, Schubert, Mozart etc. Musical operettas on themes of interest to children are important contributions. Here we have YPR’s *The Emperor’s New Clothes*, *CRG’s Sleeping Beauty* (with Tchaikovsky’s ballet music) and delightful *Robin Hood. Let’s Listen To Haydn* (LP; Haydn Society) uses narration on the record in the vocal group, to introduce and comment on the music, a practise some folks like and others do not care for. A good, lively parade record is Capitol’s *Circus Parade* (LP) played by Ringling Brothers Circus Band.

*Story Picture Record Albums*

A really fine example of children’s stories on records is RCA Victor’s two Milne albums, *Winnie The Pooh And Eyore* and *Winnie The Pooh And Tigger*. James Stewart is the narrator. The twenty pages of text and original pictures follow the story exactly as the child listens to the records—two in each album. These should be in every child’s library. RCA has also just released a group of stories on single 45 rpm’s. These are inexpensive compared to the larger albums and, while they are good, you also get less in the way of satisfaction. Among those for the younger children are the Little Nipper group—*The Railroad Train*, *The Fire Chief*, *Hansel And Gretel*. For the older child, there are *Aladdin*, *Captain Video*, *Kidnapped*, *Vivian And Ollie*. Capitol’s new album of Robin Hood is highly recommended. They have done a splendid adaptation of the story and the Disney pictures are excellent. Capitol was the first company to introduce the story-record-picture album and achieved phenomenal success with their *Bozo At The Circus*, the last in their Bozo series being the hilarious *Bozo At The Farm*. *Peter Pan* (Columbia) is not an album, but a 12-in. LP recorded on a special Broadway cast—including Jean Arthur and Boris Karloff—over a year ago. If I could give only one record to a family, this would be it.

*Record Players*

There is no space to get into a discussion on players, but do remember that “not just anything” will do for children. Good records are needed, and reproduction which cannot be had with a $10.00 “kiddie” phonograph, no matter how cute it looks! Since most smaller children’s records are still produced on 78 rpm, a single speed player which the child can operate himself is perhaps the best buy for the child under six. One can be had for around $25.00. When it comes to 45 rpm, you will have to decide whether you wish to limit the child to 45’s, or demand that both these records and their players are good—and discard the use of your 78’s, or whether you will get two machines. The older child can manage a three-speed player easily, and should have one. In discourse for him, as for us, the trend of the best is toward LP.

**The Yuletide Spirit**

Christmas comes but once a year, a fact which has had no cautionary effect whatever on record makers. On long-play alone, there are now enough Christmas carols, hymns, stories and music in general to fill a large barrel. The good ones, however, are far less numerous.

In the masterpiece department, there is, of course, *Handel’s Messiah*. For the London Philharmonic and soloists under Ferdinand Grossman (Vox: 12-in.). From RCA Victor comes a performance of the 1951 Christmas TV opera, *Menotti’s Amahl and the Night Visitors* (12-in.). The Pony Express records devoted to Christmas carols, *Christmas Comes to Children*, are far more accessible. Vox also has a Bach Christmas Oratorio, performed by the Royal Philharmonic with soloists under H.C. Robbins Landon of the English Choral Society.

Vox also has available in excellent versions by Beecham (RCA Vict: four 12-in.) and Sargent (Columbia: three 12-in.). A brand-new item of note is a Bach Christmas Oratorio, performed by the Royal Philharmonic and soloists under Ferdinand Grossman (Vox: 12-in.).

The Yuletide Spirit

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In the masterpiece department, there is, of course, *Handel’s Messiah*. For the London Philharmonic and soloists under Ferdinand Grossman (Vox: 12-in.). From RCA Victor comes a performance of the 1951 Christmas TV opera, *Menotti’s Amahl and the Night Visitors* (12-in.). The Pony Express records devoted to Christmas carols, *Christmas Comes to Children*, are far more accessible. Vox also has a Bach Christmas Oratorio, performed by the Royal Philharmonic with soloists under H.C. Robbins Landon of the English Choral Society.

Vox also has available in excellent versions by Beecham (RCA Vict: four 12-in.) and Sargent (Columbia: three 12-in.). A brand-new item of note is a Bach Christmas Oratorio, performed by the Royal Philharmonic and soloists under Ferdinand Grossman (Vox: 12-in.).

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Diamond Anniversary

The New York Public Library observed the diamond anniversary of the phonograph on August 12. Seventy-five years ago, Thomas Alva Edison had devised the archetype of all our present recording equipment and elaborate custom-built reproducing installations. An amateur soprano named Lily Moulton noted the event in her diary. She was horrified by the sounds she heard during the first playback in history, but she could recognize her voice as the needle tracked faithfully through the grooves its vibrations had cut into a tinfoil cylinder.

All through the warm months — if a sweltering, 95-degree New York summer can be called "warm" — the library presents free lunch-time concerts of recorded music in Bryant Park, that patch of grass, shrubs, and formal concrete just behind the main building at Forty-second Street and Fifth Avenue. In spite of acoustical conditions calculated to send audiophiles screaming for the cool quiet of the library itself, the programs seem to please their audience of stenographers, clerks, loiterers, hams, and purposeless strollers. But not often does it fall their lot to commemorate so really historic an occasion.

Inside the library, Philip Miller, acting head of the music department, put a forty-year-old cylinder on a 1913 model Edison Amberola. Outside in the park, amid a munching of sandwiches and the steady, big-city hum, loudspeaker diaphragms shuddered and the music began. It wasn't exactly high fidelity, but the sound was surprisingly clear, strong, and true, as Blanche Arral and Marie Delna came through in arias from Thomas' Mignon and Gluck's Orfeo e Eurydice. Mme. Delna, a Paris waitress who became a light of the Opéra-Comique around the turn of the century, sang in this country, at the Metropolitan, only in 1910, so the 1913 dating of her cylinder seemed suspect. Whatever its date, it was obviously made a long time ago.

The library has machines older than the Amberola that Mr. Miller used, including some very early Edisons and one of the first disk phonographs, made in 1896, but for a tribute to Edison the Amberola gained preference, since it is the highest development of the cylindrical player, in which he believed to his dying day.

Edison reasoned that the sound would necessarily be steadier on a cylinder of unvarying radius than on a disk of diminishing or increasing radius; but disks won out, partly because they were efficiently promoted, even more because they were less bulky. Edison finally gave up on the cylinder in 1914, long after others had been making disks and presumably long after a burgeoning collection of cylinders had crowded all of the furniture out of his house.

The hand-wound Edison machine was used for just the two cylindrical arias. Other old records, marking what Mr. Miller said were significant steps in the advance of recording technique, were played on up-to-date equipment. Of special note was an aria cut in 1900 by Emilio de Gogorza, hiding coyly behind the pseudonym Carlos Francisco. It wasn't considered quite respectable in those days for a concert artist to sing into a horn. However, since Mr. De Gogorza later became the first director of artists for the Victor Talking Machine Company, it is to be presumed that his views changed.

Then there was one of the first recordings by a major symphony orchestra — the prelude to the third act of Wagner's Lohengrin, as played by the Boston Symphony, under Karl Muck, in 1917. It sounded just awful.

If any single point can be made from all this — except, of course, that recording techniques certainly have advanced since 1878 — it is that the old Edison cylinders sounded better (at least with regard to the indefinable "nearness" that means so much in vocal reproduction) than the other old discs sounded with the presumable advantages of modern equipment. I didn't think that the superiority of cylinders caused this, either. To each his own.

By JAMES HINTON, JR.
I have an old Brunswick machine, with an alternate head for Pathé recordings. Reactionary heretic that I am, I like to play my old vocal records on it. Perhaps it is because I grew up with the old wax (the machine, not the singer) that Nellie Melba's voice sounds to me rounder and more immediate as it comes out of the old, squarish horn. Perhaps it is because I know my machine has digestive troubles (thumps and groans inside are the clinical symptoms) that I sympathize with it and tolerate its failure to emit recognizable or even decent sounds when faced with the problem of reproducing the violin tone of Margaret Pardee or the healthy noise of Vessela's Italian Band.

In any case, the phonograph's diamond anniversary concert was good, clean fun. At least Mr. Miller had the taste and forbearance to refrain from offering up one repulsive darling of old-record enthusiasts—the libellous disk, cut high in the Metropolitan Opera House flies, on which Jean de Reszke can be heard (from time to time, anyway) barking out a phrase or two of the forging song in Siegfried. That is one disk that should be suppressed, for the good of a great artist's memory, for the good of the record industry, and, last but not least, for my own good.

Collectors' Items

A recent New York Times advertisement of a three-records-for-the-price-of-two sale at the Liberty Music Shops contained a couple of items that every collector should rush to buy. The first is a recording of Indian Love Call and Rose Marie (presumably all of it) sung by Nelson Eddy and Dorothy. No last name given. The second is a recording of the Toreador Song sung by Risté Stevens and Nadine Connor. It's all right, Liberty, to unload your 78's and 45's at $1.16, three for $2.32, but don't get panic-y.

For the Birds

Any of you who doubt that Ottorino Respighi is a "modern" composer, whatever that is, should take note of the fact that the Pines of Rome cannot be performed without the use of a recording of the song of a nightingale. Or can it?

This past summer, when Fritz Mahler, conductor of the Erie Philharmonic, was filling an engagement as guest with the Danish State Symphony, he scheduled Pines of Rome for a performance. Orchestra parts arrived on schedule and were rehearsed, but just before the concert it was discovered that the nightingale recording had not been sent along. The crisis was resolved when the concertmaster, one Charles Senderowitz, undertook to make like a nightingale with his own voice. He succeeded, Mr. Mahler says, "to perfection," and everybody was happy—everybody except the next conductor who got the orchestra parts and found the nightingale recording missing.

Maybe it won't turn up at all, and Mr. Senderowitz can make a new career for himself, traveling around with the score of the Pines of Rome. Better still, maybe the publishers will hire him to make a new nightingale recording. Then again, maybe they won't. G. Ricordi publishes the score and, having a firm grasp on economic reality, is more than likely to get not only a real nightingale but a nice, meek nightingale who won't ask to be cut in on the royalties.

Otherwise, Ricordi might find itself in a peculiar position of having to buy a recording of a recording of the nightingale's song from a company that has recorded the Pines of Rome and pay royalties back to them for letting other orchestras use it in their performances of the work.

This is getting much too complicated. Does anybody know a nightingale who wants to sing in concert and on recordings, or on recordings and in concert? It's getting out of hand again. Remember, a cheap, non-union nightingale. James C. Petrollo please note.

Music on Tape

Our little outburst in the previous issue of HIGH-FIDELITY, about how there wasn't any "Music on Tape" report in that issue because no one had sent in any tape for comment, produced two batches of tape, so the column is back in business again.

One batch was from a newcomer called MaVoTape, Inc., a joint venture of Magnecord and Vox. They plan soon to begin a limited test distribution of their recordings, to be sold as "Magnecordings by Vox." Magnecord describes them as follows:

"The Magnecordings will be recorded on half tracks of standard recording tape at 7½ ips. tape speed, presenting a full hour program on a 7-inch reel. Special equalization in recording will give high fidelity reproduction of 15,000 cycles. They will be sold by time segments, the length of the selection determining the price of the tape. A one-hour program on 7-inch reel of 1200 ft. will sell for $0.95. A half-hour program will sell for $0.49.

"The Magnecordings will be made by Magnecord, for MaVoTape, Inc., from master tapes of Vox Productions, Inc., library, and will be distributed initially through Magnecord distributors.

"Plans call for six releases per month. Initial releases will include: Shostakovich, Fifth Symphony, by the Vienna Symphony Orchestra; Jascha Horenstein, conductor; Mahler, Symphony No. 2 in C Minor, by the Vienna Symphony, Otto Klemperer, conductor with Ilona Steinbruger, soprano; and Tchaikovsky, Piano Concerto in B Flat, by Monique de la Brouchellerie and the Vienna Symphony."

Magnecord sent us a preview tape on which was recorded Walter Piston's Concertino for Piano and Orchestra and Mussorgsky's Night on Bald Mountain. Both were better than the majority pre-recorded tapes which we have heard to date but the overall sound was not as good as can be secured by recording live FM off the air at a tape speed of 15 ips. Compared to records, there was, of course, no background noise, no hiss or needle scratch, but the dynamic range was not up to that of the disc optimum. Equalization was.

From A-V Tape Libraries we received four 7-inch reels which show an improvement over earlier tapes from this company but which, like the Magnecordings, were not the equal of sound taken at 15 ips. There was a considerable choice of music on A-V: Christmas Carols, semi-pop musical varieties, the Cag d’Or Suite and L'Après-midi d'une Faune, the last two, at least, being from Remington.

The A-V tapes which we heard were single-track, 7½ ips. reels, which sell for $0.95 each. Recorded double-track (600 ft.) the price is $6.95; recorded double-track at 3½ ips. (500 ft.), the cost is $5.95.

The situation on pre-recorded tapes can probably be summarized as follows: at 7½ ips., the frequency and dynamic range can be better than the average LP. The best 7½ ips. tapes are equal to but possibly no better than the best LP's. Most LP's are definitely superior to tape played at 3½ ips., even though there is no scratch or hiss on the tapes. If pre-recorded tapes were made at 15 ips., they could be definitely superior to records, but the cost would be higher.

Our suggestion to tape equipment owners: try a couple of pre-recorded tapes. The cost is comparable to a long-playing record; the sound may be better.

C. F.
the music of

Jos. Haydn

on microgroove records

C. G. BURKE

Part 1: Orchestral Works

Favors conferred by LP have been many and many have been great. We the discophiles have been favored in pleasure exceeding the pain of payment. The teachers of music have been favored incalculably in the opportunity to hear some thousands of works which without the microgrooves they could only talk about. Practising musicians have been able to enlarge a scanty repertory—casual examination of concert-programs verifies this—by repeating publicly what the bold initiative of the new records has revealed to them in private, which does not preclude the favor of an interpretive as well as a repertorial expansion.

The most extraordinary and striking of the favors granted to the musical world in general have been directed simply to listeners as such: technical improvements which make sound resound and banish interruptions. But, also, the technical advance begot the expansion of repertory which lets us have more than a limited sampling of music. Of this expansion, not the least provocative and delightful aspect has been the emergence from a reasonless obscurity of the wonderful music of Franz Joseph Haydn.

Justice requires also an acknowledgement of the hospitality offered to Haydn by 78's. The list of Haydn 78's we should not now call extensive, but it was far bolder and more inclusive than the American concert programs of any decade in this century. We had at least twenty-two symphonies on shellac, and twoscore quartets, most of the latter products of the Pro Arte Quartet's unfinished attempt at a complete edition. There were a few of the smaller works, and many excerpts from the oratorios. Now, on microgroove, we have fifty-seven symphonies, thirty-nine quartets—with the remaining forty-odd promised by the Schneider Quartet through the Haydn Society—twenty-eight piano sonatas, fourteen assorted concertos, ten masses, three oratorios, two operas, the Stabat Mater, nine trios and a number of works in less familiar forms. Haydn is third to Mozart and Bach in number of major compositions recorded, and fourth to Mozart, Beethoven and Bach in the aggregate of sides used so far to carry their recorded repertory. His representation is more abundant than that of Tchaikovsky, Brahms or Schubert. This is a rather startling reversal of concert-hall tradition. It is hard to explain either the neglect or the reversal. Perhaps Haydn's position in time, flanked by Bach-Handel and Mozart-Beethoven, has served as pretext to deprecate his music, as if the four giants had squeezed out all the latent tonal juice from two grand epochs, leaving Haydn nothing but an epitaph for the first and an introduction to the second. This has been written and repeated for a century, by men without opportunity of hearing Haydn's music. The evidence poured out by the phonograph has reversed this lazy judgment.

There may be no need to explain the flood of Haydn disks. That it has continued without abatement proves a continuous public acceptance. Indeed the regularity of issuance is remarkable: it is not a spasmodic series of jets, but an even flow, with the output of one month very much like that of the preceding month and the month to follow. Twenty months ago, preparing a Haydn Discography for the Saturday Review, the writer was induced to exclaim by the extraordinary number of recorded LP Haydn sides then available: a hundred and twenty-nine. The present study is concerned with a total just below three hundred.

Unquestionably the Haydn Society has been the strongest individual stimulus to the increasing interest in Haydn. This energetic and scholarly organization has issued more than one-third (118 sides) of the Haydn disks, is publishing the first complete edition of the master's scores, and has discovered or reassembled compositions lost for a hundred and fifty years. The preeminence of the Society as a producer of Haydn records—particularly of the works worst slighted—does not require any pleading, but the wide distribution of the composer's new prestige is better illustrated by the existence of Haydn LP's under twenty-eight other labels in the United States alone. Perhaps the only way to find an explanation of the contagion is to hear the best of the records.

The year 1732 presented to a brace of provincial mothers, distant in space and condition, each a son of vast capacity which earned a fame not soon to fail. It was Mary Washington's great fortune to see her son elevated to an unprecedented Presidency and to die without hearing any of the licentious vilification Americans bestow upon their greatest men in manly demonstration of what we choose to call the democratic process. When Anna Maria Haydn died, her oldest son was still in the world's esteem a naught. It would have been kinder to this woman, who had had nothing, to witness her son's ascent, than it was to Mary Washington, who had had a great deal, to have been granted the chance to observe as a matter of course the preeminence of her own obdurate son.
The two men — who did not know each other although each affected the other, Washington dancing to Haydn’s music, and Haydn’s Empire disintegrating at the infection of ideas which Washington’s sword had helped to spread — were by birth, instinct and habit cloistered countrymen. The excursions of Washington were all acts of duty, and his repeated gratitude for the sanctuary of Mount Vernon cannot fail to touch. Haydn, born in the tiny Danubian village of Rohrau in Lower Austria next to the Hungarian frontier, was nearly sixty before he had ventured seventy-five miles away. It was not the splendor of the palaces at Eisenstadt and Esterhaza that comforted him, but their rural settings. If he yearned for Vienna, the impulse was practical and professional.

No other pair of exact contemporaries in that age could have been more indifferent, by inclination, to its searching intellectual excitement. Yet the one wrote its music and the other carried its shield. Haydn was the professional musician par excellence, Washington the utmost in soldierly fortitude. Both disliked accomplishments that did not contribute to their professional mastery. Both were men of simple habits, though both could enjoy luxury. Words were iminal to both these men of grand exploits but sparse opinions. The restless, penetrating intelligence of Bonaparte, the impatient criticisms of Beethoven, the cultivation and philosophical intelligence of Frederick II, the reflective imagination of the German soldier Goethe — these were foreign to the nature of the twin sons of 1732. Both men became affluent, although Haydn was born miserably poor and Washington’s monetary worries were those of a man who always had money. Indeed, Washington eventually became the richest American of his time, baffling history with another instance in which the most deserving received the richest reward of gold.

Here it may be prudent to discontinue analogies, lest an impression be given that Washington and Haydn resembled each other. Their differences were as numerous, and more striking, than their likenesses. The great size, majestic appearance, severe mien and careless Anglicism of the soldier were in nearest opposition to the composer’s ready bonhomie, short stockiness and serene south-Catholic devotion. But 1732 deserves some homage, and although the analogies are not arresting they are not far-fetched. After all, Poe and Mendelssohn were born in 1809 and both were human males, but no other likeness is discernible.

The son of a wheelwright who was the son of a wheelwright who was the son of a peasant, Haydn in his impoverished childhood had a taste for music but no chance to show a talent. His boyhood was very drab, but the family’s poverty enforced the habit of ceaseless work without which we could not have heard of Haydn, who worked himself into greatness. At eight he began nine years as Imperial choirboy, learning on the side how to play the keyboard and the violin.

Inevitably his voice changed and he was no longer of use to St. Stephen’s. Not yet eighteen, he was able to make a precarious living on the shabby outskirts of music: giving keyboard lessons for a few cents, playing (and composing some forgotten occasional trifles) in the streets of Vienna with wandering bands of musicians as poor and as hungry as himself. He wrote a little Mass, which we still have and which has been recorded. He composed a burlesque opera for a cheap impresario. It had some success (for the impresario) although Haydn still knew very little about composition. He has said himself of this period that after miserable days of drudgery in earning a livelihood he worked late into the night at composition.

But he was a musician among musicians, and eventually he met some influential practitioners. It is obvious that people were inclined to like Joseph Haydn. The great librettist Metastasio found work for him. The Neapolitan composer and singing-master Porpora taught him Italian and composition in return for servile offices. Some members of the nobility were attracted to the young man. In 1761, at twenty-nine, with little repute but enormous capacity for work, Haydn entered the household of the Hungarian Prince Paul Anton Esterhazy.

He served four Esterhazys for nearly thirty years, at one or the other of their magnificent country retreats, especially Esterhaza, an imitation Versailles in the Hungarian marshes. As Kapellmeister, he was a sort of superior servant, like the steward or the schoolmaster, and wore livery. He played with and directed the musicians — a whole orchestra and a group of singers — maintained by the Esterhazys. He composed music for the family’s ceremonial and the family’s delection; he was responsible for the instruments and the conduct of his players. He made quartets, symphonies, masses, divertimentos, operas and dances for his employers. In all, he was such a musical boss as no other composer has been.

This bosshood — this intimate association with his musicians as technical leader and private adviser — contributed a vexatious falsification to his memory through a nickname, "Papa", applied to him in his early thirties and still fixed. This intimates to us in all its horror a scraping, simpering and sanctimonious image; an aged boy-scout, a characterless fellow without enemies, a dolt of such careful virtues that meaningless and contemptuous approbation is his just due. The epithet has insidiously thwarted all the contrary evidence. No pigeonhole can contain Haydn’s abounding variety. He was a rustic turned courtier, incompletely; a hack who conquered the most cultivated elements in the world’s most cultured capitals; a prankster who still prefixed every work with a devout "In the name of the Lord" and wrote after every final doublebar "Praise to God"; the man who enriched the symphony to the satisfaction of the savage Beethoven (whose musical moods were so like his own); the creator of the Quartet as we know it and of more great quartets than anyone else; a woman-chaser at sixty; the owner of a strong invective; a humble man but one who did not mistake his own value; the first to assert the peerless genius of Mozart and the first to denounce pretentious, clumsy effort. His work was hard for him, he had to work as few composers have, and he did not reject responsibilities. But those traits, which more papas ought to have than papas have, should no more determine his entire reputation than the farce of Long Island Washington’s.
"Papa" leveled at Haydn meant what the "Old Man", applied to the Commanding Officer — he be sixty or twenty — means to soldiers. They mean the Boss, the man who, for better or worse, is responsible for the welfare of a group of men. It is true that Papa implies affection and Old Man need not, but the affection for Haydn was not directed at doddering benignancy, but at responsible and practical leadership.

His life, ideal after his thirtieth year for an artist, is a trial for a biographer, for it was concerned almost entirely with his music. Its conflicts and drama were internal, and most of their evidence is confined to ruled paper. He had an extraordinary renown fairly early in his creative life, and this grew as his creations expanded; but in his cloister he did not know how celebrated he was. His friendship for Mozart is a good page in musical history; and his musical influence on Mozart and Beethoven (besides scores of lesser men) made the culmination of classicism music's greatest period.

When, nearing sixty, at last he traveled, the Bastille was down and the Empire's time was up. The proportions of emotion were swelling. For his first long triumph in London he wrote six symphonies bigger and header than any preceding group; and his second voyage westward over the Channel, while the Revolution went eastward across the Rhine, produced a final set of six which said a final say for a kind of instrumental music about to die with the waning century and the failing Empire. Freed of the kindly Esterhazy bondage, he acquired in London a spectacular glory that accompanied him back to Vienna.

There he was Master, uncontested, until his death in 1809, even after age had subdued his pen. Until 1801 he wrote masterpieces, and he had the happiness of growing even after London. The greatest Masses, the greatest oratorios, belong to his last creative decade. The enormous effort of the Seasons, completed just before his seventieth year, exhausted him. He had not the strength to finish his last quarter, although six years remained to him. His production had been enormous, and even for us who now may hear it in some profusion, everything remains eminently listenable. More than any other composer he practised the direct and healthy clarity which is characteristic of the best art of the second half of the eighteenth century. Behind him loomed the monumental music-making of the preceding epoch, with its suffocating weight of counterpoint. At hand to tempt him were the literary involvements of early romanticism, which now, 150 years later, seem to us mere tumultuous resuscitations of dead problems. Neither could deflect the fluent but calculated logic of a composer who would tolerate no aberrations in the sturdy and symmetrical architecture he had been fifty years building. He cherished wit and is frequently funny as well; he could be grim and he understood melodrama. However, in his concept, music was variable in mood but invariant in balance, its structure expansive but essentially inviolable. His punctuations of formal clauses — and they are frequent — by startlingly irrelevant matter, serve both to stimulate anticipation and to emphasize the suavity of the very line being broken. He had worked himself into mastery of music, but was bent to a direction which he made prevalent. When others deviated he did not, save to make a temporary point. To reproach him for not having been Beethoven or Mozart is to complain of Saki for being unlike Balzac or St. Luke, or of Washington for neglecting to be like Turenne or like Jackson.

In assessing the relative values of different interpretations of Haydn's works, the writer has been constantly aware that there can be no finality of judgment in music essentially Eighteenth-Century, which has no overpoweringly vivid core of extra-musical significance such as that in the "Eroica" symphony, a wonderful and unalterable bastard begat by the Nineteenth Century on its predecessor. If the interpretations are evaluated with diffidence, the quality of the engineering has been estimated with some confidence and many combinations of accoutual machinery were employed to obviate unfairness either of over- or underestimate. The imaginative diversity of couplings presented by manufacturers hurts this survey's utility as a practical guide to purchases: since it is clearly impossible to compute the comparative worth of a disk containing acceptable but mediocre versions of Symphonies No. 91 and 92, say, and another disk containing a superb 91 and a dismal 100, the couplings have been ignored as a basis for consideration by the writer, although they certainly will not be by the readers.

SYMPHONIES

(Musicologists have accepted 104 symphonies as veritable Haydn, and the latest numeration follows with fair accuracy the order of their birth. The earliest were composed for two oboes, two horns, as many strings as were available, and harpsichord and bassoon to support the bass. The last utilized the symphony orchestra inherited by Beethoven: flute, oboe, clarinet, bassoons, horns, trumpets and tympani, with a greatly enlarged string body, sometimes surpassing that of our modern orchestras. The nicknames applied to his symphonies were not his own, and some may not be apt, but all have a real convenience as an aid to memory. However, all likewise, invite a valid objection. Those unnamed don't get concert performances. "Surprise", "London", "Clock", "Military", "Drum-Roll", "Oxford" and "La Reine" tickle anticipation as a mere procession of numbers 102, 99, 98, 96, 95, 93, 86 and 78 — cannot. The only anonym to compete with those named is No. 88, a pure delight. Perhaps its unrepresentative popularity derives from its former number — 13, a sinister title in our culture. Once we have heard the symphonies, their numbers acquire particular color from the music and we hesitate to say, after hearing the fifty-seven recorded, that even the frailest color is drab.)

No. 1, I D
The first is a minute fragrant canapé, a foretaste of beardy viands concocted during thirty-five of the following thirty-six years. It was, appropriately, the Haydn Society's first LP, and the good sound of the small orchestra in an unpolished but honest performance has worn well — a little rough but direct, with clear definition and effective horns.

—Vienna Symphony Orch., Jonathan Stern
Franz Litschauer: "Fastidious revelation.

of a trilogy evocative of a day without trial, in an agreeable recording commendable for its nice proportions and just representation of timbres. Comforting, refreshing, sometimes suddenly arresting, as in the minuet's trio.

—Vienna Chamber Orch., Franz Litschauer, cond. Haydn Society 12-in. (with Symphony No. 21). 1025. 19 min. $5.95.
—Bamberg Sym. Orch., Hans Weisbach, cond. Mercury 12-in. (with Symphony No. 15). MG 10079. $4.84. (Disk unheard.)

No. 7, in C, "LE MIDI"
The five movements of "Noon" follow the four of "Morning" like a flutter of brave feathers. After nearly two hundred years, the elegance summoned by Haydn to ingratiate his prince ingratiates us as much. The adept suavity of the Litschauer realization is not challenged by the rough and clumsy aspiration of the other, although the Remington sound, barring hum, is apparently pure faithfulness to the sounds the Randolf orchestra was making. The Haydn Society disk is disturbed occasionally by some coarsening of texture in a recording otherwise solidly successful.

—Vienna Chamber Orch., Franz Litschauer, cond. Haydn Society 12-in. (with Symphony No. 8). 1016. 24 min. $5.95.

No. 8, in G, "LE SOIR"
Everything charms in the fastidious revelation of the perfumed "Evening" capping Haydn's trilogy—the restrained and refined pace and phrasing solicited by the conductor, the equable acquisiteness of a small, well-trained orchestra and the warm but explicit sound contributed by the bewitched.

of a trilogy evocative of a day without trial, in an agreeable recording commendable for its nice proportions and just representation of timbres. Comforting, refreshing, sometimes suddenly arresting, as in the minuet's trio.

—Vienna Chamber Orch., Franz Litschauer, cond. Haydn Society 12-in. (with Symphony No. 7). 1016. 18 min. $5.95.

No. 14, in D, "JUPITER"
"Jupiter" because its finale anticipates thematically the finale of Mozart's "Jupiter". Haydn's thirteenth Symphony also deserves the title by virtue of a new assertive strength. The Sternberg disk has the good qualities of interpretation and recording noted for Symphony No. 1.

—Bamberg Sym. Orch., Hans Weisbach, cond. Mercury 12-in. (with Symphony No. 6). MG 10079. $4.84. (Disk unheard.)

No. 10, in D
The only extant recording successfully eluded our long search.


No. 21, in A
"Straightforward" describes the music, the interpretation and the engineering of the only version. The horns are overblown but some of us prefer that to inaudibility. The judicious relationship of the harpsichord to the rest offers a valuable illustration of its role in these early symphonies, and Mr. Litschauer's free-striding confidence indicates him as the natural exponent of many others.

—Vienna Chamber Orch., Franz Litschauer, cond. Haydn Society 12-in. (with Symphony No. 6). 1025. 18 min. $5.95.

No. 22, in E FLAT
The pungent and mysterious melancholy of the long first movement, adagio, raises this Symphony to the highest levels of the Haydn creation. Of the two versions, the Decca sound is sunnier, less flawed, but it is December's sun. The skeletonized Haas club intime is numerically incapable of giving the deep throb needed. Mr. Sternberg realizes the solemn apprehension of the first movement by playing it in tempo, while Mr. Haas's quicker speed must disappoint, and this is to the decisive advantage for the Haydn Society, in spite of the customary Sternberg club-footed minuet against a Haas showing of real vitality there. The bigger, deeper Vienna sound is surprisingly good for its age, but not by some buzzing of the horns against the English horns, but it is a symphonic realization, and the other is not.

—Vienna Symphony Orch., Jonathan Sternberg, cond. Haydn Society 12-in. (with Symphony No. 35). 1009. 17 min. $5.95.
—London Baroque Ensemble, Karl Haas, cond. Decca 12-in. (with Concerto for Harpsi-chord and Violin and two Hobaffl Minuets). DL 9561. 16 min. $5.85.

No. 26, in D MINOR, "LAMENTATION"
Violent and anguished, an extraordinary revelation of the composer's literal Christian belief, the "Christ and Pilate" Symphony has one recorded performance, a little in

flexible and a little rough, but intelligently devised and well engineered.


No. 28, in A
A Symphony of immediate, albeit fluctuating, appeal, with a luscious adagio and a witty minuet, capably played and recorded with a sound still substantial, although this was the Haydn Society's first microgroove.


No. 31, in D, "HORN-SIGNAL"
The only edition abets a dull performance with very poor sound.

—Vienna Symphony Orch., Jonathan Sternberg, cond. Haydn Society 12-in. (with Symphony No. 34). 1002. 21 min. $5.95.

No. 34, in D MINOR
Matches its obverse immediately above: uncertain playing; coarse, drab sound.

—Vienna Symphony Orch., Jonathan Sternberg, cond. Haydn Society 12-in. (with Symphony No. 31). 1002. 15 min. $5.95.

No. 35, in B FLAT
Cheerful and unimportant, brightly played and recorded with impressive sweep and depth. The harpsichord, in excellent balance, contributes color admirably.

—Vienna Symphony Orch., Jonathan Sternberg, cond. Haydn Society 12-in. (with Symphony No. 22). 1009. 15 min. $5.95.

No. 36, in E FLAT
Only a soggy treatment of the minuet it mars a substantial recording that seems to improve with time (or with improved apparatus). Alert and flexible playing of a Symphony which embodies the polite ebullience of a court ball.


No. 38, in C
The invigorating possibilities here are properly exploited for two movements, and then comes the minuet, a rhythmic form for which Mr. Sternberg saves a very individual kind of lugubrious awkwardness. Properly depressed by his experience with that movement, he fails to recover vitality for the finale. Thus half the performance is good. The sound in a comfortable way is all good.


No. 39, in G MINOR, "THE FIRST"
The relentless menace of a darkly superb work clearly stated by Mr. Sternberg, whose intelligence is quite equal to the difficult movements, but who has no resilience at all for the minuet (a great pity that the astounding trio has not been more potently asserted). Nevertheless, an absolutely indispensable record, one of the greatest of symphonies, in a sound even better now than it seemed two years ago.

—Vienna Symphony Orch., Jonathan Stern-
berg, cond. Haydn Society 12-in. (with Symphony No. 38). 1010. 15 min. $5.95.

No. 42, IN D
The downrightness of the recording matches the virile exuberance of the performance with each note. If some roughness in the former disturbs some of the nuances in the latter. The music is concerned more with pattern and structure than with mood; here we have a superior disk of minor Haydn.


No. 43, IN E FLAT, “MERCURY”
This has the evanescent appeal of sunbeams on the surface of a shallow pool. The recording gains from expert playing and sleek sound, particularly in the sweet and natural tone of the strings.

—Chamber Orch. of the Danish National Radio, Mogens Wöldike, cond. Haydn Society 12-in. (with Symphony No. 50). 1041. 22 min. $5.95.

No. 44, IN E MINOR, “MOURNING”
The Symphony is serious and important, the performance limping and haggard, the sound veiled and scattering.

—Vienna Symphony Orch., Jonathan Sternberg, cond. Haydn Society 12-in. (with Symphony No. 48). 1003. 20 min. $5.95.

No. 45, IN F SHARP MINOR, “FAREWELL”
With a structure unique in tones, and two beautiful adagios, the “Farewell” really does not require the adventitious support of the charming story of its birth to win the hearts of listeners, but it still does require a good recording. Of the present three, London has an expert and poetic interpretation with obscure and depthless sound; Mercury a big and not improper performance unpleasantly overloaded by the engineers; and Vox a juicy, well-articulated and pleasant reproduction of a performance so matter-of-fact as hardly to be worth the trouble.

—Stuttgart Chamber Orch. and members of the Orch. of la Suisse Romande, Karl Münchinger, cond. London 12-in. (with Wagner: Siegfried Idyll). FL 525. 21 min. $5.95.

—Munich Philharmonic Orch., Alois Melichar, cond. Mercury 10-in. MG 5028. 29 min. $8.5.


No. 47, IN G
The first two movements are well, the concluding pair good red beef, well prepared and seasoned by Litschner and served with address by the engineers.

—Vienna Chamber Orch., Franz Litschner, cond. Haydn Society 12-in. (with Symphony No. 42). 1026. 21 min. $5.95.

No. 48, IN C, “MARIA TERESA”
The Haydn Society must often have wrung its scholarly hands in guilty woe over this affront to Haydn’s Empress, whom he wished to salute with a stately, ceremonial symphony. It is good that she cannot be subjected to hearing the undersized band here floundering through twenty minutes of unruly and discomfiting sound.

—Vienna Symphony Orch., Jonathan Sternberg, cond. Haydn Society 12-in. (with Symphony No. 44). 1003. 20 min. $5.95.

No. 49, IN F MINOR, “LA PASSIONE”
A struggle against torment, with an amazing climax of snarling, sinister turbulence, one of the greatest movements in Haydn. Mr. Newman’s knowing direction points to this finale from the first, in an impressive performance of increasing premonition, and the orchestra has a decided dash, to compensate for some roughness. Sound is distinct and strong, a little hardened by hall acoustics, first-class when it comes to the generally troublesome violins.


Dr. Hermann Scherchen: Finest with gusto.

No. 50, IN C
There are some brilliant fanfares in what seems to have been a pièce d’occasion, not without bombast. Entertaining if not deep; glossily played and recorded.

—Chamber Orch. of the Danish National Radio, Mogens Wöldike, cond. Haydn Society 12-in. (with Symphony No. 49). 1041. 19 min. $5.95.

No. 52, IN C MINOR
The adept and sensitive orchestral playing is immediately apparent in a Symphony generally severe, arresting in its alternations of angular and graceful ones. Fine timbre-true sound throughout an extensive spread of dynamics—afer careful adjustment of both ends of the amplifier.


No. 53, IN D, “IMPERIAL”
The “Imperial” brings out that fetching holiday aspect of Haydn which has been misappropriated to cover his entire imagination. Additional winds have been inserted for the recorded performance, a usually dangerous and reprehensible practice which happens to sound very good here. Interpretation is vivid, the playing very rich and suave, reproduction comfortable.


No. 55, IN E FLAT, “THE SCHOOLMASTER”
The amusing didactism of its second movement justifies the nickname. Next, a prepossessing, demure and so played, with continuous finesse and punctuations of gusto. It has been the extraordinary good fortune of this conductor to record fourteen Haydn symphonies without salient sonic faults in any, and this one, while not one of the most effective in its scoring, is one of the best in the crisp cleanliness of its sound.


No. 56, IN C
More than a year ago, in this magazine, this writer labeled the recording, as such, of Symphony No. 56, contrasting its rather coarse sound with that of its obverse, Symphony No. 52. Reexamination on different equipment indicates that the coarseness is orchestral: the band cannot produce as polished a noise as that in No. 52, and the engineers were not at fault in re-creating what was actually played. Not that the sound is not satisfactory according to our standards—we are not free of many deficiencies yet—but No. 56 in most particulars lacks the magnetism of its obverse.


No. 61, IN D
This is one of a number of symphonies composed by Haydn in his mid-forties, displaying continuous proficiency but some decline in internal interest. It is played with a nicely-estimated symmetry and engineered to a pleasant glow in the string body and with a decisive delineation of the winds.


No. 64, IN A
The conductor here seems to be trying to attain what his orchestra cannot or will not, and the consequent uncertainties are disadvantageous to a Symphony much more attractive than most of its contemporaries. In its original form this was a miserable recording, but it has been reprocessed to a sensible pre-emphasis characteristic and is vastly improved. Music-lovers who wish the improvement must be sure that some lettering other than WL, A and B appears on the label.

—Vienna Symphony Orch., Henry Swoboda, cond. Westminster 12-in. (with Symphony No. 91). WL 5023. 20 min. $5.95.

No. 73, IN D, “THE HUNT”
This is not large Haydn, wherefore the Indianapolis interpretation seems overblown, the smaller and more vivacious Newstone treatment ringing true. The RCA sound is warmer and solidier than the Haydn Society’s but the latter is clearer. At fortissimo Indianapolis is clamorous, but the London group is a light bridge throughout. It is fair to say
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that both are mediocre, with the 10-inch Victor cheaper, and the Haydn Society enriched by its remarkable overside.


—First Symphony Orch., Fabien Swerts, cond. RCA Victor 10-in. LM 31. 18 min. $4.67.

No. 77, IN B FLAT, "Dum Ottavo" All scored in the same key, resourcefully orchestrated, No. 77 in its only recording has a gloriously led performance (albeit fast in the 11 min score adagio) which would have sung its assurance better after an additional rehearsal. Age is fading the sound, which was never outstanding, but for all its consistent virtues and musily bad it is passable.

—Sym. Orch., Henry Swoboda, cond. Concert Hall 12-in. (with Symphony No. 78). CHC 30. 15 min. $5.45.

No. 78, IN C MINOR With its impatiant dogmatism and vindictive interpellations boldly scored, No. 78 ought to be more widely known. Dr. Swoboda affects a fast adagio, but manages in the rest a convincing and coherent exposition. The recording is better than satisfactory, finer and fuller both than that of No. 77 on the other side. (This is one of three disks of paired Haydn symphonies with completely rational couplings of consecutive numbers, the lower odd. The other two are Haydn Societys No. 101 and 101.)

—Sym. Orch., Henry Swoboda, cond. Concert Hall 12-in. (with Symphony No. 77). CHC 30. 16 min. $5.45.

No. 80, IN D MINOR Wonderful in its perplexing antitheses, known to America only since the New Friends of Music gave it a premiere a dozen-plus years ago (which Dr. Scheder recorded for Victor 9187), this Symphony enjoys in its only LP version a supple presentation of its hope and fright, not casually to be challenged by other conductors, and a limpid presentation of its instrumental phrasing not yet belittled by engineers for the mid-classical orchestra.

—Vienna Symphony Orch., Hermann Scherchen, cond. Westminster 12-in. (with Symphony No. 102). WL 5050. 16 min. $5.95.

No. 82, IN C, "The Bear" About 1785, when he was fifty-three, Haydn became a perfect practitioner of his craft, and he was under no obligation to conceal his knowledge that this was so. His confidence in himself is substantiated by the symphonies from 82 to the end, a parade of masterpieces. Not one is tentative, each is homogeneous and all, as a matter of course, are fresh and stimulating in a new and ever-changing invention. The parts no longer tend to dominate the whole; elegance is supplanted by a luster grace; humor slips spontaneously into every symphony.

The "Bear" well expresses a number of aspects of the maturing style, and it is too bad that the record does not better express the "Bear". The Rosbaud direction is resolute, more decisive than the Stemberg, but acoustics favor the latter beyond dispute. The trim chatter of the winds is engaging in both, but in both this is a serious advantage which obscures defects: the badly engineered strings in the Mercury, a shortage of smoothness in the Haydn Society disk.

—Vienna Symphony Orch., Jonathan Sternberg, cond. Haydn Society 12-in. (with Symphony No. 83). 1008. 21 min. $5.95.


No. 83, IN G MINOR, "The Hen" The pleasure one undoubtably must feel in hearing this recording will be gravely compromised if one has opportunity later to hear a really proficient performance. Conductor and orchestra are not at one here, nor is the latter alluring in tone. The protection is flabby and the dryness of the bass contaminates the sound.


No. 84, IN E FLAT Only the finale has life in a performance without energy or urgency, not improved by a flat, hard tone.


No. 85, IN B FLAT, "La Reine" The queen, whose supposed liking for the Symphony gave it its sobriquet was the fearless, hapless consort of Louis XVI, and Maria Theresa's daughter, "L'Atrice-venne," who expiated her birth under the knife in cond. what was not then called the Place de la Concorde. Her taste—otherwise confirmed by her championship of Gluck—was good: Nos. 86 and 85 are the two finest of the six Paris symphonies. Neither has been confined to disks with the care deserved. The two versions of 85 are agreeable in the playing and flawed in engineering, the Haydn Society besser in the violins and crushed under implacable low-frequency noise, the Mercury preservingly metallic. The latter is easier to endure.

—Vienna National Opera Orch., Erwin Bultzer, cond. Haydn Society 12-in. (with Symphony No. 85). 1008. 18 min. $5.95.


No. 86, IN D The sound in both LP's is miserable, obnoxious when played on a sensitive apparatus.


—Same orch., Paul Walter, cond. Period 12-in. (with Symphony No. 95). 1126. 24 min. $5.95.

No. 87, IN A It is good to hear a fine orchestra respond to a demanding task as the Viennese do here to Mr. Swarowsky's. The result is a beautifully fluent and dramatic performance of consistent design and luxuriant color. The sound in itself, mellow and perspicuous at mf or softer, is spasmodically harsh with a dry reverberation when louder. Some added bass is an improvement but not a cure. Still, this is a disk whose merits heavily outweigh its deficiencies.

—Vienna National Opera Orch., Hans Swarowsky, cond. Haydn Society 12-in. (with Symphony No. 87). 1018. 22 min. $5.95.

No. 88, IN G No one should object if this be called the most livable of symphonies. Of the six recorded versions, none is satisfactory. The tender, full-phrased interpolation of the lower and still-lamented Fritz Busch instills an immediate and lasting impression as the natural, inevitable concept, followed at a respectable distance by the perceptive, less fluid exposition of Mr. Molinari; but the recorded sound in both cases is repugnant and inadmissible. (In terms of pure sound, all six are impure.) Perhaps the dry old Victor so generous with rumble, or the old Columbia with some suggestion of timber, is the least offensive; but no Haydnist will applaud the virtuoso reverberations of Messrs. Toscanini and Ormandy. The swift orchestral perfectionism of the former's three fast movements complements Haydn's nosegay with the necklace of glass diamonds and the ruthless gigantism of the latter gives us a sedan chair mounted on tank-destroyer treads. The sound of Mr. Fekete's disk is enough to cancel any effectiveness the conductor may display; and the Remington-Paul Walter is undistinguished in direction, ragged in playing and coarse in sound. But in the 88 junkyard it is far from the worst, and until there is a good recording its $1.95 price makes it not unreasonable for a stopgap.


(No preference is implied in the remaining order of mention.)


—NBC Orch., Arturo Toscanini, cond. RCA Victor 10-in. LCT 7. 21 min. $4.67.

—Orch. of the St. Cecilia Acad., Rome, Bernardino Molinari, cond. Tempo 12-in. (with works by Mozart and R. Strauss). MIT 2036. 21 min. $5.07.

No. 89, IN F The recording has qualities like those of its other side, No. 87.

—Vienna National Opera Orch., Hans Swarowsky, cond. Haydn Society 12-in. (with Symphony No. 87). 1018. 20 min. $5.95.

No. 91, IN E FLAT Like its companion, No. 64, the recording had originally a characteristic that made it scrreech, but that has since been amended into decency. The work is congenial to Dr. Swoboda, less so to his orchestra.

—Vienna Symphony Orch., Henry Swoboda, cond. Westminster 12-in. (with Symphony No. 64). WL 5025. 23 min. $5.95.
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NO. 92, IN G, "OXFORD"
Of the four editions listed below, two are outstanding. The smooth and forcible logic of Dr. Szell (least-sung of today's first-line conductors) seems to this writer more logical than the more foursquare and less gracious impulse of Dr. Scherchen. Both orchestras are excellent and bent to the musical will of their chiefs. The reproduction of the Cleveland Orchestra on Columbia is impressively clean and sonorous, mighty for its age; while the Vienne orchestra as Westminster has perfected it has a living sting, a nervous, vibrant sounding of individual instruments, differently compelling and apprehended with a sense of physical excitement. In this opinion there is more adventure in the glittering sound given to Scherchen's romanticism than in the estimable sound of Szell's pithier classicism. The Szell would naturally be preferred if the sonic qualities were exchanged.

—Cleveland Orch., George Szell, cond. Columbia 12-in. (with Symphony No. 101). ML 4268. 23 min. $5.45.
—Munich Philharmonic Orch., Fritz Rieger, cond. Mercury 10-in. MG 15040. 24 min. $3.85.

NO. 93, IN D
The expert orchestral preparation of the Beecham version is so nice as hardly to be remarked in itself, but the disciplined ease of its motion creates a seemingly guileless but very real persuasiveness to a degree that the more intense Cantelli utterance does not equal. The Columbia recording excels also in clearer detail, although the sound in general has that unstrained good quality that requires no particular comment.


NO. 94, IN G, "SURPRISE"
There are twelve versions of this, of which nine are here compared. The three unavailing are the last listed below, without prejudice. Seven performances are in different ways good and six disks have satisfactory or better sound. Sonic values being easier to compare than interpretational, an examination of those a priori can narrow the field. In engineering competence four stand out, in this order: (1) Scherchen-Westminster, (2) Lehmann-Decca, (3) Beecham-Columbia, (4) Van Beinum-London. All are excellent, but not much like one another. In the less positive precincts of interpretational Lehmann-Decca and Schmidt-Inserreidt-Capitol are formidable presentations of the Symphony as we should think Haydn may have played it, score-true, free of external

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effect but blooming, smooth and direct. Van Beinum-London and Sargent-Columbia are not dissimilar to the first pair except in their briskness. Beecham, Scherchen and Furtwängler offer something special, the last two in this opinion, something dis-advantageous. The Scherchen slow pace in the first movement seems detractive, and the Furtwängler re-creation is soft and disappointing for all its ripe cantilena, delicate strings and lush texture. Enter Sir Thomas with equivalent cantilena, strings and texture, plus imposing and precise crescendos, whispered pp's and a communication of exultancy. It is true that this conductor also inserts a few tricks of tempo to show how easy it is for the right man, and music-lovers may find this detrimental. If they do, Lehmann-Decca is the best version. If they do not, Beecham-Columbia is considerably the best.

Still, the demands of this Symphony are so simple, and its fabric so resilient, that its cheerful story emerges pretty sturdily after any kind of reasonable treatment. The discrepancies in general appeal are so slight that owners of the fifth and sixth listed below would gain only moderately by replacing them with the first or the second — disregarding, of course, the respective couplings.

—Royal Philharmonic Orch., Sir Thomas Beecham, cond. Columbia 12-in. (with Symphony No. 103). ML 4453. 23 min. $5.45.
—Concertgebouw Orch. Amsterdam, Eduard van Beinum, cond. London 12-in. (with Mozart: Symphony No. 33). LL 419. 22 min. $5.95.
—Merseyside Philharmonic Orch., Sir Malcolm Sargent, cond. Columbia 12-in. (with Symphony No. 100). ML 4276. 21 min. $5.45.
—Vienna Philharmonic Orch., Wilhelm Furtwängler, cond. RCA Victor 12-in. (with Mozart: Eine kleine Nachtmusik). USM 1018. 23 min. $5.95.
—Boston Symphony Orch., Serge Koussevitzky, cond. RCA Victor 10-in. LM 28, 23 min. $6.45.
—Munich Philharmonic Orch., Alois Melichar, cond. Mercury 10-in. MG 10052. 26 min. $3.85.
—There are versions on Parade 2008, Royale 6090 and Royale 1223.

No. 95, IN C MINOR
Why the reticent mystery of this lovely thing has not captured a wider public is itself a mystery. There are two divinations. Of the Period let it be said in charity that a far better one could not undergo comparison with Dr. Scherchen's interpretation as Westminster has seized it; and that coupled with the still-sensational "Military" Symphony, No. 100, the Scherchen record is irresistible.

—Vienna Symphony Orch., Hermann Scherchen, cond. Westminster 12-in. (with Symphony No. 100). WL 5045. 21 min. $5.95.

No. 96, IN D
The direct, innocent performance of Mr. Reinhardt suffers from the impact of the big Scherchen manner with its violent contrasts of brusqueness and delicacy; and the Vox sound, neatly detailed, with cutting violins, is pathetically wan in confrontation by the other's overwhelming chiseled mass, the distinctness of its every choir and its almost palpable vibration of strings and reeds and hides.

—Pro Musica Orch., Stuttgart, Rolf Reinhardt, cond. Vox 12-in. (with Symphony No. 43). PL 7310. 23 min. $5.95.

Sir Thomas Beecham: Seemingly guileless.

No. 97, IN C
Victor not long ago had a superb Beecham of this, on 78's. In the absence of that competition to Dr. Scherchen now, we have Paul Schubert and the Homburg Symphony Orchestra, and the disk regrettably could not be located for this survey. To command preference it must be good; for the Scherchen performance and sound are at his best, with the exceptional finesses of the pianist's technique in the adagio and the nimble maneuvering of the stunning minuet especially to be noted. The violins are slightly shrill in this reproduction, which has the customary Scherchen depth, detail and brilliance.

—Homburg Symphony Orch., Paul Schubert, cond. Regent 10-in. 5014. $3.00.

No. 98, IN B FLAT
Both recordings present comprehensive and intelligent attentions of the most Beethovenian (Beethoven not having written a symphony at the time of its composition) of Haydn symphonies, an eye-opener for music lovers who have not heard it, as indeed they have had little opportunity to. Few expect Haydn to be domineering and infuriated, but here he is; and as may easily be expected, Dr. Scherchen drives the strong sentiments to the hill. That the potent aggressiveness of Mr. Rieger is as effective we cannot say, for with acknowledgements to some felicities in the Mercury sound, we cannot contend, and no one will, that it is as capable of realizing a noble interpretation as Dr. Scherchen's has been realized in No. 98. The engineers have wrought prodigiously to help Scherchen stress the Beethoven aspect. The sound is huge, brazen and tumultuous where the score requires. Without it, we would fail to realize the need for an austere, strict and delicate and refined and ornamented which feature Scherchen records, and a velvety string sound not commonplace on disks.

—Philharmonic Orch., Fritz Rieger, cond. Mercury 10-in. MG 10059. 31 min. $3.85.

No. 99, IN E FLAT
Here is a supreme achievement neglected for lack of name. The ravishing slow movement is the most beautiful in a Haydn symphony. Of three versions the Mercury was not bad, but the other two are substantially commendable. Mr. Kisch's warm and fresh interpretation retains an unassumingly sweet sound, spacious and easily managed, although three years old, and even though the change of sides is effected during the adagio, the disk is valuable. Dr. Scherchen's, after consideration of the merits of his performance and the brilliance of the engineering, seems to leave behind all other records of Haydn symphonies. Space is insufficient to describe the evidence, but this disk contains a few diminuendos perfectly exacting, a dozen coalescences of murmured windnotes, a seductive violin-linearity and a sensitivity of timbre almost hypnotic when heard on a single record.

—London Symphony Orch., Royalten Kisch, cond. London 10-in. LS 171. 25 min. $3.95.

No. 100, IN G, "MILITARY"
There is no need to look beyond the version of Hermann Scherchen, whose celebrated first Haydn disk showed everyone how to play this work, which evokes an aspect of war in each movement. With a bang the Swiss conductor impressed himself on discophiles by putting to use the added percussiveness in this Symphony as Haydn intended. His work makes every other performance seem a little womanish; and the recording he then received has not yet been approached in the "Military" and seldom in anything else. This is too bad for Mr. van Beinum's alert and biting statement, his silken strings and regulation performance. Two others are not competitive; the Mercury was not available.

—Vienna Symphony Orch., Hermann Scherchen, cond. Westminster 12-in. (with Symphony No. 95). WL 5045. 24 min. $5.95.
—Liverpool Philharmonic Orch., Hugo Rignold, cond. RCA Victor 10-in. (with Symphony No. 94). ML 4457. 20 min. $5.45.

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The eight versions present seven more or less satisfactory performances of which those of Messrs. Fricsay, Ormandy and Busch are the most appealing. There is little sonic distinction in the lot, with only Westminster and Columbia crisp in detail. While Dr. Scherchen's disk has as usual received the best engineering, it is still below the usual Scherchen standard, with very difficult violins. London and Mercury can be eliminated on the count of outmoded recording. Busch's Mass is a repetition of the Bush on Remington, modifying the original characteristic and adding a rumble. The brilliant Toscanini clockwork has a sound too hard for comfort.

Busch's playing is the warmest, Fricsay's the most serious. Scherchen's is the broadest, not distinguished. Ormandy is truly gay. Fricsay and Ormandy are seconded by seductive orchestras faithfully enregistered at mf or lower, hard above. Ormandy's is less hot but Scherchen has madder sound than these, but not a bad one. The Columbia disk on the sum of its merits is thus somewhat preferable to the Decca; whether its considerably superior performance makes it more alluring than the Westminster, with its considerably better sound, is a problem left to the listener.

- RIAS Orch., Ferenc Fricsay, cond. Deca 12-in. (with Symphony No. 94). DL 9617. 29 min. $5.85.
- Sym. Orch., Fritz Busch, cond. Remington 10-in. 149-32. 28 min. $1.89.
- Sym. Orch., Fritz Busch, cond. Master 12-in. (with Beethoven: Symphony No. 3). ML 4109. 28 min. $4.95.
- NBC Orch., Arturo Toscanini, cond. RCA Victor 12-in. (with Mozart: Symphony No. 35). LM 1056. 27 min. $5.72.
- Orch. de la Suisse Romande, Ernest Ansermet, cond. London 10-in. LS 54. 24 min. $4.95.
- Munich Philharmonic Orch., Georg Reimwald, cond. Mercury 10-in. MG 15018. 30 min. $3.95.

- No. 102, IN F FLAT

The only version heard was that of Dr. Scherchen, not one of his best efforts. The Symphony is very strong, and the big style of this work is becoming in that respect, but his deliberation chastens the florid mischief of the first movement, and grace is rationed in the second. Much is redeemed by the finale, a grand but puckish treacherous tempest, aggressively managed in amusing bursts of spot and fury. First-class recording, a little over-reverberant, with a few wincing moments from the violins, but fine in the bolder and splendid in countenuant demonstration—a feature of most of Scherchen's Haydn records.

- No. 103, IN E FLAT, "DREAM." No other Haydn Symphony has four versions engineered with such skill as has been granted to this grand, ever-entertaining and inexhaustible masterpiece of complex good spirits. The dramatic excellencies of the four create a problem which will not be settled here. In descending order of value we find this hierarchy: Concept—(1) Beecham on Columbia; (2) Scherchen on Westminster; (3) Solti on London; (4) Munch on Victor. Realization in performance: (1) Munch and Beecham, drawn; (2) Scherchen; (3) Solti. Achievement in engineering: (1) Scherchen and Munch; (3) Solti.

Sir Thomas and Dr. Scherchen have the requisite fineness, and orchestras in complete subjugation to express it. The Scherchen finesse is revealed in stunning contrasts of the very bright with a delicate line of extreme tentativeness admirable for its own sake. The Beecham method eschews obvious dazzling. It propounds an even swell and deflation in a restrained and subtle demeanor, but has none of Scherchen's bigger excitement. Mr. Solti's performance is spry and able except in the latter part of the andante, where control of pace escapes him. He has built the best climax. Dr. Munch in bluff fashion marches directly across the field without care for subtlety.

The last—Munch's—is the easiest way, but it has been accomplished with such transcendent of orchestral bloom as we almost never hear from any orchestra. The essay is the least penetrating but the style is the most seductive. The tonal beauty of woodwinds and strings is breathtaking. For his part, Sir Thomas has exacted for his infinitely superior concept a wonderful blend of choirs, an exactitude of phrase, a painstaking thoroughness of bowing and a supremacy in shading that none of the others has attempted. The demands set by Dr. Scherchen are well realized, but that realization has not the plumb beauty of the Bostonians nor the gemlike gleam of the Beecham poetry. The London Philharmonic gives a lusty and competent support to Mr. Solti's healthy spirits.

The wonderful sound of the Boston orchestra here, wherein a single chord, if we could isolate it aloof from a musical phrase, would have a beauty and interest in itself, is primarily an orchestra, secondarily an engineering triumph. In engineering terms the Westminster, in exactitude of timbre, brilliance of detail, and chiseled substance of the mass, is second to none recording of the medium-sized classic orchestra. But the Vienna Symphony has not a tonal potential like the Boston Symphony, and thus the Beecham Victor is the lovelier sound, Vienna-Westminster is a truer mirror. The London and Columbia engineering is excellent but definitely below the other two. The Mercury record could not be obtained.

- Royal Philharmonic Orch., Sir Thomas Beecham, cond. Columbia 12-in. (with Symphony No. 94). ML 4435. 25 min. $5.45.
- Vienna Symphony Orch., Hermann Scherchen, cond. Westminster 12-in. (with Symphony No. 80). WL 5050. 31 min. $5.95.
- Boston Symphony Orch., Charles Munch, cond. RCA Victor 12-in. (with Beethoven: Symphony No. 7). LM 134. $3.75.
- London Philharmonic Orch., George Solti, cond. London 10-in. LD 124. 25 min. $4.95.
- No. 104, IN D, "LONDON.

So ends the beguiling possession of Haydn's symphonies, in balls of cloud-choked glory. The last of twelve London Symphonies, No. 104 is everywhere known as the "London," with a cozy indifference to good sense. Of the five recordings three—West- honest Symphony, its student's笔记 are well led by Scherchen, Annozavi and Dressel, but the sound engineered for the last is difficult. London has given to Mr. Krips a sweet, small and pleasant sound, but his performance is languid and too much reverberation, has nevertheless the virtues of beautiful tone and good detail, benefits unfortunately incapable of erasing the depression caused by the lassier-faire of Mr. Munch's conception.

This leaves Westminster and Remington leading the fader. The latter is commendable, the former outstanding, since it is one of Dr. Scherchen's most successful projections and a prime example of West- minster's painstaking engineering. The values implicit in that alliance have been stated and restated throughout this survey: suffice it now to say that to the solidity of the orchestral mass is opposed a crisp reed-string-line and wind-timbre as apparent in ppp as in fff; and that the considered analysis of the conductor has wrought, for this concerto the most pure and most varied texture, by the fundamental device of giving the fullest play to everything latent in the score.

Mr. Annozavi's steady realization has not the dramatic sweep of the Scherchen concept, and his orchestra is rougher, but he has kept his men subjected to the requirements of a vivid and symmetrical plan. His sound is remarkably sympathetic. In recognition of counterfeiting, the Remington is not inferior to the West- minster. In polish and tone it belongs to a lower class, but the fault seems to be the orchestra's own, particularly in some harshness of the violins, which are well attributed to a shortage of personnel.

- Vienna Symphony Orch., Hermann Scherchen, cond. Westminster 12-in. (with Symphony No. 55). WL 5066. 28 min. $5.95.
- Symphony Orch., Napoleone Annozavi, cond. Remington 12-in. (with Mozart: Symphony No. 28). NL 1054. 27 min. $2.40.
- Boston Symphony Orch., Charles Munch, cond. RCA Victor 10-in. LM 49. 25 min. $4.67.
- Royal Philharmonic Orch., Josef Krips, cond. London 12-in. (with Symphony No. 100). LPP 339. 24 min. $5.95.
- Orch. of the Bavarian Radio, Allons Dres- sel, cond. Mercury 12-in. (with Symphony No. 82). MG 10050. 27 min. $4.85.

(In addition to the one hundred and four symphonies indubitably Haydn's, there are others ascribed to the composer on small
DANZES FOR THE REDOUTENSAAL
Twenty-four dances for court use, ländler alternating with minuets, imaginatively orches-
trated and inventiveness of the old master's be-

ländler is a delight in itself. Dr. Gillesberger is an eminent conductor of church music whose realization of

París do sound like Haydn who influenced all his contemporaries but the shape of some of its thematic material and ornaments justifies skepti-
cism.

MISCELLANEOUS

DANCES FOR THE REDOUTENSAAL
Twenty-four dances for court use, ländler alternating with minuets in the full vigor and inventiveness of the old master's be-

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The Spoken Word on Records

One propitious day in 1937, engineers at what is now called “old” Columbia (Columbia Records before it was purchased by CBS), hooked up their microphones and took down four scenes of Shakespeare’s Richard II, as performed by Maurice Evans and members of his repertory company. The resulting album was something of what the trade calls a “dog”, it wasn’t much good. But it was an album, and it was devoted to the human speaking voice in a unified, 40-minute dramatic effort.

The years since have brought forth much more golden talk, the first great effort for microgroove being (new) Columbia’s 1949 cutting of the Robeson-Hagen-Ferrer Othello, on three LP’s, still a fabulous and blood-curdling set. Decca got into the act, somewhat later, with two plays which almost could almost have been written for the wonderful combination of phonograph and visual imagination, T. S. Eliot’s The Cocktail Party and Christopher Fry’s The Lady’s Not For Burning, and another of less, but still potent, effect, Arthur Miller’s Death of a Salesman. Columbia countered with something lightsome but delightfully engrossing: Noel Coward, with Lily Pons, in his own semi-musical whimsy, Conversation Piece. It also spiced proceedings with four albums of history, I Can Hear It Now. In Washington, the Library of Congress began taking down poets’ recitations of their own works on low-fi 78’s. A small LP company, Polymusic, issued an excellent two-LP version of The Tempest, featuring Raymond Massey and some very hi-fi indeed.

This year has been a rich one for people who like the mother tongue at its best work. Most notable are three bright new efforts. One comes from a new company named Caedmon. It is a 12-in. LP presenting the young Welsh poet Dylan Thomas in readings from his own works. The recording is gorgeous, and Thomas talks English in a way to make most of the rest of us shrink with shame for our abuse of this great instrument. The poems, mostly impressionistic, are Fern Hill, Do Not Go Gentle, In the White Giant’s Thigh, Ballad of the Long Legged Bait and Ceremony After a Fire-Raid. But prize item is the half-hour metrical short story, A Child’s Christmas in Wales, a straight, tangibly atmospheric recital and very, very funny.

A real surprise is an offering from Atlantic Records, heretofore known chiefly as a purveyor of LP jazz. This is a two-LP performance by Eva LeGallienne, Dennis King, Richard Waring and the Margaret Webster repertory players of Shakespeare’s Romeo and Juliet. No one LeGallienne’s age could look like 14-year-old Juliet, but no one a tear jerker. Aply backing the aurally realistic stage doings is some handsomely arranged Tchaikowsky music, which (and this is a tribute to its cleverness) employs an electric organ without the slightest offense. Since Herbert Abramson, producer of the album, has labeled it “Living Shakespeare Series”, it is to be presumed, and hoped, that he plans others.

In the wake of Decca’s success with its Eliot and Fry plays, wherein the words served adequately without viewed action, Columbia has come forth with a work proven in advance to have no need of stage action for maximum effect. This is the central scene of G. B. Shaw’s Man and Superman, subtitled Don Juan in Hell, and played to capacity audiences across the nation by the so-called First Drama Quartette, who sat around a table on the stage and read it. The FDQ consists of Charles Boyer, Charles Lawton, Sir Cedric Hardwicke and Agnes Moorehead, and they really bring Shaw’s civilized, sophisticated, pleasure-ridden hell right into Mr. Doakes’ living room. They are accompanied by a slight pre-echo, the result of cramming the grooves too close together, to get the whole thing on two LP’s, but this sounds proper and fitting in the halls of Hell. All that is lacking is the Mozart music, which Shaw could have wished for (the characters are Mozart’s libertine Don Juan, his wife, her father — younger than she, having died earlier — and the devil.) This album actually provokes censure in the listening, but it may sell well all the same.

J. M. C.
Tested in the Home

THE NEWCOMB CLASSIC 25

Last May, Newcomb Audio Products Company of Hollywood previewed their new line of amplifiers at the Parks Show in Chicago. Two features—strangely enough, mechanical rather than electronic ones—caught our eye: a true remote control unit, and an adjustable panel-and-knob arrangement.

Electrically, the eight amplifiers in the Newcomb line were as carefully designed as they were well manufactured; sound was impressive, control ample; the price range complete: from $39.50 (audiophile net) for a 10-watt without preamplifier to $269.50 for the Classic 25.

Remote Control without Quotes

Practically all amplifiers are available with "remote" control units, but the degree of remoteness varies considerably, as does the answer to the question, remote from what? Read the answers for all equipment: Remote from the amplifier chassis?

The importance to the audiophile of the answers to those questions depends entirely on the individual installation. The number of amplifiers available is legion; let’s review briefly what might be called separation factors for various pieces of equipment.

Under nearly all conditions, speakers can be separated from power amplifiers by anywhere from 25 to 50 ft. without noticeable losses. Of course, the longer the distance, the heavier the wire which should be used, but this factor is almost inconsequential. For instance, according to Rider,1 100 ft. of No. 18 wire (common lamp cord wire) will introduce a power loss of 15% when used with 8-ohm speakers. — The location of dividing networks is of no importance in this separation factor; they can be put at the amplifier or at the speaker end, depending on convenience.

The separation factor for a control-preamplifier—the distance between it and the power amplifier—depends almost entirely on the design of the unit. Most of the newer equipment uses cathode follower design which permits separation of from 10 to 50 ft. with, at the greater distance, only a very slight attenuation of the highs—and how much attenuation over, say, a 35-ft. distance depends on the type of cable used for the interconnection. Prospective purchasers should obtain specific information on this subject from the manufacturer of the equipment they are considering: it is freely and willingly given.

The older types of control-preamplifiers had to be kept close to the power amplifier except in cases of specially built equipment.

Note that we have hyphenated "control preamplifier" and considered this as one piece of equipment, for it is common practice today to combine the separate functions of preamplification and control (of tone, volume, and switching) into one unit. But the two functions can be, often are, and sometimes must be (for convenience sake) separate units. Then the separation factor of each unit may be different. For instance, the Brociner preamplifier-equalizer can be as much as 30 ft. away from whatever control unit or amplifier is used in conjunction with it, but a G-E preamplifier should be within 6 ft. of the next piece of equipment in the chain. The Brociner control amplifier, however, has a high separation factor, a 30-ft. wire from it to a power amplifier is not excessive.

There is not nearly as much flexibility of separation factors for phonograph cartridges—and here is where we come back to our starting point of remote control without quotes. To avoid unduly complicating matters, let it be stated that the usual magnetic cartridge should be connected to the preamplifier unit by as short a wire as possible; 3 to 6 ft. is considered optimum; anything much over 6 ft. is dangerous. There are some exceptions, due to design factors; see the "Tested in the Home" report on the Fairchild cartridge.

Thus, we return to our question, remote from what? And that brings us to the question which audiophiles should ask: where do you plug in the wire from the phonograph cartridge? If the answer is, on the remote control unit, then that unit must be located within 6 ft. or less of the pickup.

Fig. 1. Remote control unit on the Newcomb has four "minor" and two "major" controls.

If the answer is, on the power amplifier chassis, then that is the unit which must be within 6 ft. of the pickup. Which is best depends, as we said, on the installation.

Let’s examine two typical (2) installations: that of Mr. ILT (I Love Television) and Mr. IHI (I Hate It).

Mr. ILT has his TV set located in the middle of one wall, with a fine loudspeaker system under it, next record storage shelves at one side, a record changer at the other side. Two easy chairs are located at a comfortable viewing and listening distance. Now, unless Mr. ILT wants to pop up and dash for the volume controls every time the phone rings, the answer for him is a remote control and amplifier system wherein the phonograph and TV wires plug into the amplifier chassis, the remote control being connected by a single cable (run under the floor, probably) to the amplifier.

Mr. IHI, of course, does not have a television set. He has the same two armchairs as Mr. ILT. His speakers are located along a facing wall or in a corner of the room. He has either a changer or a turntable. But, unlike Mr. ILT, Mr. IHI has his pickup in a near cabinet right alongside his armchair. You see, he likes to play individual records, and he doesn’t want to have to hop up at the end of each one to turn it over. So, for Mr. IHI, the type of remote control in which the lead from the pickup plugs into the remote control unit is just fine. His power amplifier can be either in the same chairside cabinet or across the room with the speakers.

For the same results, Mr. IHI’s system will cost a little less. It complicates engineering design very considerably to have the pickup, TV, FM tuner, and other wires plug into the amplifier chassis, yet have input selection, volume, bass and treble tone, and record equalization controlled from a distance.

The extra cost may be worth it. If Mr. IHI developed a taste for television, he would not be able to control volume and sound from his chairside unit, simply because TV sets generally have to be connected to the control equipment by a short wire. The same applies to tape recorders and FM tuners—in fact, to nearly all equipment in the average home installation.

It may be felt that we have gone far afield from a report on the Newcomb Classic 25 amplifier, but this unit is of the type

1Low Power P. A. Systems, John F. Rider, 1948
wherein the connections from FM and TV tuners, phonograph pickups, and what have you are made to the amplifier chassis — and this may well be a deciding factor in many installations. Since very few manufacturers produce this type of equipment, we felt it important to clarify exactly what was meant by "remote control".

The Newcomb remote control unit is shown in Fig. 1. It is connected to the amplifier by a single cable which may be up to 100 ft. long. The control is supplied with a 5-ft. cable attached; 20-ft. extensions are available. The cable may be run anywhere — along the baseboard, under the floor, or loose on the floor so that control can be moved easily to different parts of the room. It should not be run too close to 110-volt AC lines, lest it pick up hum.

The control unit has six knobs. The two small ones at the left regulate bass and treble response. The adjustment range is -16 to +23 db for the bass, -25 to +23 db on the treble.

The large left hand knob is a "record condition compensator". It is in essence a sharp treble cut-off control utilizing an L-C circuit which provides the following cuts:

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<th>Position</th>
<th>Down 3 db</th>
<th>Down 4 db</th>
<th>Down 5 db</th>
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<td>2</td>
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<td>6</td>
<td>7,000</td>
<td>10,500</td>
<td>13,000</td>
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The large right hand knob is the recording characteristic equalization control. Two microgroove and three 78 rpm. positions are provided. One microgroove curve matches the AES standard, the second is labelled "microgroove standard" and is the same as the AES as far as turnover point is concerned, but the treble is flat (the AES droops about 12 db at 10,000 cycles). On the 78 rpm. side, the AES curve corresponds to AES position on microgrooves, the "standard 78" has the same turnover point as the AES position but the treble is not deemphasized and the bass continues to rise, rather than rolling off gently below 100 cycles. The "foreign 78" position is identical to the AES at the high end but the turnover point is dropped to 250 cycles.

One other feature distinguishes the three 78 rpm. positions from the microgroove curves: because the output of pickups for 78 rpm. records is usually higher than that from microgroove records and pickups, the volume level on the 78 side has been reduced. Thus the change in volume level when switching from 78 rpm. records and cartridge, is compensated for automatically.

The two small knobs at the right of the control unit’s panel are a two-position selector (at top) and a loudness control (at bottom). The loudness or volume control is effectively compensated for the changes in hearing characteristics which occur at low volume levels.

Taking the Pain out of Panels

As we said at the beginning of this discourse, the second feature of the Newcomb line which caught our eye was an adjustable panel-and-knob arrangement.

Time was when manufacturers supplied their equipment in metal chassis having a front panel about 1/2-in. thick and cut the shaft lengths which stuck through the front panel so that the knobs would fit neatly against the panel with absolute minimum clearance. It was just about impossible to do anything with such equipment except to leave it lying around on top of the table, because about the thinnest material the average home owner could find for a panel was Masonite or plywood which, all too often, was so thick (relatively) that the knobs wouldn’t stay on.

Continued on page 105

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THE WEATHERS PICKUP

If you can devise a way to hold the record in place, you can amaze and startle your friends by playing records with your turntable upside down — if you use the new Weathers pickup arm. We do not see any immediate practical application for this feature, but we do find the mechanical method of securing the correct stylus pressure, which Paul Weathers has used, an interesting, decidedly novel, and practical departure from the customary. Instead of relying on weight, achieved in one way or another, Weathers uses a spring to hold the stylus down on the record. Thus pressure is constant, regardless of the position of the turntable. Also, just as the stylus is held down against the record, it is held up away from the record, when the arm is lifted above a halfway point.

When we photographed the arm for Fig. 1, it was in its up position. If it is pushed down gently, it reaches an approximately horizontal position with spring pressure exerted upwards. Then, the spring appears to reverse itself and the pressure is exerted downwards.

Fig. 1. Special arm for Weathers cartridge.

The arm is made of wood, and is counter-balanced with a factory-adjusted weight so that, with spring pressures removed, it is exactly balanced both vertically and laterally around the pivot point. The Weathers cartridge is held in place by a spring clip; the correct length of shielded wire is supplied with the arm. Installation is simplicity itself.

Also supplied with the arm are two round blocks of drilled and cut wood, each 1/2-in. thick, to be used to adjust the height of the base in relation to the turntable surface. This is a neat, simple, and inexpensive idea, one which we have not seen before. Incidentally, the height of the arm is not critical: the base should be from 1 to 1 1/2 ins. below the turntable surface. As manufactured, and without resorting to the shims provided, the height is correct from such turntables as the Rek-O-Kut 747.

Certainly the new arm is the answer to the troubles along these lines which we reported in High-Fidelity No. 5. In that issue, we pointed out that the cartridge was hard to adapt to several of the better-known pickup arms. Further, most of the arms required considerable readjustment of counter-balances to provide the correct weight for the Weathers. The new arm cannot be adjusted for different weights, nor can it accommodate cartridges other than the Weathers — but this is in its favor. Used with the cartridge for which it is specifically designed, optimum operating conditions are ensured.

Continued on page 115

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Fig. 2. Note rubber shock mounts lower right, separating preamp from main chassis.
THE TANNOY FIFTEEN

In wartime Britain, every raucous device that blared unwanted orders from a wall-box was known to members of the armed forces as a "Tannoy." This was a fact hardly likely to encourage exacting high-fidelity enthusiasts to listen when, early this year, Beam Instruments Corp., New York, began marketing a line of British speakers called Tannoy. Fortunately, however, the speakers could speak for themselves — but eloquently!

Tannoy Dual Concentric (co-axial) loudspeakers come in two sizes, 15-in. and 12-in. diameters. Only the former made it through to the Tannoy. It became immediately efficient. The parent organization, Tannoy Instruments Ltd., even substituted the name "Tannoy" on Gene Krupa's records. In regard to the old arm we said, "the method of mounting makes for perfect tracking, but it also means that operating conditions must be perfect."

The primary advantage of the new design is that the arm will operate better under less perfect conditions, i.e., those encountered in the home. In the old arm, there was a ball attached to the arm itself. The ball reined in an inverted cone which formed the top of the base. The inverted cone was partially filled with a viscous damping "goo" so that the ball literally floated in the base cup. The weight of the turret head, with its three cartridges, and of that part of the arm in front of the base, was counterbalanced by a heavy weight in the rear overhang portion of the arm. The weight was adjusted for use with 78 rpm cartridges. When the turret was turned to its LP position, a spring was actuated which had the effect of lifting some of the weight from the cartridge end of the arm.

This was fine — with careful handling and under near-perfect operating conditions. But what happened when the arm was domesticated? On a bumpy LP record the arm would rise up the bump, but drift down — sometimes skipping a groove in the process. Only the weight of gravity, duly damped by the viscous goo, tended to pull the arm back into place, and the stickiness of the goo slowed the pulling back process.

Also, since the arm moved freely if a bit lugubriously in all directions, if it was not picked up and moved to playing position with care, it would twist — that is, rotate counterclockwise, so that the stylus would ride in the groove at a slight angle instead of exactly perpendicular to the disk. Again, matters would straighten out after a few grooves, but one tends to expect a professional arm to operate perfectly at all times, regardless of the amateurishness of the operator.

Late last Winter, Fairchild started redesigning the method of counterbalancing the arm. The final design, shown in Fig. 1, is just now reaching the market. As can be seen from the illustration, the weight has been removed from the overhanging rear of the arm and replaced by a system of springs. The two springs to the right in Fig. 1 are the basic equivalent of the old counterweight. Then, whereas the cup (of the ball and cup base) in the old arm was part of the base, in the new design it is part of the arm, held against the ball by the three springs visible around the periphery of the cup. The two side springs hold the arm in a position exactly parallel to the base or turntable; any tendency to rotate (or be rotated, by the operator, as discussed above) is counteracted by the side springs.

The spring to the front of the cup (at the left in Fig. 1) counterbalances the two main springs. It will be noted that there is a small cord running from the spring over a pulley and up into the forward part of the arm. This is interconnected with the turret head so that when the head is rotated from the 78 to the 33 rpm cartridge position, the cord is relaxed a little and a pull exerted on the front spring, so that the two rear springs exert more pull, with the final effect of reducing the stylus tip pressure.

Essentially, springs have replaced gravity in the new arm. The advantage is that the increase in pressure exerted by a spring, as it is stretched further and further, is far greater than the increase exerted by gravity alone. Thus, with a tiny bump on the record, the action of the new arm is almost identical with the old design. But if we can imagine a really enormous bump — the springs may be thought of as pulling the arm back toward its original position very quickly over the first 50% of the distance, quickly over the next 30%, but allowing it to "drift" down for the final 20%.

The overall result is a much better arm from the point of view of the non-professional user, yet at no sacrifice to the professional. The matter can be summarized, perhaps, by saying that the new Fairchild arm, in the professional zone of operation, functions almost identically with the old arm. Continued on page 111

THE FAIRCHILD ARM

In HIGH-FIDELITY No. 3, we "Tested in the Home" the Fairchild transcription arm and cartridges. The report herewith will bring readers up to date with a redesigned arm, and furnish more information about the cartridges.

Until recently, Fairchild equipment has been marketed almost exclusively to professional users, and the arm continues to be designed to permit playback of 16-in. transcription disks as well as standard 7, 10, and 12-in. records. In regard to the old arm we said, "the method of mounting makes for perfect tracking, but it also means that operating conditions must be perfect."

The primary advantage of the new design is that the arm will operate better under less perfect conditions, i.e., those encountered in the home. In the old arm, there was a ball attached to the arm itself. The ball reined in an inverted cone which formed the top of the base. The inverted cone was partially filled with a viscous damping "goo" so that the ball literally floated in the base cup. The weight of the turret head, with its three cartridges, and of that part of the arm in front of the base, was counterbalanced by a heavy weight in the rear overhang portion of the arm. The weight was adjusted for use with 78 rpm cartridges. When the turret was turned to its LP position, a spring was actuated which had the effect of lifting some of the weight from the cartridge end of the arm.

This was fine — with careful handling and under near-perfect professional operating conditions. But what happened when the arm was domesticated? On a bumpy LP record the arm would rise up the bump, but drift down — sometimes skipping a groove in the process. Only the weight of gravity, duly damped by the viscous goo, tended to pull the arm back into place, and the stickiness of the goo slowed the pulling back process.

Also, since the arm moved freely if a bit lugubriously in all directions, if it was not picked up and moved to playing position with care, it would twist — that is, rotate counterclockwise, so that the stylus would ride in the groove at a slight angle instead of exactly perpendicular to the disk. Again, matters would straighten out after a few grooves, but one tends to expect a professional arm to operate perfectly at all times, regardless of the amateurishness of the operator.

Late last Winter, Fairchild started redesigning the method of counterbalancing the arm. The final design, shown in Fig. 1, is just now reaching the market. As can be seen from the illustration, the weight has been removed from the overhanging rear of the arm and replaced by a system of springs. The two springs to the right in Fig. 1 are the basic equivalent of the old counterweight. Then, whereas the cup (of the ball and cup base) in the old arm was part of the base, in the new design it is part of the arm, held against the ball by the three springs visible around the periphery of the cup. The two side springs hold the arm in a position exactly parallel to the base or turntable; any tendency to rotate (or be rotated, by the operator, as discussed above) is counteracted by the side springs.

The spring to the front of the cup (at the left in Fig. 1) counterbalances the two main springs. It will be noted that there is a small cord running from the spring over a pulley and up into the forward part of the arm. This is interconnected with the turret head so that when the head is rotated from the 78 to the 33 rpm cartridge position, the cord is relaxed a little and a pull exerted on the front spring, so that the two rear springs exert more pull, with the final effect of reducing the stylus tip pressure.

Essentially, springs have replaced gravity in the new arm. The advantage is that the increase in pressure exerted by a spring, as it is stretched further and further, is far greater than the increase exerted by gravity alone. Thus, with a tiny bump on the record, the action of the new arm is almost identical with the old design. But — if we can imagine a really enormous bump — the springs may be thought of as pulling the arm back toward its original position very quickly over the first 50% of the distance, quickly over the next 30%, but allowing it to "drift" down for the final 20%.

The overall result is a much better arm from the point of view of the non-professional user, yet at no sacrifice to the professional. The matter can be summarized, perhaps, by saying that the new Fairchild arm, in the professional zone of operation, functions almost identically with the old arm. Continued on page 111

Cross-section of Tannoy 15-in. speaker.

A Tannoy 15 was substituted in a 10-cu. ft. bass-reflex cabinet for an American speaker system priced at $55 more than the Tannoy. It became immediately apparent that the American system came off best in only one respect: it was more efficient. In all other ways, the Tannoy made it look sick. Most important, the Tannoy was smooth; there was no shrill disagreement between tweeter and woofer at the crossover point. Also, and this was something of a revelation, it was remarkably versatile. It could be turned down to an operating volume which must have consumed about one-third of a watt, and listened to from six feet away, and it still sounded full and pleasant. Alternatively, when it was opened up a little, it delivered the Benny Goodman Trio to the lawn outside the French windows, 40 feet away, with enough vigor to justify critical comment on Gene Krupa's snare technique. It showed small trace of treble "beaming," being perhaps most free of this complaint of any co-axial yet heard by this reviewer. By the same token, its high-end distribution was fine and wide, very satisfactory at 40° off-axis.

In the 8-ft. box, experiment disclosed, it worked best with no bass-port aperture at all. In an 8-ft. box, a port noticeably improved bass response. In a corner folded-horn enclosure, it delivered almost too much bass, making the high end seem muffled. The immediate inclination was to call it just about the best living-room, box-Continued on page 119

Fig. 1. A system of springs replaces the counterbalance on the new Fairchild arm.
THE BIAMPLIFIER SYSTEM

ROY F. ALLISON

Trifles make perfection...

That quotation explains, in a nutshell, the motivation for the development of an audio system employing two amplifiers instead of the customary single unit.

The audible difference may be small, but it is there. With continued listening, it becomes more and more apparent. There are sound technical reasons for achieving a noticeable improvement and, in addition, the solution of tough acoustic and matching problems is made easier through the use of a two-amplifier— or, as we shall call it—a biamplifier system.

The biamplifier system consists essentially of a filter network inserted between a preamplifier or control unit and two or more amplifiers. Each amplifier is then connected directly to a speaker.

Customarily, systems employing multiple speakers utilize a single amplifier followed by a dividing network, the output of which is connected to the speakers. In effect, the biamplifier system moves the network from a position in the amplifier output circuit to one on the amplifier input side.

What’s Wrong With What We Have?

In a conventional multi-speaker sound system, the various sources of audio such as phonograph pickups, tape recorders, and tuners, are usually fed to a control unit which performs the functions of preamplification, input switching, and volume and tone control. The output is then fed into a power amplifier which is charged with the tremendous task of magnifying by some 10 million times the puny electrical signals entering it, without making the slightest change in any characteristic except size.

A dividing network, consisting of one or more large coils, capacitors, and level controls, is connected to the output of the amplifier. This network is supposed to sort the composite electrical signals according to frequency or pitch; one section routes the low tones below a certain crossover frequency to a low frequency speaker and enclosure, such as an air coupler, and the other section of the network feeds the high tones to a coaxial speaker or a tweeter directly, or to a mid-range speaker and a tweeter through another dividing network.

This basic system, while superior by far to one wherein all frequencies are fed from the amplifier to a speaker or a combination of speakers without a dividing network, has still a few undesirable features.

First, and most obvious, is the lack of standardization of dividing network design. Because the correct values of network components are determined by the individual speaker impedances, by the crossover frequency desired, and by the method of wiring the components together, each installation must be custom-designed for best results.

Even when the right components have been selected and wired in accordance to recommendations, dividing networks are still not infallible because, as has been pointed out, their correct operation depends on speaker impedance. Unfortunately, speaker impedance varies according to the frequency of the signal fed to it, and is affected also by the speaker enclosure. Only in the middle frequency range is the impedance likely to be close to the rated value. At both high and low ends, the actual impedance increases radically and unevenly. The variation of impedance with frequency means that a network designed to operate with, let us say, 8-ohm speakers, is mismatched over a good part of the frequency spectrum.

One of the achievements of modern amplifier design is the ability of the amplifier to compensate automatically for wide changes in impedance at the speaker. Thus, with a speaker connected directly to the amplifier, mismatch due to variations in impedance becomes relatively insignificant.

However, when a dividing network is inserted between an amplifier and a speaker, the amplifier’s “automatic” matching ability is largely negated.

Another basic difficulty in the usual multi-speaker installation is the matter of speaker efficiency. Some woofers tend to be quite inefficient when compared to mid-range speakers and tweeters. Therefore, more driving power is required for the woofer in order that a balance may be obtained with the rest of the system. It is for this reason that dividing networks are fitted with individual volume or level controls which can be set to reduce the driving power to the individual speakers.

Now, it will be recalled that one of the basic requirements of a fine amplifier is flat frequency response—that is, with equivalent input, the amplifier provides the same power output at 50 cycles as at 1,000 cycles or 15,000 cycles. If the woofer must have 5 watts at 50 cycles to be balanced with a tweeter requiring only ½ watt at 5,000 cycles, then the amplifier must be driven hard enough to put out 5 watts at each frequency. The level control at the output of the dividing network which feeds the tweeter must be turned down and 90% of the power at 5,000 cycles is absorbed—wasted—by the level control. In other words, so far as the high frequen-
cies are concerned, the amplifier is working ten times as hard as necessary. This may seem an unimportant matter until two other facts are considered: first, the harder an amplifier works, the more distortion it produces; and second, it is agreed generally that distortion is much more objectionable at high frequencies than at low frequencies. Thus, because of low woofer efficiency, high frequencies may be reproduced in a single-amplifier system with a good deal more distortion than is desirable. The effect may be noticeable particularly on low passages of music with significant low frequency content.

Two more ills can be charged to the level controls. Even when turned to the maximum ON position, these controls consume some power. When added to the power consumed by the resistance of the network itself, the loss may be such that the apparent loss of amplifier gain becomes significant. Finally, resistance between the speaker voice coil and the amplifier terminals reduces markedly and may even nullify the damping properties of a good amplifier.

To summarize, the major disadvantages of conventional multi-speaker systems are occasioned by the necessity for driving all speakers with the same amplifier, and inserting a dividing network between the amplifier and the speakers.

Some may say — and rightly so — that sound reproduction today, with a single amplifier, dividing network, and a multiple-speaker system, is remarkably perfect — and why bother with what to most are almost undetectable flaws.

The point is, here we are after perfection. If our present modus operandi has known shortcomings, let us undertake to eliminate at least some of them. Thus, from our statement of flaws, we move onto the logical thought that it would seem to be a good idea to split the frequency range into two parts directly after the preamplifier-control unit, and to use two amplifiers, each connected directly to a speaker. The low frequency range, which causes most of the trouble, could be isolated completely from the middle and high ranges, with no chance of interaction at high power levels. The individual amplifiers could be operated at the power levels actually required, with none wasted. Low frequency high amplitude tones would not be amplified together with high frequency tones, so that intermodulation distortion would be almost completely avoided and, because the high frequency amplifier would probably be operating at a much lower level, distortion would be reduced even further.

Other important advantages can be realized with such an arrangement. Speaker impedance variations would have very little effect because a direct connection could be made between the woofer amplifier and speaker, preserving desirable damping action.
The Biampifier System

A pictorial diagram of such a biampifier system is given in Fig. 1. It can be seen that the ordinary connections are made from phonograph pickup, tuners, and tape recorder to the preampifier and control unit. From that point on, however, the system is unconventional. The signal from the control unit is fed to the biampifier filter, described later, which serves the same purpose as the original dividing network—that is, it splits the sound spectrum into two parts, feeding the low tones to the low frequency amplifier and the rest of the range to the high frequency amplifier. The crossover frequency can be any desired. Volume controls on the output of each filter channel can be used to adjust the drive to the amplifiers for speaker balancing. Note that the inputs to the amplifiers are adjusted for balance, not the outputs, so that neither amplifier is driven harder than necessary. A woofer speaker mounted in a suitable enclosure can be connected directly to the output terminals of the low frequency amplifier, with a mid-range cone speaker and a horn tweeter connected through a dividing network to the high frequency amplifier. It should be noted that the effects of a dividing network at high frequencies do not appear to be as deleterious as at low frequencies. Among many reasons, two may be advanced: power is low, and with the horn loading normally used for tweeters, impedance mismatch is not as great.

In such an installation, the crossover frequency of the biampifier filter would probably be from 75 to 400 cycles, and the crossover frequency of the dividing network from 1,100 to 4,000 cycles. Many other combinations are possible for both the woofer and the high range system. For instance, a coaxial speaker might be used rather than the two separate high range speakers shown.

Thus the basic idea behind our experiments was that an improvement in sound reproduction could be achieved by dividing the frequencies ahead of the power amplification function. To do so would eliminate the somewhat uncertain quantity of a dividing network and would permit securing maximum advantage from efficient, well-damped modern amplifiers. Our work was directly primarily at the low frequency problem (400 cycles and below), although there is no reason why a triamplifier system, employing a third amplifier for the extreme high frequencies, should not be used. It is doubted, however, that the improvement so obtained would be worth the extra trouble and cost.

Design of the Filter Network

Two basic types of filter network were considered: those designed around the L-C principle, which requires inductances and capacitances, and those operating on the R-C or resistance-capacitance principle.

A deciding factor in the final design was that a universal filter was needed. We were faced with the impedance matching problem—a headache of dividing network design from which we wanted to escape once and for all. The matching difficulty arose with ahead-of-the-amplifier filters because of variations in design used in preampifier-controls as well as in amplifiers.

Actually any filter design that will provide a constant load of the necessary magnitude on the control unit, function properly when terminated by the two amplifiers concerned, and not introduce undue attenuation into the system, can be used as the biampifier filter. The optimum crossover frequency will vary according to the speakers and enclosures used in the system and, of course, the preference of the user.

First consideration was given to the standard coilcapacitor network configuration as used for speaker-system dividing networks. This was rejected for the following reasons:

1. Component values depend on both output and input impedances.
2. If any of the units (preamplifier-control or amplifiers) were replaced, it is likely that the network would have to be redesigned.
3. Suitable coils are not generally available, and would have to be custom made or wound by the user.
4. Because the network would be of high impedance and would be used in the system at a relatively low audio frequency.

Fig. 2. Double R-C filters divide frequencies into two bands.
signal level, it would be difficult to shield the coils adequately to prevent objectionable hum pickup.

The alternative was a simple resistance-capacitance network. Since attenuation approaching 12 db per octave was required, it was necessary to use two RC sections, well isolated, in each filter section. Also, in order to avoid a low impedance load on the control unit (which might or might not have a low-impedance output), a minimum-loss isolator would be needed. This requirement was best met by a cathode-follower stage, which provided also a low impedance input for the RC networks. Then, in order to compensate for the insertion loss of the cathode-follower and the RC networks, and to increase the audio signal level enough so that no hum problems would be encountered in the filter section, it was decided to add a stage of amplification. This was accomplished simply by using a double-triode tube. One section serves as the amplifier stage, and the other as the cathode-follower.

Fig. 2 is a schematic diagram of the complete filter, including a power supply for the tube. The power supply can be omitted if desired, and the power obtained from one of the amplifiers. If this is done, four power leads are required: one providing approximately 250 volts DC, which should be connected at the point marked “X” on the diagram; one lead connecting the ground buses between the two units; and two leads (twisted or shielded) from the 6.3-volt filament supply to pins 7 and 8 on the 6SN7-GT socket.

If a power supply is to be included, all leads entering and leaving the power transformer should be twisted and should lie close to the chassis. The transformer itself should be completely cased in order to avoid hum difficulties.

Standard wiring practice should be observed throughout, with only one ground connection made directly to the chassis.

The parts layout for the filter is shown in Figs. 3 and 4. As can be seen, the power transformer, rectifier tube, and associated components are mounted at one end of a chassis approximately 9 1/2 by 5 by 2 ins. The input receptacle, the 6SN7 tube, and the amplifier components are grouped at the center of the chassis. Next to the amplifier and cathode follower stages are mounted the RC network components for the filters, and at the end of the chassis are the volume controls and the output receptacles for the two channels. Foot-mounted terminal strips are used as intermediate wiring points throughout, and as mounts for the filter components.

Resistors in the RC networks are fixed in value, no matter what crossover frequency is selected. R6, R7, R9, and R10 should be within 1% of the values indicated, and should be of at least ½-watt rating. The filters will work, of course, if the components are more than 1% off nominal value, but the system response in the region of crossover is likely to be accentuated or depressed.

Under no circumstances should an error of 5% be exceeded.

Table I gives the list of components used in the original design. Because it is likely that other crossover frequencies will be desired, Table II lists values of C2, C3, C5, and C6 for frequencies from 75 to 1000 cycles. Mica capacitors of at least 300-volt rating should be used. Preferred tolerance on these capacitors is 2%. As before, 5% deviation from the nominal value is the outside limit.

Such tolerances for the filter components are required not because the actual crossover frequency is very critical, but because it is important that all components be set to provide the same crossover frequency. It will be necessary to use combinations of standard capacitor values to make up the nominal values indicated. Some of these units are quite large physically and adequate room for them should be allotted on the chassis.

Conclusion

The final test of any idea or equipment is how it sounds. The idea may be wonderful, and the equipment may be perfectly designed, but if it doesn’t sound “right”, it must be considered useless. Therefore the filter network described in the foregoing paragraphs was examined under the same conditions as those used for the “Tested In The Home” reports in this Magazine.

The equipment was connected in such a fashion that we could A-B test two arrangements. First, the output of a preamplifier-control unit was connected directly to the input of a single amplifier. A dividing network was used with a three-speaker system. This dividing network was a two-way network: it divided the frequency spectrum into a low and a high section. The woofer was, of course, connected to the low side. A 12-in. speaker was connected to the high side, and a tweeter was connected in parallel to the 12-in. unit but isolated (or filtered) from it by a single 1 mfd. capacitor.

For the second arrangement, the speakers were identical, but the filter network was connected to the output of the preamplifier-control unit. Two identical amplifiers were then wired to output connections of the Continued on page 92
Continued from page 32

performance. The most convenient or attractive arrangement may not be the best acoustically. You may need expert advice on this detail.

Additional speakers with individual volume controls can be installed in various rooms, together with switches to turn the equipment on and off. Thus you can load up your record-changer, or tune in the radio before you go to bed, switch on either one when you are ready, adjust the volume of your bedroom speaker, and switch off the entire radio-phonograph system before you go to sleep.

Also, you can have a connection for a permanent or plug-in speaker outdoors on the lawn or hidden in the trees, on a terrace, or inside a patio. This calls for running wires in conduit, with a waterproof mounting for the connector, switch and volume control.

**Speaker or Speakers $** **Cabinets or Mounting $** **Remote Speakers $**
**Remote Controls & Installation $**

### 8. INSTALLATION OF EQUIPMENT

This item was set up on the assumption that you will want to have some kind of special mounting for your equipment, which will involve a certain amount of labor. It may be only a simple arrangement in a bookcase. Perhaps you have ideas about a complete music wall, or the reconstruction of a cabinet or closet. All that expense can be saved if you do the work yourself, but you may find it more satisfactory to employ a custom installation expert, or a serviceman who has a thorough knowledge of audio equipment.

Whatever kind of an installation you plan, don't skimp on cost at this point. If the performance of some simple part is not satisfactory, you can replace it. But if the wires are run carelessly, they will be broken in the course of housecleaning. What is worse, they may develop mysterious, intermittent open or short circuits that are difficult to find. Generous ventilation must be provided for the amplifier and tuner, as a protection against overheating. Cabinet work must be well done, and of solid construction. This applies particularly to record-changer and speaker mountings. Pickup pressure is so light that any jar transmitted to the changer may cause the pickup to jump a few grooves. Loud notes from the speaker will cause anything loose in the room to rattle, including joints in the speaker cabinet.

Your hi-fi system should be a source of pleasure and satisfaction to see as well as hear. Otherwise it will be only an irritation and disappointment, and a waste of money.

**Cabinet Work $**
**Installation of The System $**

### FINAL SELECTION OF EQUIPMENT

After you have read the foregoing discussion of the possible variations that can be incorporated in your hi-fi system, you may have the feeling that the project is just too complicated for a layman to tackle. It would be the same if, at the first session with your architect, he presented all the factors that you would ultimately decide upon in planning a house. You would throw up your hands and say: "This is beyond me! I'm going to look at houses that are already built, and take my chances on finding one that will prove satisfactory after I move in."

Well, that's one way to decide on a hi-fi system, too. Several companies are offering very handsome cabinets of functional design, so simple in line and appearance that they do not argue with furnishings of any period. And they offer a choice of facilities and fine equipment all installed and ready to operate. You can set up such a unit in your living room, connect the AC current and the antenna, and have everything working in a matter of fifteen minutes. That is a solution worth considering.

On the other hand, the problems of planning a custom

### RECAPITULATION

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<td>3. 2nd Phonograph, Microphone</td>
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<td>4. Tape Machine</td>
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<tr>
<td>7. Loudspeaker, Cabinet or Mounting</td>
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All music sounds better on a

**Webcor**
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Continued from page 88

installation for your home shouldn't discourage you. As you study the various elements and begin to understand what they will mean to you, you will be able to think of them in their order of relative importance in function and cost. Then you will be ready to compare the pieces of equipment as described in catalogues, or to go to a dealer and say: "I have a tentative plan for a hi-fi installation and I'd like to hear a combination of instruments that will come to about the figure I have set as a budget." If you have a capable man to assist you in making your final selections, the last of your uncertainties will be cleared up quickly.

In the end, when your installation is complete, the last adjustments made, and you finally have as your command the music of your own choosing, with all the tonal magnificence a fine audio system can provide, you will look back on the work and worry of planning your installation as one of your most rewarding experiences. Even if the cost was twice what you intended to spend, you will be comforted by the conviction that no other investment would pay such liberal and lasting dividends of enjoyment and satisfaction.

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BIAMPLIFIER SYSTEM

Continued from page 87

filter. The output of one amplifier ran to the woofer; the output of the other was fed the 12-in.-and-tweeter setup.

Switching back and forth produced a subtle but distinct difference in listening pleasure. The low frequencies seemed a little more pure and less obscured, the muddles and highs cleaner. The overall effect was that we had moved one step forward toward exact reproduction of the music as inscribed on the phonograph disk. There was a definite improvement in sound over a considerably better than average single amplifier system with a carefully designed dividing network and well balanced speakers. But we hesitate to claim that the improvement was sufficiently marked to warrant purchase of a new hi-fi amplifier—except for the most critical.

The advantages of the filter and of the bi- amplifier system were much more apparent in other ways. For example, we tried a combination of a moderately efficient woofer with a highly efficient 12-in. speaker. With a single amplifier system, the power going into the efficient 12-in. mid-frequency speaker had to be cut drastically by use of the level control in its voice coil circuit. The sound then seemed thin and restricted in the dynamic range when compared with tests utilizing for the mid-frequencies a speaker identical with the moderate-efficiency woofer.

When the filter network was used, with separate amplifiers feeding the woofer and the high-efficiency 12-in. mid-frequency speaker, no such “thinning” effect was noticed. It was possible to match the volume output of the woofer and the mid-frequency speaker by adjustment of the volume controls on the filter network; the effect was akin to turning down the volume on a single amplifier, single speaker system, rather than forcibly restraining the speaker.

Another advantage of the bi- amplifier system is that of matching speakers having different voice coil impedances. For instance, if we were to try to use a 16 and an 8-ohm speaker with a dividing network and a single amplifier, there will have to be a mismatch somewhere. The dividing network will have to be designed for one impedance. With a bi- amplifier system, the 16-ohm speaker would be connected to the 16-ohm output taps on its amplifier, and the 8-ohm taps used for the corresponding speaker on the second amplifier. Each amplifier and speaker would operate under optimum conditions. This is an important advantage, particularly for those who want to combine 4-ohm and 16-ohm speakers. Such mismatch is considered “intolerable” for a dividing network (two to one is acceptable, by customary standards). In a bi- amplifier system, there would be no problem.

Just as differences in speaker efficiencies can be balanced easily with the volume controls on the filter network, so too differences of gain in amplifiers can be equalized. We tried pairing a low gain amplifier with a high gain unit; no problem.

There is no doubt, the bi- amplifier system is a luxury system. It is a touch of refinement which may be considered superfluous.
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Anyone Can Install It! EASY
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Price $116.00

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The World’s Finest - At Lowest Prices

What Every HI-FI Enthusiast
Should Know!

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THE PRESS
HIGH FIDELITY
SIMPILIFIED
by
Harold D. Weiler

A New RIDER Publication

HIGH FIDELITY SIMPLIFIED is written for those who now own, intend
to purchase or improve a high fidelity music system. It is the com-
plete story of high fidelity from the point of origin, through the
tuner, into the amplifier, and then into the loudspeaker. The author
provides a thorough explanation of the characteristics required for
high fidelity reproduction.

HIGH FIDELITY SIMPLIFIED has over 100 illustrations, blueprints
and photographs of the latest equipment available.

HIGH FIDELITY SIMPLIFIED provides for the first time the minimum
requirements of each component and explains in simple language the
terminology used by the manufacturers in their specifications.

The problems encountered in housing a high fidelity system are
discussed in detail and many suggested installations are illustrated.
The Nova Wall Units are described in detail with complete dimen-
sional drawings. Audio hobbyists, record collectors, and all who
enjoy lifetime reproduction will find this book authentic and practical.

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2.- SOUND!
3.- ACOUSTICS, ELECTRONICS AND MUS.C!
4.- THE SIMPLE LOUDSPEAKER
5.- THE HIGH-FIDELITY LOUDSPEAKER SYSTEM
6.- LOUDSPEAKER ENCLOSURES
7.- THE AMPLIFIER
8.- THE AMPLIFIER PART 2
9.- THE RECORD CHANGER
10.- THE RECORD PLAYER
11.- THE TUNER
12.- THE COMPLETE HIGH-FIDELITY SYSTEM
13.- TAPE RECORDERS

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Changers, Tape Recorders, Packaged Systems,
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installation. Select from the largest stocks of ALL.

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The Weiler “Progressive” Loudspeaker System

Completely described and illustrated in HIGH FIDELITY SIMPLIFIED. Provides, for
the first time, a method of achieving true high fidelity reproduction without a
large initial cost. Now you can own a superb 3-way speaker system, and yet
acquire it progressively, that is, start with a single loudspeaker and improve the
system at future dates by adding a tweeter and its crossover network and at still
a later date a woofer and its crossover network. While conventional speaker enclo-
sures do not permit such latitude, the Weiler corner enclosure, which is simple
to build, does! It provides optimum performance at each stage of the way. The enclo-
sure supplies superb bass response through horn-loading of the back wave of the
woofer. This cabinet was expressly designed for use with the University speakers
and crossover networks illustrated here. Installed in the corner enclosure they will
provide the finest reproduction at each step, at moderate cost. Together, they
leave little to be desired. The following system features:

UNIVERSITY WIDE ANGLE DUAL TWEEETER
HIGH FREQUENCY REPRODUCER
Model 4402 Dual Tweeter provides ac-
oustical characteristics which make it
the most versatile high frequency tweeter available today. In
addition to its essentially flat response from 2000 to 15,000 cycles, it provides the wide
angle distribution required for true High-
Fidelity reproduction. Compact dimensions offer a variety of mounting possibilities,
whether for use in 2, 3 or 4-way systems.

NEW UNIVERSITY C-15W WOOFER
A true 15" low frequency reproducer capable of handling up to 50 watts
without distortion in multiple speaker sys-
tems. Provides clean reproduction down to 30
cycles. Maximum OD: 1.1". Requiring 13"/6,000-
diameter panel hole. Depth 101/4".

UNIVERSITY MODEL 4410 CROSSOVER NETWORK
600 cps crossover. Genuine L/C filter
effectively blocks “nights” from entering
woofer. Provides cleaner reproduction.
Complete with variable attenuator to bal-
cane high and low frequencies. Input
impedance 6-12 ohms. 4 1/4" x 8" x 71/4". NET $20.58

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NET $11.76

WORLD’S BEST PAINT
NEW UNIVERSITY 4-93W PENDANT SPEAKER

Extensive high frequency horn ar-
range ment sets up two distinct sound
paths to provide wide angle distribu-
tion in a single unit speaker. Enjoy true
cona hall quality reproduction at
amazingly low cost. Uniform
radial type field pattern permits
high quality listening from any loca-
tion in the room. Range 45 to 15,000
cps. Power handling capacity 30
watts, continuous duty. Input im-
pedance 8 ohms. Overall depth 4¼".

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THE BIAMPLIFIER SYSTEM

Continued from page 92

But many of us have an extra amplifier lying around... put it to use in a bi-axializer set-up! It's likely to be well worth the trouble.

**Table I**

<table>
<thead>
<tr>
<th>Crossover</th>
<th>Capacitor Values, Microfarads</th>
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</thead>
<tbody>
<tr>
<td>Frequency</td>
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<td>.0115</td>
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<tr>
<td>1000</td>
<td>.0103</td>
</tr>
</tbody>
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**Table II**

**Resistors**

| R1, R4 | 470K, ½ watt, 20% |
| R2, R5 | 2.2 K, ½ watt, 20% |
| R3 | 47 K, 1 watt, 20% |
| R6, R9 | 10 K, ½ watt, 20% |
| R7, R10 | 50 K, ½ watt, 1% tolerance, 5% max. |
| R8, R11 | 500 K, potentiometer, audio taper |
| R12 | 1.5 K, 10 watts |

**Capacitors**

| C1, C4 | .01 mfd., 400 volts, paper, 20% |
| C2, C3, C5, C6 | see table and text |
| C7 | .01 mfd., 400 volts, paper, 20% |
| C8 | 16 mfd., 600 volts, electrolytic |
| C9 | 40 mfd., 450 volts, electrolytic |

**Tubes**

| 1 | 6SN7GT |
| 5W40T | 1 |

**Transformer**

| UTC R-110,スタンプ P-6210, or equivalent. |

SECONDARY WINDING REQUIREMENTS: 5 volts at 1.5 amperes minimum; 600 to 650 volts, center-tapped, at 25 milli-amperes DC minimum; 6.3 volts, center-tapped, at 1 ampere minimum

**Miscellaneous**

3 - RCA phono receptacles
2 - octal tube sockets
2 - potentiometer control knobs
1 - chassis, approximately 5 by 9½ by 2 ins.
1 - chassis-mounted fuse receptacle and 1-ampere fuse
4 - N-110 terminal strips, foot-mounted Machine screws and nuts — hookup wire — AC cord

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PILOT... world renowned for 33 years as the last word in precision electronics...

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PILOT now puts its wealth of know-how into the most brilliant FM-AM Tuner ever built! Nothing has been spared to make the new PILOTUNER truly the ultimate among Hi-Fi Tuners. Space permits listing only a few of the many outstanding specifications, which include:

- two stage audio amplifier with bass and treble control units
- two stage preamplifier properly equalized for use with variable reluctance cartridges
- RF stage for improved sensitivity and selectivity
- automatic frequency control. A remarkable value at...

$999.50

PILOTONE Amplifier

Model AA-901

Superb new amplifier with full Williamson circuit. Constructed in accordance with rigid Pilot specifications. Contains 4 amplifier tubes, 1 rectifier tube, power output, 10 watts. Total harmonic distortion, less than .01% at 10 watts output. Sensitivity, 1.5 volts RMS input for rated output; input resistance 47,000 ohms. Speaker output, 8 and 16 ohms. Front Pilot light; on-and-off switch. Hum and noise level 80 db. below full rated output. KT 66 English Tubes. Dimensions: 14" wide; 7" deep; 7½" high. A luxury instrument, priced at...

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PILOTONE Pre-Amplifier

Model PA-911

A companion unit for PILOTONE AMPLIFIER Model AA 901. Selector switch allows quick choice of Auxiliary, TV, Radio or Phono inputs. Three positions of switch for phono input give proper compensation for records made to AES, NAB and foreign standards. Seven input jacks on back permit quick connection of various types of signal. Separate microphone input channel permits voice to be superimposed on radio, TV or phonograph. 12" long x 5½" x 5½". An exceptional "buy" at...

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The Pilot High Fidelity line is discussed and appraised in the practical new book, "High Fidelity Simplified," by Harold W. Weiler

Write for circular HF-1 describing these superb PILOT High Fidelity Instruments in complete detail.

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Like the Chambered Nautilus, Klipsch and Associates has been forced to seek new quarters. From humble beginnings to a larger plant in 1948, we moved again in the summer of 1952 to quarters several times as large. Actual production has doubled, and potential capacity increased by several times.

Thanks to you (we would say you—all here in Arkansas) for the support and acknowledgement of leadership that has made this last move both necessary and possible.

About our products: Klipschorn is the most highly developed sound reproducing system in existence, offering unapproached performance and a promise of lowest obsolescence. Styled with functional beauty, it is beautifully functional; it has already earned recognition as an art form in its own right, taking its place along with the grand piano, harp and cello.

Rebel is an inspired design for a corner horn speaker which offers a truly remarkable performance per dollar and which will compare favorably with contemporary speakers costing several times as much.

When you consider modernizing or installing new sound equipment, remember to write us for name of nearest dealer and latest information on Klipschorn and Rebel speaker systems.

Klipsch and Associates
HOPE, ARKANSAS
Phones: 7-6795 and 7-4538

READERS' FORUM
Continued from page 19

manipulation, handling each record (except the middle one) twice to play the work?

b) Why Don't They: Issue long-playing records with different colored labels on each side, so that the owners can tell at a glance whether they are playing side A or side B, without close scrutiny of the label?

Could you keep your reviews of Schubert, Beethoven, and Verdi up-to-date by reviewing in each subsequent issue all the new works of these composers?

William D. Diemer
Chicago 37, Illinois
Burke will keep his discographies up-to-date.

Sir:
The current article on care of LP records, makes no mention of the stuff in the little bottles, for sale hereabouts, for rubbing on records, and magically removing all static electricity, dust, etc.

My experience is that it does work, and makes for a very quiet-playing record. But, as it is all a mystery what is in the bottle, whether just milky dish water, or some magic chemical, I am still skeptical. I should not want to put anything on the records which might be fine at first but turn gummy or something later.

If it is worth while, then the manufacturers ought to give us records already treated, as the camera folks give us coated lenses.

W. R. Augur
New York, N. Y.

Sir:
The United States mails work wondrous slow, but they have finally disgorged my first three issues of High-Fi-lowFi.

My congratulations, and a long life to you!

Since these magazines arrived, I've spent lots of time mentally revising my rig for that far distant day when I get back to Texas, and regretting not taking the 3-year offer.

Don't forget to bill me for renewals for I don't want to miss an issue.

As one gentle suggestion, how about doubly wrapping the issues for overseas. Between Great Barrington and Japan mine got pretty beat up.

Again congratulations and add me to your list of satisfied readers.

1/Lt. Robert R. Jackson USAF (MC)

How are copies arriving now? We're on our third wrapper design—in an effort to outwit the muscle-men in the post office.

Sir:
I would like to call to your attention the existence of the Louisville Audio Society, for we are proud of our organization which, though it has been in existence for only 6 months, has had a very interesting life. Our membership runs the gamut from broadcasters to music hobbyists. The
Yes, Arrow's new Audio Center was created with YOU in mind. Whether you are a dyed-in-the-wool High Fidelity Fan or just a neophyte, an Audio Engineer with design and development problems, or a Professional or Industrial Sound User—you'll find exactly what you're looking for at Arrow's wonderful, new Audio Center.

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Automatically plays BOTH SIDES of 10" and 12" records continuously in sequence — without turning them over!

Take for instance, the recording of "South Pacific" (Columbia) — an LP 33 1/3 rpm recording; one side contains half the score of this musical — and the other side contains the other half. Only with the MARKEL Playmaster can you hear both sides of this recording — without getting up and turning the record over! The conventional automatic drop record changer cannot play this record automatically!

And this same problem of playing both sides in sequence without interruption — without getting up — exists with practically all 33 1/3 rpm recordings — regardless of whether they are RCA Victor, Columbia, Decca, London ffrr or any other of the famous labels.

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Now available with a specially-designed PFAN-TONE "Full Range" PHONO PICK-UP!

Now you can enjoy true concert clarity and realism in your own home... hear complete symphonies and operas without annoying interruptions to turn and restack records... and with each note clean and brilliant, each instrument in full natural voice!

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Plays one or both sides of 10" and 12" records.

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Playmaster Division MARKEL ELECTRIC PRODUCTS, Inc.
152 SENeca ST. BUFFALO 3, N. Y.

READERS’ FORUM
Continued from page 98

monthly meetings are well attended and have featured many talks, films, and demonstrations including an excellent demonstration on binaural tape recording of the Louisville Orchestra and Capel.

We invite any visiting hobbyists to join us, and we welcome as members anyone within easy travelling distance. The meetings are held the first Friday in every month; the time and place may be ascertained by contacting me by card or phone.

Louisville, Kentucky

David Kling

San Antonio's high fidelity organization, the "Audiophiles" came into being March 29, 1952, at the home of Mr. Robert R. Culmer. The first name chosen, the "High Fidelity Music Reproduction Club", was changed to "Audiophiles", due to criticism of its length.

Mr. Culmer, the president, has a thirty minute classical record program on Sunday mornings on 50 kilowatt NBC outlet WOAI-KITE, an FM station, has asked for a list of members, and is requesting that we make suggestions as regards programming.

A local newspaper columnist has given us a plug; we are hoping to have a feature in the Sunday magazine section of one of the papers. We are inviting new members, but the organization has not exactly been thrown open to the general public, as we rather want people who have a reasonable taste in music, and want their music reproduced as faithfully as possible.

We would like to contact other such organizations with the idea of being of mutual aid as regards programs and projects, and also with the thought of forming a national organization of affiliated clubs.

Bill Cate

San Antonio, Texas

Mr. Sharpe some samples of the best work being done over here, and are looking forward to a report from him.

Roselle, N. J.

We sent Mr. Sharpe some samples of the best work being done over here, and are looking forward to a report from him.

Karl F. Ockert

San Antonio, Texas
THE NEW JENSEN TRI-PLEX
3-Way Reproducer System

The result of exhaustive research to achieve the ideal system. The Tri-Plex consists of the P13-1L "woofer", the A-201 mid-frequency driver and horn, the RP-302 "super-tweeter", and crossovers, all housed in a handsome, solidly constructed enclosure which provides folded-horn back loading for the "woofer", and is designed for either wall or corner placement. Frequency range: 30-18000 cps. Power handling: 35 watts. Impedance: 16 ohms. Dimensions: 38 7/8" h. x 25 1/2" w. x 18 1/4" d.

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ST-902 - Blonde Karino ....... 299.29

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Model C104
PHONO PREAMPLIFIER and EQUALIZER

An extremely flexible unit designed for the most discriminating and acute listener. Provided with five inputs and selector switch, it accommodates crystal pickup, FM-AM tuner, low level microphone, as well as high level and low level magnetic pickups. A 3-position switch selects the correct compensation to match the three recording characteristics most often used. In addition, the C104 features treble and bass boost and attenuation, each with separate controls. Connectors are furnished for obtaining power from the main amplifier. A master power switch and volume control completes the attractive brown homemtone panel. Supplied complete with tubes and connectors.

In Mahogany-finish Cabinet .......... $57.50
Less Cabinet .......... 49.50

NEW TECH-MASTER HIGH FIDELITY AMPLIFIER KITS

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Ultra-Linear Williamson
The famous Williamson circuit, uniquely modified to provide equally high fidelity performance at considerably increased power output. A specially wound Peerless Output Transformer and other top quality components are used throughout. Undistorted power output is 15 watts. Frequency response at 5 watts is ±1 db., 8 to 80,000 cps. Kit is complete with pre-punched chassis, transformers, tubes, and all other necessary parts and components, together with detailed wiring and assembly instructions. $49.95

TECH-MASTER TM-15P
Preamplifier Kit
A versatile phono-preamp and tone control providing utmost flexibility to any sound system. Input selector switch has four channels for FM/AM or TV tuner, crystal pickup or variable reluctance type, tape recorder, or other signal source. Three-position phono-equalizer switch permits selection of characteristics to match recordings. Has independent bass and treble, attenuation and boost controls. Power obtained from main amplifier. Kit is furnished complete with pre-punched chassis with novel imprint of pictorial diagram for easy assembly, together with tubes, cabinet, components, and detailed instructions. $19.95

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BOOKSHELF MODEL FOR 8 INCH SPEAKER

The new famous R-J cabinet developed to new dimensions. Small enough to permit it to be inconspicuously mounted on a bookcase shelf. Reproduces amazingly clean, smooth, bass fundamentals while permitting direct radiation of high frequencies. An ideal system where space is a premium or as an extension reproducer in an extra room. May be finished to match the decor.

Dimensions: 11 1/2" h. x 10 1/2" w. x 23 3/4" d.

$8-4-U - (Single-shelf height) $24.50

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103 West 43rd St., New York 18, N. Y.
The C-800 is here to bring you new record performance!

**READERS’ FORUM**

Continued from page 100


Thank you very much.

Jack D. Campbell

Danville, Illinois.

We have had a fine response to our request for names of good carpenters and cabinet-makers. Can we do as well on this? What experiences have readers had with companies which make recordings?

Sirs:

I received my fifth issue of your publication the other day and I find each edition successively more interesting.

I have familiarized the majority of personnel on the basis with a degree of fidelity they did not know existed today. Many have learned to appreciate classics when they never cared for them before, since they could hear the music with all the overtones present rather than, as they had heard it before, with only fundamentals. The dynamic range possible was a surprise to those who were used to hearing the compressed range obtainable through AM radio and low fidelity systems.

The interest in your Air Coupler has increased since I first installed it. People have to get used to not hearing the juke-box one-note bass with no extended high frequency response. The one-note bass they are used to hearing is missed since the bass from the Air Coupler is more evenly distributed over the range. The ears really turn, however, when I play the 32-ft. pedal note in the Poulenc organ recording by Columbia.

One fact I have had trouble educating people to is the fact that high fidelity is not an effort to reproduce what we think the orchestra should sound like, but, as nearly as possible, to reproduce exactly the sound source, whether it be AM, tape, or disc, no matter how bad that source may be. As these sources improve, true reproduction will more nearly be approached without change in the reproducing equipment.

A few years ago before true high fidelity tape recorders were within the reach of the average home enthusiast, records would have been remarkable. Now, however, tape has so much less distortion, is almost completely free of any extraneous noises, regardless of number of playings, and has an added feature of a signal almost impossible to ruin as a complete unit. To explain the last statement: discs, no matter how few times they are played, are physically deformed at each playing. I recorded (tape) a copy of a new noise-free LP, played the record five times and re-recorded it and spliced these two together and was surprised at the increased surface noise in even five playings. Discs are capable of being damaged a few grooves at a time or scratched as a unit, both sides at one time. Tape, however, can only be ruined as a unit when placed in a very strong magnetic field. Tape is not particularly in

We rest our case on evidence you can hear

Words can’t prove the performance of this superb High Fidelity Tuner. Neither can witnesses. When it’s time for a decision, your judgement of the CRAFTSMEN 10 is based on one thing: evidence you hear with your own ears. Listen—and the conclusive evidence of incomparable sensitivity and flexibility will turn your trial into a lifetime of distinctly better listening.

The C-800 too! Williamsons eliminate circuit—99.99% distortion-free!

**CRAFTSMEN**

High Fidelity FM-AM Tuner

- Two cathode followers furnish both audio output and detector output for remote installations.
- Built-in pre-amplifier, compensated for variable resistance pick-ups.
- Automatic Frequency Control entirely eliminates drift, simplifies tuning.
- 5 microvolts sensitivity on both FM and AM.
- 10 kc filter on AM eliminates inter-station squeal.
- Bass and treble tone controls: for boost, cut, or 20,000 cycle flat response.

JUDGE THE C-800 TOO!

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SELECTIVE RECORD GUIDE: Moses Smith, 3 1/2 x 8 1/2, cloth.

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danger of short period erasure since this can only be accomplished unknowingly by "knob turners", an animal of which there are all too many of the species. I trust these people so much I am putting a key-operated AC switch on my recorder!

I have now fallen in the category of the type mentioned in one of your previous issues: one who wonders if he could have gotten a component that would do the job better. When I first played Pictures at an Exhibition, I was surprised at the low amount of distortion and the dynamic range on the disc. Now, however, after hearing it four times I am impressed no more. I want something better. The manufacturers have finally admitted they could do better. How much better remains to be seen.

E. P. Malone

Reader Malone's method of checking record wear is interesting. Any others?

SIR:

You will be pleased to know that in our business of custom cabinets, we have noted a vast increase in the knowledge and desire of the customers to obtain cabinets with proper acoustical space and construction for their equipment. No doubt, the articles you have printed on this subject have been beneficial.

 Whereas customers used to limit speaker space to the exterior appearance of the cabinet, they now appreciate the need for ample space and proper construction. This eliminates the educational headache we used to have on each cabinet. The customers also benefit by getting far superior results from their equipment. An interesting example happened when we built a cabinet for a musician who had his hi-fi components in use for several months without a cabinet. After installing the equipment, he heard a sustained bass violin note and drum roll on his favorite record although these notes were not audible without the cabinet.

New York, N. Y.

A. J. Crawford

SIR:

I have read several issues of High-Fidelity and am now ruefully trying to figure out if it wouldn't be more practical to move the rest of the family into a large closet, and to move the records and equipment into the master bedroom.

Jay R. Berkeley

New York N. Y.

SIR:

I would like to thank you very much for sending me the summer issue of High-Fidelity. Your magazine is excellent. I have enjoyed my subscription. Due to the fact we are presently in the process of purchasing a new home, we are temporarily cutting all luxury expenses. Therefore, I will not renew my subscription until some time...
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None, however, was authorized by the designer D. T. N. Williamson, nor approved as delivering the full performance of which his own design is capable.

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Fortunately, equipment manufacturers have become aware of the plight of the amateur who wants a panel to match his furniture or cabinetry, and would like to affix thereto a neat escutcheon with close-fitting knobs. One answer has been to provide escutcheons which are attached to the main chassis with screws or bolts long enough to go through most any panel. But there may be a snag here: the equipment is attached to the main chassis, so that to take care of thick panels, long shafts must be used. Which is fine, until we come to the installation for which ¾-in. Masonite is used — and then the shafts stick too far out, the knobs don’t fit snugly against the escutcheon. There are two answers here: use a false panel in back of the real panel, to hold the chassis away from the real panel, or get out the hacksaw and hack off the unneeded length of shaft.

The entire Newcomb line features one of the nearest solutions to this problem which we have seen. The remote control unit of the Classic 25 (the model we called "Tuscan in the Home") has two chassis plus an escutcheon. One chassis is the working chassis, to which the controls are attached. This is encased in a beautiful brushed-bronze box, which might be called the decorative chassis. To the decorative chassis, in turn, is attached the escutcheon. The working chassis is attached to the decorative chassis or box by four bolts... a box-within-a-box arrangement. The working chassis can be slid back and forth inside the decorative chassis.

To attach the Newcomb control unit to a panel, the knobs are pulled off, the escutcheon removed, and the front of the decorative chassis attached to the back of the panel. The escutcheon is attached to the front of the new panel, the knobs are replaced, and then the working chassis — to which, remember, the shafts and whatnot are attached — is slid back until the knobs clear the escutcheon just the right amount.

It’s hard to describe, but it is simple to do, neat and effective.

The adjustable knob-and-panel arrangement was the second mechanical feature which caught our attention last May. It is used on all eight Newcomb amplifiers, on the ones without the remote control unit as well as those with.

Tube Balance Control

Although it may seem that the only things we noted about the Newcomb line were mechanical, there are some original electrical ideas. We are not going into the technical details here of balancing output tubes, but it is said that all good amplifiers use a pair of tubes in the output, and to operate correctly, they must be, literally, paired. This is usually done with electronic testing equipment, seldom if ever found in the average home. These output tubes, be they 6L6’s, 807’s, KT-66’s, or whatever, age and deteriorate and may well collapse completely after long use. They do not age
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Tested in the Home

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equally, if one gives out and is replaced, the new one is almost certain not to match the old one. But, for optimum results, the two tubes must, like two horses in a team, "pull" equally.

Only one or two amplifiers are constructed so that even the electronic test equipment can be attached, for balance measuring and adjustment, without completely removing the amplifier from its native habitat somewhere in the more inaccessible reaches of the cabinet. As far as we know, Newcomb is the first to make this adjustment so simple that anyone, technical or non-technical in ability, can do it. Simply push a button on the amplifier chassis, and a distinct hum is heard in the speakers. Turn a short shaft with a screwdriver, and the hum increases or decreases. Adjust the control until hum is at a minimum, and that's that.

It is now positively fun to drop a hammer on an output tube. It used to be a catastrophe, calling for a complete dismantlement of equipment and a visit to the local radio repair shop.

The Rest of the Equipment

We have gone into a long, long discussion about what may be considered details—but sometimes these details are of utmost importance in achieving true satisfaction and enjoyment. Furthermore, among the group of top-quality amplifiers, details may be distinguishing features. Today, our knowledge of sound reproduction has advanced to such a point that, though it may be expensive, but is not difficult to design and manufacture a power amplifier which is "99.44/100%" pure in sound. Far more important is the front end—about which we have already said more than enough in this report.

Sound-wise, the Newcomb Classic 25 is certainly in the top bracket. It is pure, clean, and unadulterated. The frequency response of the power amplifier section is stated to be flat from 10 to 30,000 cycles, and, with the preamplifier and remote control unit attached, flat within ± 1 db over that range. Distortion is extremely low. Operation is, to all intents and purposes, hum-free. Design is clean, components more than adequate for long life. Nothing has been skimped— as should be the case with a $269.50 amplifier.

Let's take a quick look at the top of the amplifier chassis, Fig. 2. At the upper left, between the big transformer and the two tubes, is the button which one pushes to balance the two output tubes (6L6's). The balance control itself is between the tubes and the transformer at the upper right of the chassis.

In the extreme lower right hand corner are six RCA-type phono input jacks. Reading from left to right, we have: tape, TV, radio, crystal, magnetic (high input), and magnetic (low input). Tape, TV, and radio are identical and all feed to the same selector position on the control unit. The next two jacks to the right are for magnetic cartridges. The left hand one is for a high output level cartridge, such as Pickett.
erding and Clarkstan. The jack at the extreme right is for low output level cartridges, such as Audak and General Electric.

To the left of this row of six jacks is an octal socket to which is connected the cable from the remote control unit. And to the left of the octal socket is another standard phono jack which is the output to a tape recorder. This output is affected by the position of tone, volume and record equalization controls on the remote control unit.

Just above the six jacks, in the right hand corner of the chassis, are two tubes and between these tubes are, at the left, a level control operating on magnetic and crystal phonograph inputs which can be adjusted with a screw driver to balance the input to that from radio, TV, and tape. To the right of this is a small switch which is marked "magnetic" and "crystal". It controls the input to the phonograph position on the selector switch on the remote control unit.

We found that there was ample gain from the low level magnetic input to handle a Fairchild cartridge without a transformer.

Using a Weathers cartridge was something of a problem. If the AES terminals on the Weathers oscillator unit are connected to one of the three radio inputs (tape, TV or radio), sound and volume level are good. If, however, the Weathers oscillator is connected to the crystal jack on the amplifier chassis, there is much too much bass. This is, of course, also true if the Weathers unit is connected to either of the two magnetic inputs and, furthermore, volume becomes excessive even with the phonograph level control adjusted to almost completely off.

Some audiophiles may feel that the selector switch on the remote control unit should have more than two positions. The Newcomb people have limited the flexibility of this control for two reasons: In the first place, since it is a true remote control unit, the addition of selector positions would have complicated and increased the size of the remote control cable very considerably. In the second place, they believed — and rightly so — that there were very few audiophiles in the world like your Editor, who wants to have tape recorder, FM tuner, television tuner, and phonograph records all going simultaneously. However, on his behalf, it should be said that simultaneous operation of so many sources and quick switching back and forth from one to the other help to keep his mind ever alert. It should also be said that probably Newcomb has the right idea — and certainly the sensible one!

**Summary**

The Newcomb Classic 25 is one of the nicest amplifiers that we have worked with in quite a while. As we have said, the sound is of the best. The mechanical features of the remote control unit, the adjustable-panel-knob arrangement, and the output tube balancing device, are really important and may indeed be the solution...
Exhibitors at The New York Audio Fair

Below is the list of exhibitors at the 1952 Audio Fair in New York City. Those who were unable to attend the Fair will find it worthwhile to write these companies for their latest catalogues. Also, for the convenience of our readers, we have listed the pages on which these companies advertise in this issue of High-Fidelity.

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Continued from page 107

tion to a knotty installation problem. True, prices are high, but one has to pay for really good solutions. As we pointed out in the beginning, the Newcomb line includes amplifiers to fit any pocketbook. The Classic 25 is the top; below is the Classic 15 at $179.50. Below that is a 15-watt amplifier without remote control for $99.50 and then come a pair of 12-watt units, with remote control at $159.50 and without at $139.50. Still further down the scale are three 10-watt models.

Like its much vaunted sunshine, the Newcomb line should make California well known throughout the Country — although, if a brash easterner may so, we expect a more consistently good performance from Newcomb! — C. F.

TESTED... FAIRCHILD

Continued from page 83

design. The system of springs simply expedites the return of the arm from operation in the non-professional zone back into the professional zone. Thus, Fairchild now provides a professional arm for non-professionals.

Incidentally, two further points should be made: the viscous damping fluid is still used, with concomitant benefits to arm damping and arm resonances, and the very neat turret head arrangement for mounting up to three different cartridges has also been kept.

The Cartridges

No changes have been made in the cartridges, but we thought readers would like to have a look at the interior design, Fig. 2. Note that the Fairchild is a moving coil type of pickup. At the end of the stylus shank is a very fine coil of wire, which wiggles between the magnet pole pieces. Ray Crews, of Fairchild, explained the advantages of this design as follows: "In other cartridge types, the coil is fixed in position and does not move with the stylus. Movement of the stylus shifts the position of the magnetic armature. The magnetic flux of the magnet in the armature also shifts, as it is concentrated by the armature. This produces a change in the flux passing through the coil, thus inducing a"

Fig. 2. Anatomy of a phonograph cartridge.

Continued on page 113

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voltage in the coil. By proper design, the flux passing through the coil can be made nearly proportional to stylus displacement. It follows then, that the voltage induced in the coil will be proportional to stylus velocity.

"In the moving coil cartridge, the coil is mechanically linked to the stylus and moves with it. Unlike the cartridge types described above, the magnetic flux does not shift as the stylus moves. As the coil moves in a uniform magnetic field, a voltage is induced in the coil that is proportional to stylus velocity".

Fig. 3 is a block diagram of a typical installation — and by the "input transformer" hangs a tale! Though this point was discussed in detail in our previous report on these cartridges, it will not be amiss to repeat the essentials. The output of the Fairchild cartridge is extremely low: about 3 millivolts under normal average conditions. This compares with approximately

10 mv. for a G-E, 20 or so for an Audak, and about 70 for a Pickering. The primary purpose of the transformer is to increase the output 10 to 15 times.

Let's take a typical set-up: Brociner preamplifier-equalizer. Brociner tone control unit (which incorporates about 10 db gain), Musician's amplifier (American Williamson), and a highly efficient 12-in. speaker in a 15 by 15 ft. room. Maximum volume level is adequate for most people; inadequate for the let's-really-hear-it group. Recommendation for prospective Fairchild cartridge users: try the cartridge without the transformer first. If volume is insufficient, add the transformer. Hum will also be added; as asserted previously, everything in sight will have to be grounded and shielded.

Here's a point about the Fairchild cartridges which may be of interest under certain circumstances: the output impedance is very low — 80 ohms. This means that the wire between the cartridge and the transformer can be long, whereas with most cartridges, which have a high output impedance, the wire must be as short as possible. Normal professional hook-up for the Fairchild is from the cartridge to a passive equalizer (one which compensates for recording characteristics but does not incorporate amplification) and thence over as great a distance as required to the input of a flat preamplifier. This means, in a...
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TESTED IN THE HOME
Continued from page 113

home installation, that the turntable, arm and cartridges, and equalizer for recording characteristics, could be located at a distance from the preamplifier and amplifier equipment. Normally, the preamplifier-equalizer unit is mounted near the turntable. Then, with cathode-follower preamps, a long wire can be used between preamp and amplifier.

A couple of final words: there are four Fairchild cartridges, all diamond-tipped, with radii of .005, .0025, and .003 in.; the fourth cartridge is for vertical (hill and dale) recordings. All cartridges meet RMA standards for size and location of mounting holes, and so may be used in almost any arm. Prices are $42.50 for all except the microgroove tip, which is $47.50—audiophile net. The arm is $65.

TESTED . . . WEATHERS
Continued from page 82

The spring action, which holds the stylus down on the record, makes for better tracking on those occasional, bumpy records which bounce the average arm out of the groove.

Special care should be given to wrapping the lead from the cartridge so that it does not exert rotational pressure on the arm. The arm turns so freely that a poorly placed lead wire will cause the arm to swing right around on its pivot and "unwrap" the lead. Weathers recommends one complete loop—and it should be a loose one.

This free-swinging business is a decided advantage when playing a record (reduces wear, among other things, although wear is not much of a factor with only one-gram pressure), but it has one disadvantage—or danger—when not playing a record. There's nothing easier than removing the

Fig. 2. Base and arm spring mechanism.

Weathers arm from the record: lift it up half an inch or so, and it snaps up about 2 more inches, to stay there until it is pressed down gently (and do it gently, until you get used to the "snap action"; otherwise, it will tend to slip from your fingers and bang down on the record). But—once

Continued on page 117

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115
The output impedance of 807 tubes. The output of 6SN7, 1/2 watts output, also is the best obtainable in this range. Frequency response is considered by engineers using the Peerless Amplifier and Tone Control unit. The power supply is a separate chassis and choke, and choke, and individual tubes with push push operation. A 5V4G rectifier is used.

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up, it swings in the breeze, so to speak. And a carelessly handled dust cloth, or a hastily moved hand, can snap it down on the turntable or record surface with what seems, for a delicate cartridge, like a dangerously hard bang. Since the Weatherites arrived in the family, we have staked out the turntable area as strictly off-limits for the chief duster in our household... at least until we can figure out a simple method of catching the rear end of the arm under some sort of a snap holder arrangement, so it can't swing and can't be knocked down.

If you are a Weatherite cartridge user, get the arm to go with it. It will solve several problems — and improve all-around results.

Addenda

Paul Weathers has advised us that, to solve the problem of using his cartridge in record changers, he has brought out a special "record changer model" in which the compliance of the stylus shank has been reduced and the weight increased slightly.

Point is, the original unit tracked so lightly that it would not operate the mechanism on some changers. The new cartridges overcome this difficulty without, it is said, impairing their sound reproducing characteristics. A little of the light-weight feature is lost, but stylus pressure still remains well below average — and record life correspondingly above average.

Dept. of Further Information

Since our original article appeared in High-Fidelity No. 5, in which we said that the output of the Weatherite cartridge was too low to permit its satisfactory use with power amplifiers such as the McIntosh, we have had several letters questioning this statement. We refer, specifically, to the McIntosh used without its preamplifier-control unit. There is a somewhat unusual situation here. The McIntosh power section, when powered up (the tubes sticking out on top) provides less gain than the average audio amplifier. It is a power producer (50 watts), not a gain producer. The gain is built into the control unit which, from the radio tap, provides an unusual amount of gain. The power section is rated to have a gain of 40 db; the control section, 34 db.

We admit, our statement was misleading unless qualified more completely. When the Weatherite is plugged into the McIntosh control unit, volume is more than ample, in fact, so much gain and resultant volume is available that the input level adjustment on the control unit has to be turned down to protect speaker cones.

Sometime soon, we are going to do a full article on this subject of amplifiers, preamplifiers, control amplifiers, and whatnot. Meanwhile, we hope that the foregoing brief explanation will clarify the situation.

It's nice to see a company outgrow its original quarters, and so we're glad to advise that Weathers has moved to a new factory at 66 East Gloucester Pike, Barrington, N. J. — C. F.
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in the future. I do intend to subscribe to your magazine as soon as I think it wise. I would like to make a suggestion for whatever it is worth. I am sure you have many subscribers—like myself—who have spent considerable money (more than was probably wise) in assembling a fine music system. I have acquired a Brook 12A3 amplifier, a Meissner 9-500-C tuner, a Stephens 411 speaker system, a Webster 355 changer, a General Electric cartridge with diamond stylus and a Pickering compensator. I have spent considerable time building a speaker enclosure and equipment and record housing facilities. Now, I enjoy hearing all the new products and enclosures. However, I am very well pleased with what I have and wouldn't want to spend the necessary time and money for what would probably

Continued on page 121
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be very slight improvements. You already have an excellent record review section for my type of subscriber. However, I feel many of us—who are proud of our equipment—would like to know more about what we already possess. In a reasonably technical language, how does a tube work? How do tubes differ? True, everyone would not care for this type of article, but many who take your magazine, I am sure, would like to understand the operation of their own equipment.

Dr. Marvin McNeil

Los Angeles, Calif.

Such a series is a possibility, but not yet on our schedule. In the interim, we can only suggest consulting some such text as Oliver Read’s The Recording and Reproduction of Sound, available through HIGH-FIDELITY’S Book Department and probably in your local public library.

S M E

Continued from page 27

Basic By-Laws for Chapters of the
Society of Music Enthusiasts

Article I: Name
The name of this organization shall be: Chapter No.________ of the Society of Music Enthusiasts.

Article II: Aims
It is the purpose of this Chapter to carry out the aims and ideals of the Society of Music Enthusiasts.

Article III: Loyalty
The officers and members of this Chapter shall abide by the By-Laws which have been and may be adopted or amended by the Society and will conform to such directives and resolutions which have and may be issued by the office of the Managing Director and the National Council and shall honor and abide by the terms of the Charter Agreement.

Article IV: Officers
Section 1: There shall be, as officers of the Chapter, a Chairman, Vice-Chairman, Secretary and Treasurer.

Section 2: The office of Delegate to the National Council may be filled by one of the officers with the approval of a majority of the Chapter members, or by any other Chapter member either elected or appointed by the Chapter Chairman with the approval of a majority of the Chapter members.

Continued on page 123

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SME
Continued from page 121

Article V: Elections
Section 1: Elections of the officers of this Chapter shall take place annually at the end of the Chapter fiscal year.
Section 2: An officer of the Chapter may succeed himself for as many times as he may be re-elected to office.
Section 3: The nomination of officers and the administration of the election shall be accomplished by an Elections Committee appointed by the Delegate to the National Council from the members of the Chapter who are not at the time holding any office whatever.

Article VI: Membership
This Chapter shall accept for membership any person who is a member in good standing in the Society of Music Enthusiasts and who agrees to abide by the rules and regulations by which this Chapter is governed.

Article VII: Dues
Section 1: This Chapter may impose annual dues upon its members only as may be necessary to cover essential operating costs.
Section 2: This Chapter may impose an assessment upon its members to cover the cost of any extra-curricular activity germane to the purposes of the Society, but only providing such activity and assessment has been approved by the Chapter membership.

Article VIII: Responsibility
The officers of this Chapter shall conduct their office in a manner commonly prescribed and recognized for their capacity and shall keep and maintain suitable and accurate records accounting for all activities and transactions and shall from time to time but at least once annually report on the general welfare, progress, and condition of the Chapter its members, with copies to the Managing Director and the National Chairman.

Article IX: Resignations
Section 1: A member of this Chapter may resign or transfer to another Chapter at will by submitting written notice to the Chapter Secretary with copy to the Office of the Managing Director. Such resignation shall constitute a release of all and any claims on this Chapter by the member.
Section 2. (A) A member of this Chapter may be refused renewal of membership in the Chapter if in the opinion of the Chapter Chairman such member has not conducted himself in accordance with the letter and spirit of the Society.
(B) A member refused membership in a Chapter may appeal for final decision to the National Chairman.
Section 3: In the event of dissolution of this Chapter, or revocation of this Chapter's Charter due to failure to comply with the terms of the Chapter Charter Agreement, the assets, if any, of this Chapter shall become the property of Society of Music Enthusiasts and the Managing Director shall liquidate such assets and shall disburse such proceeds as may be so acquired among the Chapter members of last record.

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BONAFIDE can supply you with a complete, first-quality Hi-Fi Record Player system at an unbelievably low-low price! LOOK, COMPARE... ORDER A BONAFIDE COMBO DEAL TODAY!

New V-M Triomatic 3-Speed Changer. Model 990 GE: Includes General Electric triomatic magnetic reluctance cartridge, RPX-050, 4 pole motor. Records are lowered, not dropped—completely automatic, 33-1/3, 45 and 78 RPM; 7", 10" and 12" records; intermixes; automatic shut-off, completely jamproof. Regular price: $79.50.

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Famous MEISSNER 9AJ AM-FM TUNER


Bell Amplifier Model 2122

Superb high-fidelity performance. Excellent for reproducing the extended range of microgroove records and FM. Frequency response 30 db 30 to 15,000 cycles with controls set for flat response. Four inputs: radio, crystal, and two magnetic pickups with built-in pre-amp for each. Bass and treble boost with attenuation. Power: 12V, 60 cycles. Size: 7½" deep, 6" high, 11½" long.

VM Tri-O-Matic 3 Speed RECORD CHANGER

VM model 9S1 GE with General Electric RPX-050 cartridge. Plays all records, all speeds, all sizes, all types completely automatically and stops automatically after the last record. Records are lowered, not dropped on spindle shelf. No wobble, scrape, or slap... no center hole wear.

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Model S-1201-D GE high fidelity 12" speaker to deliver true faithfulness from your Hi-Fidelity system. Frequency response 30-13,000 cps. Power handling capacity 25 watts. 8 ohms impedance. Alnico V. PM.

Address Orders To Dept. HF 11 Write For Free F.Y.I. Folder

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CHAPTER CHARTER AGREEMENT

This Agreement is made between:
SOCIETY OF MUSIC ENTHUSIASTS, with offices in the city of Great Barrington, hereinafter called the "Society", and the SME Chapter No.________ with headquarters in the city of__________, hereinafter called the "Chapter".

WITNESSETH:

THAT WHEREAS, The Society has been sponsored by Audiocom, Inc., a corporation under the laws of the State of Massachusetts, to protect its name and organization of the Society and to promote the Society’s purpose;

AND WHEREAS, the Chapter has been authorized as a Chapter of the Society of Music Enthusiasts with the consent of the Society and to continue such affiliation, and that it and its members will at all times recognize, abide by and observe as effectively binding upon itself and its members the By-Laws of the Society of Music Enthusiasts now in force or as hereafter amended, and that it will from time to time, upon request of the Society, amend its By-Laws or activities to conform to those of the Society of Music Enthusiasts, and that it herewith adopts the By-Laws for Chapters appended hereto.

1. The Chapter hereby specifically acknowledges and agrees that it is affiliated with the Society and intends to continue such affiliation and that it and its members will at all times recognize, abide by and observe as effectively binding upon itself and its members the By-Laws of the Society of Music Enthusiasts now in force or as hereafter amended, and that it will from time to time, upon request of the Society, amend its By-Laws or activities to conform to those of the Society of Music Enthusiasts, and that it herewith adopts the By-Laws for Chapters appended hereto.

2. The Chapter further covenants and agrees that whenever required by the Society, it will dissolve or change its form of organization, and that no amendments to the articles of its By-Laws or change in the purposes of the Chapter will be made without the consent of the Society and it will not incur any financial or other obligations that will be binding on the Society.

3. The Society covenants and agrees that it will not at any time seek to enforce against the Chapter any obligations, duties or liabilities inconsistent with the By-Laws of the Society of Music Enthusiasts.

IN WITNESS WHEREOF, the parties hereto have caused these presents to be signed by their duly authorized officers, and their respective corporate seal, if any, to be hereunto affixed.

SOCIETY OF MUSIC ENTHUSIASTS

By: ____________________________
Managing Director, S.M.E.
Attest Witness
Date ____________
S.M.E. Chapter No.__________
By: ____________________________
Chairman
Attest Witness
Date ____________

FAS Air-Coupler for Bass Reinforcement

Good News... The Dual Air-Coupler for bass reinforcement is in stock, ready for delivery. This is the improved model described in Radio Communication last October, and in the Winter Edition of High Fidelity.

As more and more of the most critical audio experts install Air-Couplers in extended-range systems, reports of remarkable performance continue to pour in. One of the most enthusiastic owners is Paul deMars, former chief engineer of the Yankee Network, and a pioneer in high-quality reproduction.

He said: "I have never heard such magnificent tone from records and live-talent FM as I am getting from my Air-Coupler in combination with a dual speaker for intermediate and treble frequencies."

For your convenience... the Air-Coupler is available in both knock-down form, so that you can assemble it with a screwdriver, or completely assembled, ready to mount the speaker. Made entirely of first-quality 3/4-in. plywood, with each piece cut to precision fit.

DUAL AIR-COUPLEIN, IN KNOCK-DOWN FORM ________ now only $34.50.

Every part furnished, including the screws. Illustration shows assembled Air-Coupler, before front panel is mounted. Opening is cut for your 12-in. speaker, the recommended size.

DUAL AIR-COUPLEIN, COMPLETELY ASSEMBLED ________ now only $47.50.

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MISCELLANY: we carry in stock... Altec 600-B 12-in. speaker for the Air-Coupler, $46.50; Peerless S-2200 output transformer, $26.00; Peerless B-5000B power transformer, $15.00; Peerless C-455A power choke, $10.00; English KT-64 output tube, $4.95; Ratzen CHU-2 tweeter, $23.10.

Crossover Networks for Any System of Two or More Loudspeakers

By a judicious selection of associated components, the three coil sizes on which G.A. has standardized enable our customers to secure low-cost crossover networks which will operate at 14 different crossover frequencies! For the experimenter, that means a wide range of choice without having to break the bank to buy dozens of coils. For the man who wants to install his system once and for all, it means money saved, because G.A. saves money by making only three coil sizes (10.2, 5.1, and 1.5 M) – and it passes on those savings direct to its customers.

If you want to use three speakers with crossover points at 350 and 1,100 cycles, for example, just order two of the networks listed above (for an 8-ohm system, with rapid crossover attenuation, it would be Nos. 6 and 8).

As most everyone has found out by now, G.A. is headquarters for crossover networks. As far as we know, we’re the only organization stocking networks specifically designed for use with Air-Couplers.

SAVE C.O.D. Charges! Send remittance with your order.

General Apparatus Co.
South Egremont, Massachusetts

Rapid Attenuation Networks

12 db drop per octave. These networks use two inductance coils.

Impedance of Low Frequency Crossover Order by 2 Coils Complete

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Crossover</th>
<th>Number</th>
<th>Price</th>
<th>Price</th>
</tr>
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<tr>
<td>175</td>
<td>5</td>
<td>20.00</td>
<td>24.00</td>
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<tr>
<td>8 ohms</td>
<td>1,100</td>
<td>6</td>
<td>7.00</td>
<td>12.00</td>
</tr>
<tr>
<td>550</td>
<td>7</td>
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<td>20.00</td>
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<td></td>
</tr>
<tr>
<td>85</td>
<td>10</td>
<td>20.00</td>
<td>26.50</td>
<td></td>
</tr>
</tbody>
</table>

4 ohms     | 550       | 11     | 7.00  | 13.00 |
| 275       | 12        | 7.00   | 13.00 |
| 175       | 13        | 12.00  | 19.00 |
| 85        | 14        | 20.00  | 26.50 |

* Complete networks include necessary capacitors and level controls. Be sure to indicate whether you want just the coils or the complete network.

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$10.50
PLUS POSTAGE

No doubt you have learned by now that the needle in your record player is not permanent. It is tipped with either sapphire or osmium metal which should be changed after about 20 hours of playing, in order to protect your valuable records.

This means that if you use your record player on an average of an hour a day these needles need replacing about every three weeks at a cost of between $1.50 to $3.50. Because of this frequent needle changing you have of course learned how to install a new one when required.

Why not, then, replace 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 1, 5 or standard records. Send check or money order for $10.50 plus 25c for return postage with your needle assembly or complete cartridge if you cannot remove the replacement needle assembly (except Pickering non-replaceable type) to:

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Diamond Styli Manufacturers
172 Green St., Dept. H Boston 30, Mass.
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SORRY

We are so busy that we just could not meet the advertising deadline for this issue.

However, we will always have the time to discuss your audio problems, and to try and help you.

We suggest that you bring one of your favorite records along in order to evaluate the improvements which better components give you.

Our facilities are greatly enlarged; so are our services. The address is the same. If you have not seen our latest catalogue, write for your copy to Dept. HF.

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EXCHANGE, INC

159-19 Hillside Avenue
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Olympia 8-0445

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$19.50 plus $1.00 for sending E. of Miss.; $1.50 W. of Miss.

Matching Brass or Copper Footed Waste Basket—12 1/2" high.
$17.50 plus $1 for sending E. of Miss.; $1.50 W. of Miss.

J.Cuf Jewelry
Beautifully hand wrought in handsome sterling silver... these pieces have the simplicity of line that spells elegance. A smart addition to almost any costume... a noteworthy gift!
Pin, $3.00
Earrings, $4.75 the pair
Federal tax and postage included

Music Master Plaques
These handsome wall plaques conceal Swiss music boxes! Pull the knob to hear a selection by the composer pictured in bas-relief. Mahogany finished frame. 5 1/4" square, with gold toned medallion on recessed black background. Choose Chopin, Strauss, Schubert, Haydn, Wagner, Beethoven, Bach, Brahms or Mozart... superb singly or in groups!
$7.95 each, $15.95 the pair, plus 40c east, The west of Miss.

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GREAT BARRINGTON, MASS.

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GRAY
HOMES
KLIPSCH
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MAGNAICORD
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PHILCO
RENO-KUT
SCOTT
STEPHENS

CUSTOM ELECTRONICS
813 Chartres Street • New Orleans
Write for Brochure showing our Complete Services

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to be. There is the one who takes chances, his theory being that nothing is so boring as a perfectly rehearsed performance, in which nothing new or unplanned can happen.

There is the one who personalizes the music, so that it is partly his. (Sometimes, admits composer Copland, this improves a mediocre composition.) There is the man with the "classic" approach, who concentrates on structure and flow, always building expectation of the next measure to come. This is a mark of real mastery, as is also the air of relaxed and perfect control.

Copland, it is generally agreed, a proponent of modern music, particularly modern American (North and South) music. But he doesn’t try to force it down his readers’ throats. Instead, he carries them on a tour of the evolution of music, bringing in the importance of the growing instrumentation which, era by era, tempted composers into using it. His enthusiasm over what can be done, and has been done (partly by him), with today’s superb instruments is contagious; the reader stops reading with the feeling that now he really would like to try listening to a little Webern. Or some Copland.

STATEMENT OF THE OWNERSHIP, MAN-
AGEMENT, CIRCULATION, ETC., RE-
QUIRED BY THE ACTS OF CONGRESS OF
AUGUST 24, 1912, AND MARCH 3, 1933
Of High-Fidelity, published bi-monthly at
Great Barrington, Massachusetts, for
October 1, 1952
State of Massachusetts
County of Berkshire.
Before me, a Notary Public in and for the
State and county aforesaid, personally appeared
Milton B. Sleeper, who having been duly sworn
according to law, deposes and says that he is the
publisher of the High-Fidelity Magazine and that
the following is, to the best of his knowledge
and belief, a true statement of the ownership, manage-
ment, etc., of the aforesaid publication for the date
shown in the above caption, required by the Act
of August 24, 1912, as amended by the Act of
March 3, 1923, embodied in section 357, Postal
Laws and Regulations, to wit:
1. That the names and addresses of the pub-
lisher, editor, managing editor, and business
manager are: Publisher, Milton B. Sleeper,
Monterey, Massachusetts; Editor, Charles Fowler,
So. Egremont, Massachusetts; Managing Editor,
one; Business Manager, none.
2. That the owner is: Audicom, Inc., Great
Barrington, Massachusetts.
3. That the known bondholders, mortgagees,
and other security holders owning or holding
1 per cent or more of total amount of bonds,
mortgages, or other securities are; Ethel V. Sleeper,
Milton B. Sleeper, and Charles Fowler.
4. That the two paragraphs next above giving
the names of the owners, stockholders, and sec-
urity holders, if any, contain not only the list
of stockholders and security holders as they
appear upon the books of the company, but also,
in cases where the stockholder or security holder
appears upon the books of the company as trustee
or in any other fiduciary relation, the name of
the person or corporation for whom such trustee
is acting, is given; also that the said two para-
graphs contain statements embracing affiant’s full
knowledge and belief as to the circumstances
and conditions under which stockholders and security holders who do not appear upon
the books of the company as trustees, hold stock
and securities in a capacity other than that of a home
fide owner; and this affiant has no reason to be-
lieve that any other person, association, or cor-
poration has any interest direct or indirect in the
said stock, bonds, or other securities as so
stated by him.

(Signed) Milton B. Sleeper
Sworn to and subscribed before me this first
day of October, 1952.
Lillian Bendross, Notary Public
Commission expires July 1, 1954.
HIGH FIDELITY 10-Watt AMPLIFIER
MODEL AR-410. Frequency response is from 20 to 20,000 cps flat within ± 1 db, with a hum level 70 db below its full rated output. Less than 1% total harmonic distortion. 5-position selector switch for: Phonograph, Radio, Microphone and auxiliary input. Separate bass and treble tone controls.

HIGH FIDELITY FM/AM TUNER
MODEL SR-401. FM frequency response of 20 to 20,000 cps, and from 20 to 7,500 cps on AM, both within ± 3 db. 5 microvolts sensitivity. 3 volts output across a 250,000 ohm load at less than 1% total harmonic distortion. AFC circuit eliminates drift.

TERMINAL Cordially Invites You TO SEE AND HEAR THE ULTIMATE IN Home Music Reproducing Equipment featuring STROMBERG-CARLSON Custom Four Hundred HIGH FIDELITY INSTRUMENTS

HIGH FIDELITY Deluxe AMPLIFIER

12" COAXIAL LOUDSPEAKER
MODEL RF-471. Employs the STROMBERG-CARLSON coaxial principle. 3½" seamless tweeter suspended in Carpinchoe leather which smooths response up to 15,000 cps. Tonal range down to 30 cps is reproduced through the 12" low frequency cone. Wide angle, correctly balanced sound dispersion. Power capacity 32 watts.

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Beethoven “Pastorale”

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William Steinberg and the Los Angeles Woodwind Ensemble repeat for Capitol Records the spectacular performance acclaimed at the Ojai Music Festival as one of the most devoted renderings of this work ever performed. The quality of Full Dimensional Sound has never been more vital to a composition whose intricate form requires a perfect balance of the various instruments in its reproduction.

THE MUSIC OF DELIUS
"On Hearing the First Cuckoo in Spring"
"Summer Night on the River"
"Prelude to Irmelin", "Caprice and Elegy"
"The Intermezzo and Serenade from Hassan"
Felix Slatkin conducts the first Long Play presentation of these concert pieces by England’s "musical impressionist”...an FDS recording and performance that fully reveal the subtleties of this composer’s style.

SHOSTAKOVICH: Quintet for Piano and String Quartet, Op. 57
The Hollywood String Quartet, with Victor Aller at the piano, give admirers of Shostakovich an opportunity to hear this great and popular work in its full tonal perspective—at last!

SUK: Serenade for Strings
Harold Byrns and the Harold Byrns Chamber Symphony make this exclusive Long Play presentation by Capitol in Full Dimensional Sound a high point in the recording art.

For gifts of music that say Faithfully Yours consult your record dealer for newest Christmas releases and complete repertoire of Capitol FDS Classics