

January • 60 cents

High Fidelity

THE MAGAZINE FOR MUSIC LISTENERS

in this issue

**Fifty Thousand
Sides Ago:**

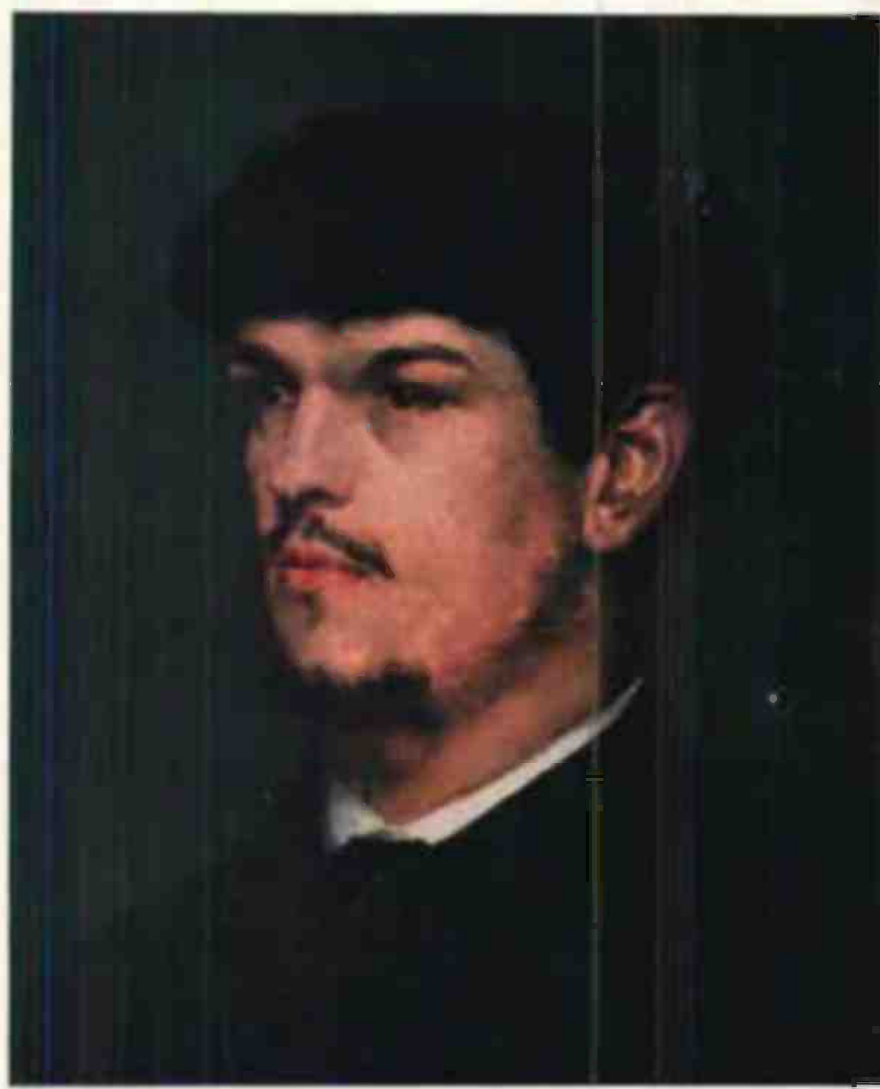
the first days of LP

by MARTIN MAYER



**The
Pangs
of Progress**

by ROLAND GELATT



ALAN FISHER

Debussy on Microgroove

a discography by Alfred Frankenstein

something wonderful has happened in high fidelity



a record changer with turntable quality performance

The new Glaser-Steers GS Seventy Seven made its debut at the 1957 New York High Fidelity Show. Thousands of people filed through the demonstration rooms to see and hear it perform.

Response was sensational. Listeners were astounded at the quality of the sound — the absence of wow and flutter, and — the absence of rumble, even with the bass sharply boosted.

Three GS-77 features received the most comment: Speedinder, Turntable Pause, and the Tone Arm.

SPEEDINDER is the super automatic setting on the speed selector knob at which the user has virtually nothing to do but place the records on the spindle and select the correct stylus.

With the standard groove stylus in position, the changer automatically plays at 78rpm. With the microgroove stylus in position the changer automatically operates at 33 $\frac{1}{3}$ and 45rpm, playing both speed records intermixed in any sequence.

SPEEDINDER also protects both stylus and record, for you can detect immediately if you are using the incorrect stylus.

The changer can also be 'dialed' to play 16 $\frac{2}{3}$, 32 $\frac{1}{3}$, 45 or 78rpm, automatically or manually.

TURNTABLE PAUSE brings to the automatic GS-77 all the gentleness of record handling associated with manual turntables. In the GS-77 — and only in the GS-77 — the turntable pauses during the change cycle and resumes motion only after the stylus is in the run-in groove of the next record.

This eliminates the surface grinding which takes place in conventional changers where the record drops onto a rotating record. Turntable Pause protects your records, and adds many, many plays to their useful life.

The **tone arm** of the GS-77 is another example of precision engineering — evident from the very moment you lift and handle it. Movement, literally as well as

vertically, is so smooth and free from friction drag as you'd expect in a high quality transcription arm.

Fundamental resonance of the arm is well below the audio band, and of extremely low amplitude. Acoustical isolation is also used to prevent vibration feedback through the arm pivot.

Dynamically balanced on hardened steel pin bearings, the arm will track at low stylus pressures recommended for modern cartridges. And stylus pressure between the feet and tenth ounce in a stack will not vary beyond 0.8 gram.

... and there is much, much more!

See all the GS-77 features! See the advanced, years-ahead styling. See why music lovers everywhere hail this American contribution to high fidelity.

\$19.50 less cartridge

For descriptive literature, write: (RF-1) GLASER-STEERS CORPORATION 28 Main Street, Bellville 5, New Jersey In Canada: Glaser-Steers of Canada, Ltd., Toronto, Ont. Export: H. Glaser & Son Co., Inc., N. Y. C.

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The "T-Guard" stylus assembly is a quick-change, easy to slip-in unit which eliminates precarious finger-and-fingernail fumbling. Its practical "T" shape provides a firm and comfortable grip for safe and easy stylus change.

The most flexible cartridge in the world . . . the FLUXVALVE is the only cartridge with the remarkable $\frac{1}{8}$ mil stylus . . . exclusive only with PICKERING. The FLUXVALVE can be used with any one of five styles, to meet any requirement or application . . . to play any record, at any speed.

If you are planning to buy a new cartridge—the fact that PICKERING developed this revolutionary stylus is important to you! All of the research, development and planning that went into the "T-Guard" stylus is conclusive proof of the superlative engineering skill in every FLUXVALVE model you buy.

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The portrait of Debussy on the cover, illustrating Alfred Frankenstein's *Debussy on Microgroove*, was painted by Marcel Luchet and photographed for us, through the good offices of Angel Records, by Marcel Artobard.

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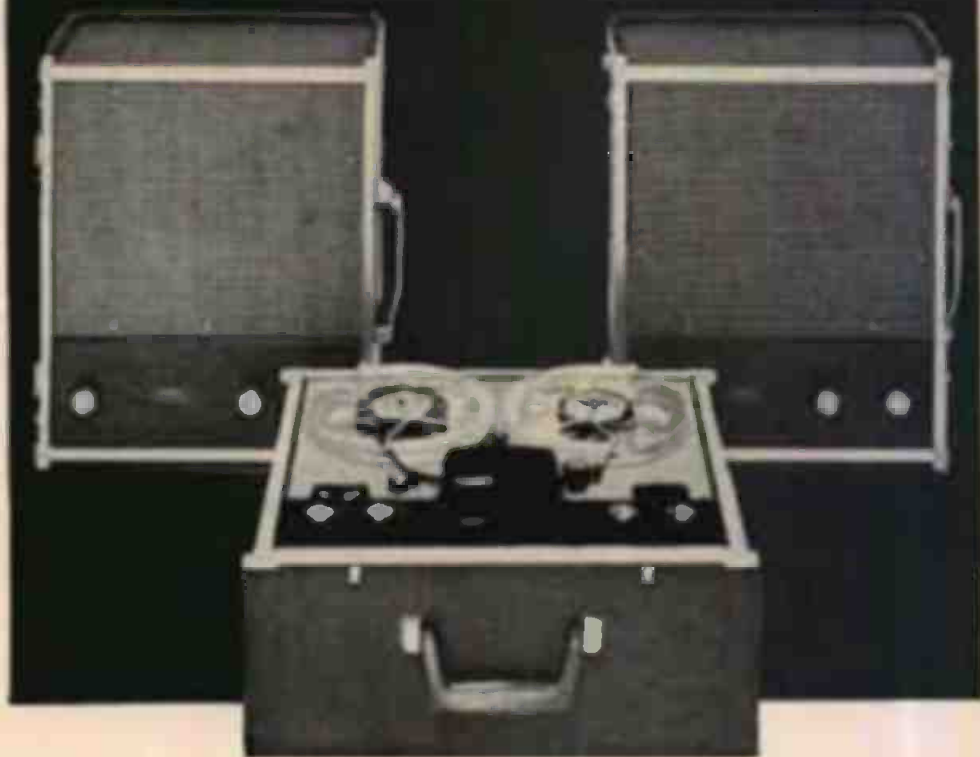
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Martin Mayer, who takes us revisiting the first days of long-playing—see page 36—has been a regular contributor to these pages since he left his copy-editor's desk at *Esquire* in 1954. Now a free lance, he divides his time between books and magazine articles. He has prepared three uncredited editions of the Maco paper-back 116-FL, each of which also has come forth as a hard cover, from either Random House or Macmillan.

Hullis Alpert, who this month completes for us his survey of artist-and-expertise management in the record companies (page 46), also is in the hard-cover business: Alfred A. Knopf, late next summer, will bring forth an Alpert novel, rather appropriately entitled *The Summer Lover*.

Arthur W. Wayne is a witty and articulate Briton (read "Smart Spout," page 42) who makes two livings at once. He is a concert pianist and an audio engineer. He made his first public appearance at a layman's when he was seven, and has been playing judiciously ever since, especially as an accompanist. Among performers he has shared stages with are the late Kathleen Ferrier, Joan Hammond, Campbell, Larry Adler, and Eva Turner. He also has played to a select at nearly every concert hall of any importance in Great Britain. Despite this, he says he has always been more intimately concerned with engineering, especially in its mechanical aspects, than with music. His audio aspects began to attract him in the 1930s, when he realized that commercial sound-reproducing equipment was not what it could be, and decided to design some himself. This brought into being Shirley Laboratories, Ltd., whereof Mr. Wayne is managing director. It's in Woking, Surrey. He enjoys music, tinkering, and eating salad, pickles, and rye bread before a big饭. Among his assets he has one (1) wife and two (2) children, one of whom is at Cambridge.

Another engineer has ancient history-photographically speaking—is Martin Bookman, who tells us on page 50 of the Boston Symphony Orchestra's first break with primitive Bookman comes mainly by his interest in the 800's native language and a few features. After graduating from (Columbia University, or some study director) first attempt at which didn't contribute to serious music education.

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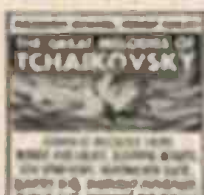
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12. Day to Day—Duke Ellington
13. Duke Ellington—All Stars
14. Love of the Tropics—Beethoven
15. Love of the Tropics
16. Broadway Melody
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18. The Elgart Touch
19. The Great Masters of Television
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Continued from page 8

2% at 30 watts, 1.83% at 20 watts, and 0.35% at 10 watts; frequency response is ± 0.5 db from 15 cps to 50 kc and ± 1.5 db from 15 cps to 100 kc at 30 watts.

A new ADAPTER from Switchcraft will accept a phono plug at each end.

Grundig Majestic's current line is too long to list. It runs from table-model RADIOS to TAPE RECORDERS to radio-phonograph-TV CONSOLES. Thirty items in all range from \$79.95 to \$2,795.

The Components GI Special Turntable will operate in areas served by either 50- or 60-cycle power, simply by shifting the bolt to the appropriate stop on the turntable's pulley. Speed is 33 $\frac{1}{3}$ rpm; price is \$44.50. The unit is similar to Component's Professional Junior model.

All models of Sargent-Rayment's regular line of TUNERS and AMPLIFIERS are now available with flush-mounting escutcheons for mounting in consoles and walls. Further flexibility is provided by two accessory kits: one for conversion of cantilevered cabinet model to a flush-mounted one; the other, for converting a flush mount to a cantilevered model.

The complete line of Wigo loud-speaker systems is described in a new CATALOGUE issued by United Audio products.

Ferrodynamics is offering a shatterproof plastic TAPE CONTAINER with a variety of means of storing for their line of Sonomatic recording tapes. No price is specified.

The Alonge TAPE EDITING DEVICE performs both cutting and splicing operations. Measures 4 $\frac{1}{2}$ by 3 $\frac{1}{2}$ by 3 $\frac{1}{2}$ in.; weighs less than a pound. Price is \$29.95, postpaid.

Rockbar has introduced three new Collaro RECORD CHANGERS. The TC-540, called the Collaro Continental, is a four-speed unit incorporating a transcription-type arm; cost is \$46.50. The Collaro Conquest, TC-340, with the same arm, runs at 33 $\frac{1}{3}$ only (we think), and costs \$37.50. The Coronation RC-440 is a four-speed model and will accept all standard cartridges; price is \$41.50.

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LETTERS



Art and Ethics

Sen:

You publish in your October issue an article by Paul Moor on Herbert von Karajan.

Why?

I can imagine nothing more objectionable to him... Musically, the article tells us nothing of value. Karajan's great gifts are belittled; the subtitle "The operator" implies that Karajan has attained his present eminence by skillful maneuvering rather than by his musical talents. The fact that his Mozart is every whit as sensitive as Beecham's, and that he has recently brought out a *Falstaff* on discs which many critics prefer to Toscanini's, finds no mention...

I protest at your aiding and abetting Mr. Moor in his witch-hunting and mud-slinging proclivities. Artists are important not for their politics, nor for their morals (both of which are more often than not deplorable), but for their art.

Ewald Jung
London
England

Odi et Amo

Sen:

I am flattered that the editors of *High Fidelity* and Mr. Moor consider all the readers of your magazine to be linguists. But I am afraid that you are wrong about this reader; I am just one of the uneducated record buyers (and I believe there to be many).

I am referring to the quotation "Je l'aime et je le déteste," which appeared in the article entitled "The Operator." I made two guesses about it, neither probably right: that it was French and what "déteste" means.

Would it be asking too much to

Continued on page 13

monte carlo



decorator



barrington



fiesta



LIVE SOUND

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to a Weathers speaker

Listening is your dynamic proof! With any Weathers Speaker System you'll hear the full range of sound audible to the human ear... sound re-created at any volume, any frequency, to "natural perfection". Audiophile or beginner, a Weathers Speaker is your finest source to professional sound within your own home. This achievement is made possible by Weathers exclusive sonic principles: "radial damping" backwave control, exclusive multiple octave crossover, and a new cone-edge treatment resulting in the incredible smooth middle register. Weathers enclosures are constructed of selected, solid woods, all surfaces beautifully finished. Listen and compare—the closest comparison is "live" sound.

Weathers INDUSTRIES

DIV. OF ADVANCE INDUSTRIES, INC.

64 E. GLOUCESTER PIKE, BARRINGTON, NEW JERSEY

Export: Joseph Florento, Inc., 491 Broadway, New York, N. Y.

The **DECORATOR**—a powerful, 12 speaker system, built to withstand and give long service at 1/10 cost of other power by small room volume. Offers a fidelity and smoothness of the full range of sound reproduction possible only under controlled laboratory conditions.

The **MONTÉ CARLO**—a 6 speaker system, planned and played to design... up close to perfection. Like all Weathers speakers, Monté Carlo is a truly integrated system offering distortion-free, unimpaired full range response of every sound audible to human ear.

The **BARRINGTON**—compact, streamlined two-speaker system... EMV 500 makes it worth a heavy weight of budget price for hi-fidelity response with perfect clarity. Additional features provide three-dimensional sound with unprecedented quality.

The **FIESTA**—a beautiful, lightly colored two-speaker system, built to give more to your room on full-range response with true fidelity at every frequency. Ideal where space is at a premium. Ideal for multiple speaker installation for permanent sound.

from all angles . . .



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CO. LTD.
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- ★ Duplex design
- ★ Full range reproduction
- ★ Purpose-built tweeter
- ★ Heavy duty woofer
- ★ Generous magnet design
- ★ Plasticised cone surround
- ★ Dust-excluding construction
- ★ Low fundamental resonance
- ★ Smooth cross-over
- ★ Replaceable cone
- ★ Die-cast chassis
- ★ Instrument finish

**FULL RANGE
LOUDSPEAKER**

Made in England by
Pioneer Limited,
London, N.W.9

LETTERS

Continued from page 10

have such future quotations translated?

Robert Nielsen
Foxton, Minn.

Happy to translate. In order to express the ambiguity of his feelings about Von Karajan, the anonymous French musician in Mr. Moor's article was inspired to quote from Catullus' ode to Lesbia: "Odi et amo" (I hate and I love).—Ed.

Credit Where It's Due

Sir:

Thank you for your very complimentary review of my Mozart record in the October issue of HIGH FIDELITY. I would like, however, to make sure that honor is given where honor is due, and I notice that your reviewer states that Peter Bartók was in charge of this recording. This is not accurate. The recording engineer for this particular record was Mr. Hale of London, England.

I notice also that your reviewer imagines that there are no fewer than three Boyd Neel Orchestras in existence! Why he should imagine this, I have no idea, as there has never been more than one to my knowledge at any time.

Perhaps it would be of interest to your readers to know exactly who engineered the recent set of Boyd Neel recordings. The so-called "Light Music" disc was done entirely by Peter Bartók, as was the Vaughan Williams *Tallis Fantasia and Greensleeves*. The Brandeburg concertos, the Mozart record, and the Dvorak *Serenade* were all engineered by Mr. Hale. Bartók used Hornsey Town Hall and Hale recorded in Wembley Town Hall. Both halls are located in the north of London and have been much used at various times by recording companies.

Boyd Neel
Toronto, Ont.
Canada

Sonic Disagreement

Sir:

After reading Mr. Robert Charles Marsh's review of the five Beethoven piano concertos by Rubinstein

Continued on page 14

HIGH FIDELITY MAGAZINE

Did Someone Say "Switch?"



When the art of recording was just taking shape
 And it seemed to the experts that tape was just tape,
 It made sense to try switching from this brand to that—
 Until **Irish** pulled FERRO-SHEEN out of the hat!

Now the FERRO-SHEEN process, the experts agree,
 Has made **Irish** tape different in *kind*, not degree,
 So there's no earthly reason for switching your brand,
 Save from Long Play to Double, or Brown to Green Band!



...if you are using
Irish BROWN BAND
 (an inexpensive general purpose
 tape of excellent characteristics)
 ... and want all the advantages of
FERRO-SHEEN ...

...switch to
**Irish
 FERRO-SHEEN GREEN BAND**
 (it costs no more than old
 fashioned coated tape)
 ... if you then want the ultimate
 in professional tape ...

...switch to
**Irish
 FERRO-SHEEN SHAMROCK**
 (specially made with premium
 oxides and fill)
 ... if you then want 50% more playing
 time on the same size reel ...

...switch to
**Irish
 FERRO-SHEEN LONG PLAY**
 (on 1-mil Mylar or acetate base)
 ... if you then want twice the
 normal playing time on the
 same size reel ...

...switch to
**Irish
 FERRO-SHEEN DOUBLE PLAY**
 (made on 1/2-mil Mylar base and
 available on 1" and 7" reels)
 There's an **Irish** tape
 for every recording purpose!

Available wherever quality tape is sold.

Orlando Industries, Inc., Opelika, Alabama
 Super Market Exporting Corp., 458 Broadway, New York 12, N.Y., U.S.A.
 Canada Alfa Radio Corp., 116, 50 Wingold Ave., Toronto 10, Ontario

JansZen[®] Electrostatic



Model 130

New listening pleasure awaits you when you hear music over the JansZen Electrostatic. Transient response reaches a perfection hitherto unknown, record scratch is reduced because it creates no audible resonances and clarity and realism are maintained at all listening levels.

JansZen[®] DYNAMIC

The JansZen Dynamic sets new standards in cone woofers. Unique design concepts, combined with new materials, has resulted in a woofer system which can be used singly or in pairs with the JansZen Electrostatic.



Model 250 measures only 18 1/2" high (exclusive of legs) by 24 1/2" wide by 14" deep

The Z-200 System



A complete range loudspeaker system using the incomparable JansZen Electrostatic mid and high range speaker (Model 130) with the new JansZen Dynamic. Here is a loudspeaker of nearly perfect naturalness incorporating the latest advances in the art of music reproduction. Its design simplicity makes it suitable for use with either traditional or contemporary decor.

Model Z-200 measures only 32" high (including 4" legs) by 24 1/2" wide by 14" deep

NOW more than ever...

Hear the Music, not the Speaker

*Designed by Arthur A. Janszen

Write for literature, and the name of your nearest dealer

Products of **NESHAMINY ELECTRONIC CORP.**, Neshaminy, Pa.
Export Division, 28 Warren Street, N.Y.C. 7 - Cable Streamline, N.Y.

LETTERS

Continued from page 12

and Krips in your October issue, I find myself in almost complete agreement with his opinions, except for one. This is in regard to his comments on the sonic properties of the discs. Mr. Marsh states that "... there is richness in the low frequency registration ... unmarred by booming resonances, that combines with bright and agreeably balanced highs to produce intoxicating sound with clean detail." On my copy of the third concerto the exact opposite seems to be the case. I find the bass, particularly the timpani, to be very overrecorded and resonant, and the strings appear to be quite distorted in several places, especially in the first and third movements of the work.

I do not believe my record playing equipment is at fault, for I am using a Pickering Fluxvalve cartridge, a BJ arm, and a Rek-O-Kut turntable. For this reason, I think it would be advantageous for Mr. Marsh to reappraise these records, especially the one that I have mentioned.

Lowell Cross
Lubbock, Tex.

Legal Slip?

Sir:
On page 63 of the October HIGH FIDELITY you make Mr. de Mennace say that some things were "more or less *res judicata*." A new sort of jazz fanatic, or just a misspelling of Latin?

W. E. K. Middleton
Ottawa, Ont.
Canada

Brazing it out, we could explain that *res judicata* is something that may look at a judging, but it would be a little more voracious to admit that an *o* may look like an *a* when a proofreader gets a little weary of looking at either. Yes, Mr. Middleton: *res judicata*. —Ed.



ANNOUNCING A GREAT NEW AMPLIFIER

PERFORMANCE
GUARANTEED!



THE FISHER "200" 60-Watt Amplifier

FEATURES SUFFICIENT reserve power capacity to handle full-orchestra volume surges at any part of the audible spectrum. The "200" exceeds the requirements of any program source available today.

GUARANTEED! 60 watts of power at the speaker terminals on continuous sine-wave operation.

GUARANTEED! Conservatively handles 160 watts of power on peaks up to 30 milliseconds in duration. But high reserve power is only part of the story. THE FISHER Model 200 provides controlled frequency

and power response above and below the audible range for unequalled stability, with excellent transient characteristics, even under adverse loading conditions. Power and frequency response are uniform throughout the audible range at full-rated output. Harmonic and intermodulation distortion, as well as hum and noise, are completely *harmless*. Transcribed true terms of listening pleasure, THE FISHER "200" achieves the ultimate aim of every high fidelity enthusiast — the complete realism that is possible only with absolutely clean tone! output. **\$179.50**

OUTSTANDING SPECIFICATIONS OF THE FISHER "200"

• Power Response: uniform throughout the audible range of 20 to 20,000 cycles, within ± 1 db at full rated output. • Frequency Response: uniform throughout the audible range of 20 to 20,000 cycles within ± 1 db at full rated output. • Harmonic distortion less than 0.1% at full rated output. TH distortion less than 0.1% at full rated output (harmonic and TH distortion, as well as hum and noise, recorded under any listening conditions). • 4, 8 and 16-ohm speaker connection terminals, plus special 16-ohm

output connections for multiple speaker systems. • Exclusive DYNAMIC VARIABLE DAMPING range accommodates all dynamic speakers. • Two channels to insure correct operation. • 9 tubes, plus 1 automatic variable. • High voltage supply features CAPACITOR FILTER SYSTEM. • Amplifier employs best vacuum tube quality features. Dual Triode Vacuum Tube Voltage Regulator. • Overall size: 14 1/2 inches wide, 11 1/2 inches deep, 4 1/2 inches high. • Self-cleaning WILBERT 50 powder. • Beautiful brass dress panel.

WRITE TODAY FOR COMPLETE SPECIFICATIONS

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NEW
FAIRCHILD
 single-speed 33 $\frac{1}{3}$ rpm
TURNTABLE UNIT

easily converts to 4-speed electronic operation

The new Fairchild 33 $\frac{1}{3}$ rpm turntable is, by far, the finest single-speed unit ever designed. And it is priced at only \$99.50.

It is almost incredible. Rumble, wow and flutter have been so drastically reduced that if their presence is at all detected, they originate in the record or the recording equipment. It is the audio perfectionist's dream come true.

Utilizing the barest minimum of moving parts, this new turntable achieves an accuracy and consistency of speed, a quietness of operation beyond anything we have ever known. A hysteresis-synchronous motor drives a Demite-damped, aluminum turntable through a 2-stage belt drive.

The entire unit is mounted on a unitized chassis.

And by simply adding the Fairchild Electronic Control-Regulator, you can convert the single-speed unit into the fully electronic, 4-speed Fairchild E/D.



Turntable Unit, Single-Speed, 33 $\frac{1}{3}$ rpm.....	\$ 99.50
ECR (Electronic Control-Regulator).....	131.00
Fairchild E/D Electronic 4-Speed Turntable complete with ECR....	229.90
Hardwood Base (shock-mounted) in walnut, mahogany or birch....	31.50

See your hi-fi dealer for complete details, or write:

FAIRCHILD RECORDING EQUIPMENT CO. 10-40 41st Ave., L.I.C. 1, N. Y.
 Export Department: 431 Fifth Ave., New York 1, N. Y.



Sputnik

The voice of Sputnik I has been preserved for evermore on a 45-rpm record released in November as part of a \$1.00 booklet. Booklet has pictures and descriptions. It is available on most newsstands or direct from Mooney-Rowan Publications, Severna Park, Md. The record includes several minutes of beep-beeping as well as a description (voice) of the event.

A Russian translation is available to clever stereocists. Simply: record the disc on a monaural recorder, half-track. Transpose reels, record the second track. Now play back on a stereo machine. One ear will be English, the other Russian. Played back simultaneously over the largest speaker systems available, the present state of the world is well depicted.

Sputnik (continued)

University Loudspeakers made quick capital out of Sputnik, which began its earth-circuiting almost simultaneously with the opening of the New York high-fidelity show. University had an exhibit which featured a choral-surrounded revolving globe. With the first beep, a University engineer got a ping-pong ball and completed the picture.

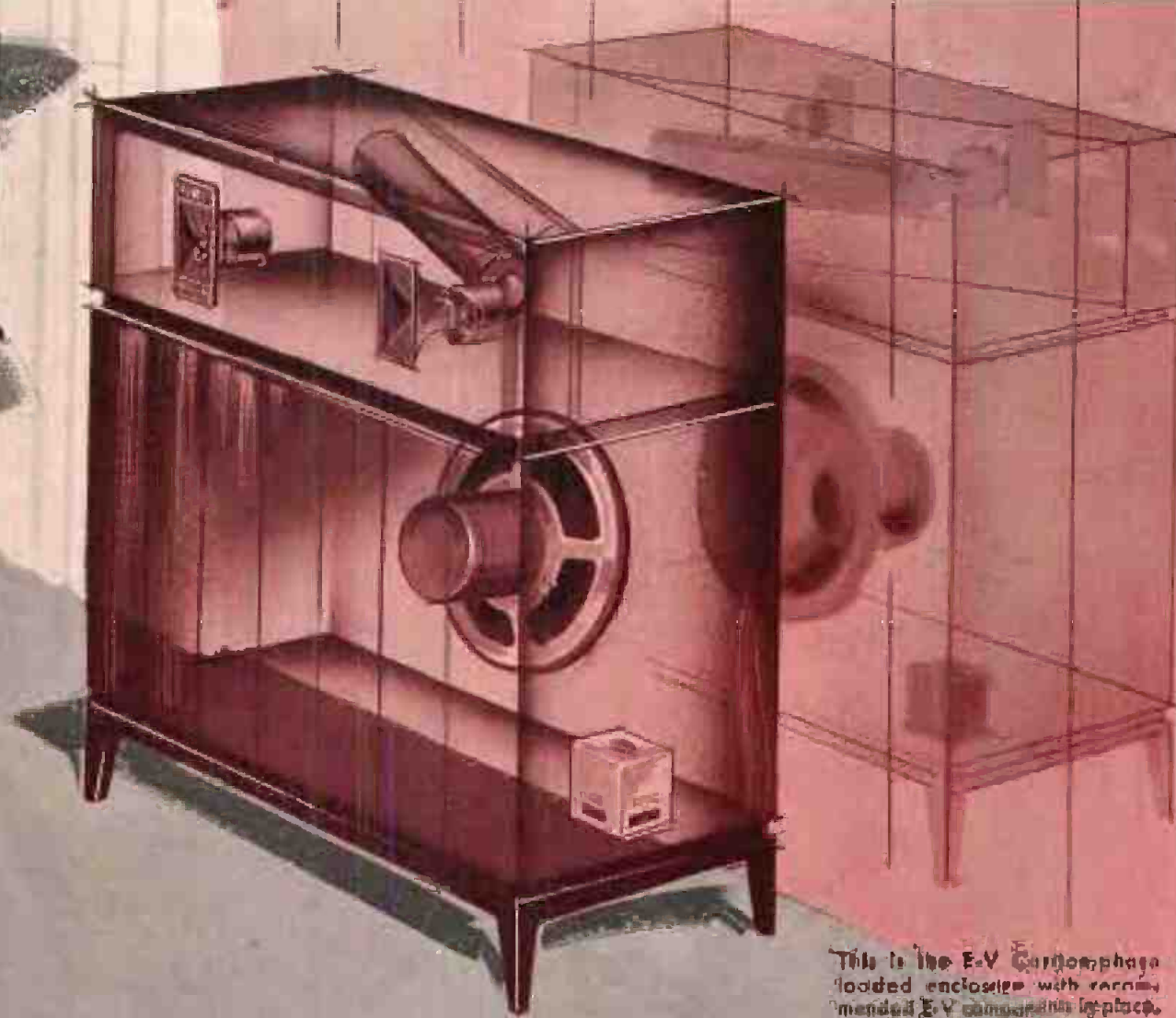
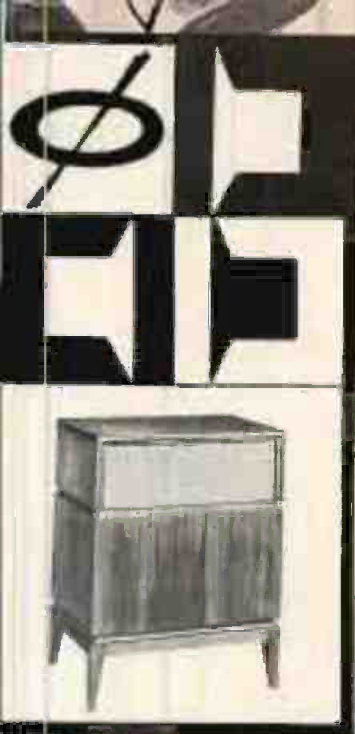
Tape Recorder Catalogue

The October issue of *Audio Record* contains a detailed listing of tape-recording equipment. Over 125 units are pictured and described. Published by Audio Devices, Inc., 441 Madison Ave., New York 22, N. Y.

FM in California

A card from Charles Mish tells us that KPEN went on the air Octo-

Continued on page 21



This is the E-V Corner-phase loaded enclosure with recommended E-V components in place.

Electro-Voice[®] MAKES HI-FI HISTORY WITH EXCITING NEW PHASE LOADED ENCLOSURES

For the first time—and only from Electro-Voice—you get performance from along-the-wall speaker enclosures which approaches the performance of a corner horn! E-V does it with the exciting new principle of PHASE LOADING, the most important advance in baffle design since the Folded Corner Horn!

Designed specifically for use along a wall, phase loaded cabinets give you almost a full added octave of bass range and completely eliminate the "boomy" characteristic of bass reflex enclosures.

Flat, fundamental response is obtained two ways with PHASE LOADING:

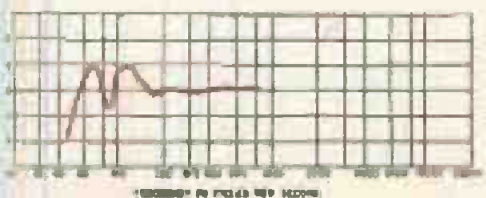
First, by placing the driver at the rear of the cabinet close to the floor, and facing the wall. The wall and floor act as reflecting surfaces, close and almost equi-

distant from the driver cone, eliminating phase difference between reflections and the source.

Secondly, Phase Loading permits a sealed cavity behind the cone, of precise volume. The compliance of this cavity, in conjunction with the mass of the cone, is made to react with the mass and compliance of the outside air throughout the second octave, adding this range to the response not otherwise attainable except through corner horns.

The low crossover of 300 cps makes this system possible, for higher frequencies are not propagated properly by indirect bass radiators.

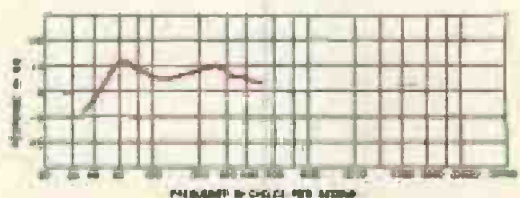
The application of these principles in E-V's PHASE LOADING gives full-bodied, extended low-bass hitherto unavailable. Musical balance is achieved for the first time in an along-the-wall system.



This curve shows performance of the usual 4-way system in a bass reflex cabinet. Note the dip at 85 cps, which shows the destructive cancellation and the reinforcement (peak) at 120 cps which causes "boom."

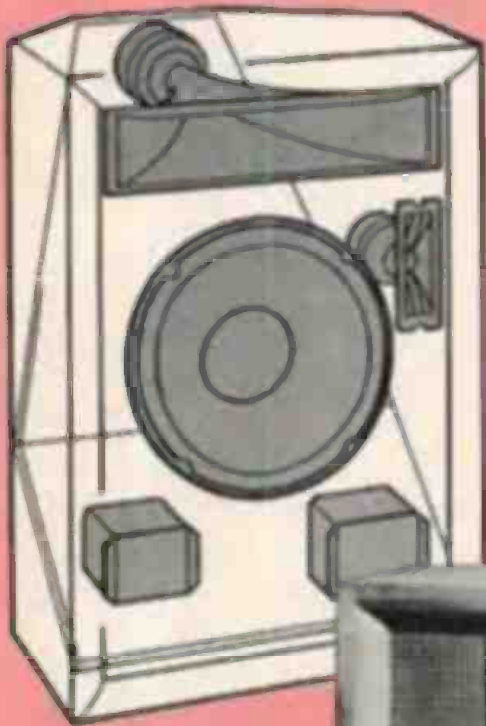


This curve shows the smoothness throughout, the extra response and the extended bass response you get only from a folded horn corner enclosure.



This is E-V phase loading. As you can see, performance in an along-the-wall position closely approaches that of the corner horn.

DESIGNS FOR



The speaker system shown mounted in place is one of more than a dozen variations which may be employed in the ARISTOCRAT enclosure alone. Speaker performance data below.

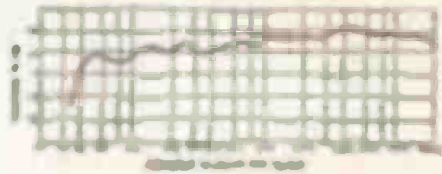


ARISTOCRAT 1A

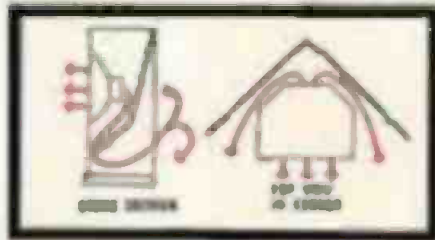
Model No. 108A \$240
 Model No. 108B 247
 Model No. 108C 267

THE DIRECT RADIATOR CORNER HORN

Typical of Electro-Voice direct radiator folded horn corner enclosures is the ARISTOCRAT, a deluxe space-saver design for use with E-V 12-inch coaxial speaker TRX integrated three-way speakers your choice of speaker systems. It is designed for use in a corner, where the walls of your room serve as extensions of bass horn to deliver one full extra octave of bass range. Increased power-handling in the lower range is as much as 50%



The E-V ARISTOCRAT is the full line of Electro-Voice corner enclosures. It is one of many units designed to propagate the bass tones. Curve shows smooth, flat response.

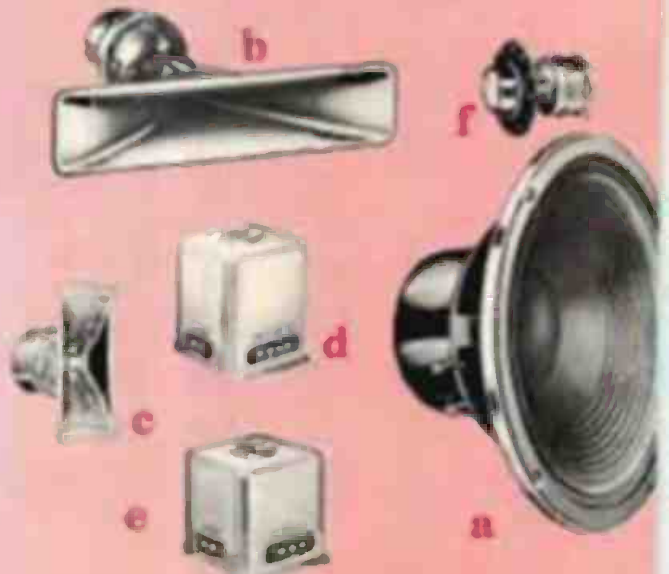


The folded corner design has a sound path from the radiator.

Integrated Speaker Systems

This is the Electro-Voice 108A direct radiator speaker system shown in the ARISTOCRAT enclosure above. It's an economy 3-way system employing (a) 12BW low-frequency bass driver; (b) T10A treble driver with 8HD horn for mid-range reproduction; (c) T35B very-high-frequency driver for silky highs; (d) X825 crossover; (e) X76 crossover; (f) two AT37 level controls plus wiring harness and baffle board. Crossovers are at 800 cps and 3500 cps, lowering intermodulation distortion and assuring optimum operation of each element in the system. Complete, ready to install, Net \$165.

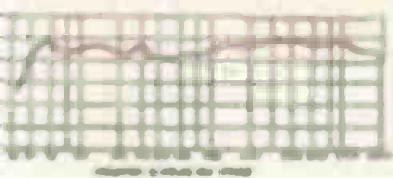
INTEGRATED



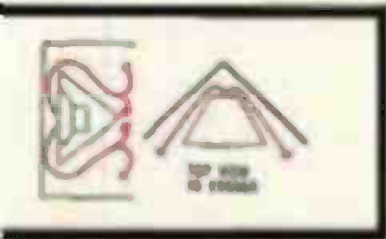
FOLDED HORNS

THE INDIRECT RADIATOR CORNER HORN

Using an advanced indirect horn-radiator principle E-V design extends the lows, enhances highs, uses room walls as extensions of the potential horn air load. Indirect radiation and employment of low crossover frequency, allows exploitation of the sealed cavity feature explained on Page 1. These enclosures actually assure more than one full octave added bass with unprecedented efficiency, provide direct front radiation of higher frequencies, cleaner overall musical balance.



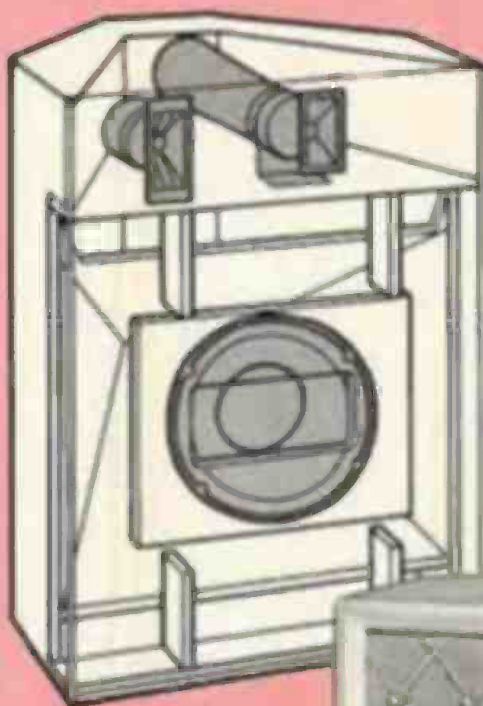
This is the response curve of an Electro-Voice Century indirect radiator folded corner horn enclosure employing a 4-way speaker system. Note the excellent balance of response.



Arrows in diagram show sound path in an indirect radiator corner enclosure.



Perspective drawing shows mounting positions of speakers in the E-V CENTURION enclosure, typical of this fully loaded Electro-Voice design type.



CENTURION IV

Hedgehog \$392
Blonde 399
Walnut 399

SENOR CENTURION IV

Hedgehog \$487
Blonde 494
Walnut 494

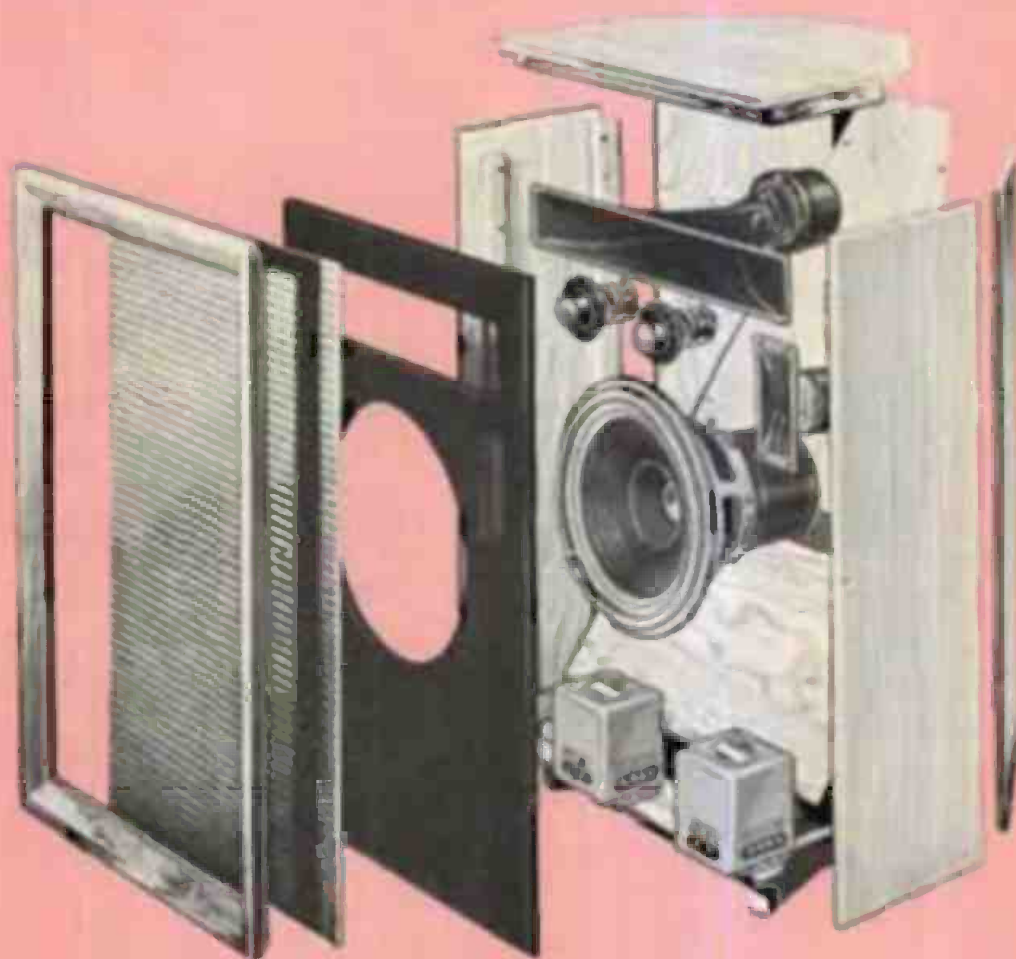
SPEAKER SYSTEMS



This is the 117B indirect radiator speaker system shown in the CENTURION enclosure above. It is an economy 4-way system of unusual performance and high value (g) 15BWK "K" type low-frequency driver for bass reproduction; (h) MT30B coaxial mid-bass and treble driver-horn assembly; (i) T35B very-high-frequency driver for smooth reproduction of the highs; (j) X36 crossover; (k) two AT37 level controls plus wiring harness and complete instructions including enclosure construction details. Electronic crossovers are at 300 and 3500 cps and there is an acoustic crossover at 1000 cps. Complete, Net \$151.

Also shown are some of the components included in the deluxe 106E system of the same type. This deluxe system substitutes a high-efficiency 15WK LP driver for the 15BWK bass reproducer shown and also includes MT20 mid-bass horn assembly and a new T380 VHF driver, an Ultra-Sonax model which has a frequency response of 2kc to 21 kc, ± 2 db. The deluxe 106E system complete, Net \$245.

FOR HI-FI ON A BUDGET, FOLLOW THE ELECTRO-VOICE BUILDING BLOCK PLAN



Start with your basic speaker and improve your compatible E-V high-fidelity system one economical step at a time by adding Electro-Voice Speaker Building Blocks.

Here, we've started with an SP12—12-inch coaxial driver. Later, you add BB2—a T36 very-high-fre-

quency driver, X36 crossover and AT37 level control with wiring harness. BB2, Net \$50. Still later, augment with the BB4—to smooth and disperse treble range, it includes T25A treble driver, with 8HD horn, a second crossover—800-cps X8—and a second AT37 level control with wiring harness. BB4, Net \$114.

Build Your Own E-V Speaker Enclosure with a Pre-Cut, Pre-Cleated 'Do-It-Yourself' Kit

There's no thrill like building your own speaker enclosure! Economize on your hi-fi system without sacrificing quality by assembling an E-V knock down kit of Korina plywood. Korina is of highest quality, naturally light in color, harder than mahogany, allows finishing to match any shade. There are seven models to choose from.

Shown dis-assembled is E-V K06 kit. Assemble it and you have a duplicate of our factory-built ARISTOCRA enclosure of folded horn cabinet design for use with 12-inch drivers or separate multi-way systems. K06, Net \$114.

For all the facts about Electro-Voice 'Listen-ered' high-fidelity components, see your distributor and write for complete details.

Electro-Voice®

ELECTRO-VOICE, INC. BUCHANAN, MICHIGAN
Export: 11 East 64th Street, New York 16, U.S.A. Cable: AVLAB

NOTED WITH INTEREST

Continued from page 16

ber 27 on 101.3 mc with 1,500 watts in Atherton . . . that the San Francisco Chronicle has a construction permit for an FM transmitter . . . and that there's a new station due in Sacramento in February. Mr. Mish says "things are looking up, here in Northern California."

Open House

Acoustic Research, Inc., manufacturers of the AR-1 and AR-2 speaker systems, will hold open house from Monday through Wednesday, January 20-22. Tours through the plant will be held at 11:00 a.m., 2:00 p.m., and 4:00 p.m. The address is 24 Thorncliffe St., Cambridge 44, Mass.

Fair Trade

Electro-Voice has announced a fair trade program has gone into effect for its products in California. Good!

Mildew

A subscriber in Florida asked what to do about mildew, said her records were being damaged. We know how to get mildew off, but not how to prevent it. A letter from Damp-Chaser Inc., 1440 Ridgewood Blvd., Hendersonville, N. C. tells about a product they manufacture: gentle electric heaters, encased in aluminum tubes one to three feet long. They consume eight watts per foot, may be placed inside pianos, closets, and storage cabinets. Prices are from \$5.95 to \$7.95. Damp-Chasers are sold by leading department stores.

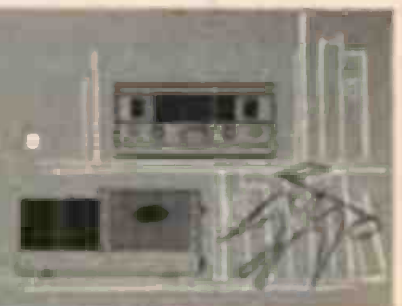
Radio Library for the Blind

The South East Amateur Radio Club, Inc., of Cleveland has announced the SEARC Radio Library for the Blind. It plans to act as a clearing house for information on electronic literature in condensed and tape-recorded form. It will provide a depository for Braille and tape-recorded readings of literature pertaining to electronics, and will offer taped readings of electronic literature. Full details of

Continued on page 23

Together...

THEY CREATE BEAUTIFUL MUSIC



FM-AM TUNER
MODEL 90-T

THE FISHER



30-WATT AMPLIFIER
MODEL 80-AZ

EVERY FEATURE you need today — or may need in the years ahead, is incorporated in these two matched FISHER units. For a complete music system, simply add a record changer and loudspeaker!

THE FISHER FM-AM Tuner • Model 90-T

Because of its exclusive FISHER Gold Cascade, the 90-T is unconditionally guaranteed to be the world's most sensitive FM tuner.

- OUTSTANDING FEATURES: • Exclusive Mercurial Tuning Indicator • Independent performance improvements in FM and precision AM selectivity.
- Completely variable Agnes Control Circuit with new Precision Control and three-position Boost and Retune Controls. **Check \$239.50**

Shipping of Blende Cabinet, \$19.00

THE FISHER 30-Watt Amplifier • Model 80-AZ

A high reserve of power for clean, undistorted reproduction. Conservatively rated at 30 watts, the 80-AZ handles up to 60-watt peaks.

- OUTSTANDING FEATURES: • Less than 1% distortion at full output • Distortion response from 20 to 20,000 cycles, 20db 0.1 db • Heat and color stability unmatchable • Exclusive 2-MHz Variable Damping Control • Super Level Control • Phase Inverter Balance Control. **\$99.50**

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Two to build on- from SONOTONE

1.



THE CA-12 12-INCH COAXIAL LOUDSPEAKER

- Full range (40-14,000 cycles).
- Wide dispersion from the elliptical cone tweeter.
- Complete L-C dividing network built-in.

Music to your ears if you want really fine sound on a limited budget. Ideal if you're already thinking of a second speaker—especially for stereo.

\$19.50 NET Zone 2—\$21.00

2.



THE 3T CERAMIC CARTRIDGE

- Flat response "unusually smooth over its entire range."
- Naturally equalized...no magnetic hum or climate problems.
- Easy to install...snap-in needle replacement.

The 3T-SD Cartridge, complete with sapphire-diamond needles, is priced at only **\$24.00 LIST**.

*Audio League Report—April, 1968—And there is no more respected authority for expert, impartial listening tests.

ASK YOUR DEALER FOR A DEMONSTRATION. SEND IN THE COUPON BELOW FOR FULL DETAILS.

Electronic Applications Division

SONOTONE[®] CORPORATION

ELMSFORD, N. Y.

SONOTONE CORPORATION
Department LH-18, Elmsford, N. Y.

Gentlemen: Please send me complete details on:

- the CA-12 LOUDSPEAKER the 3T CARTRIDGE

Name _____

Address _____

City _____ Zone _____ State _____

NOTED WITH INTEREST

Continued from page 21

services available to blind persons may be obtained from Warren Slacky, Librarian, SEARC Radio Library for the Blind, 11519 Parkview Ave., Cleveland 4, Ohio.

May we wish the best of success to this worthwhile effort.

More about the Blind . . .

Another organization doing much for the blind is Recording for the Blind, Inc., 745 Fifth Ave., New York 22, N. Y. They have their own recording studios, where volunteers read into tape recorders. Then the recordings are transcribed onto 16 $\frac{3}{4}$ -rpm discs in New York. Studios are maintained in the following communities, and those interested are urged to get in touch with one of these local units: Athens, Ga.; Chicago; Denver; Lenox, Mass.; Los Angeles; Louisville; Oak Ridge, Tenn.; Phoenix; Princeton, N. J.

New Factory

The booming high-fidelity industry is causing manufacturers continued expansion problems. One of the latest to move into a new plant is Rek-O-Kut, with a 25,000 sq. ft. factory capable of doubling output. George Silber, president of Rek-O-Kut and of the Institute of High Fidelity Manufacturers, predicted that component high fidelity would gross \$250,000,000 to \$300,000,000 in 1958.

Florida Awry

If memory serves, we once had an item in NW1 about some fellow in Florida who was fixing up a hotel, so that instead of having a jangling telephone bell awaken the tired traveling man at 7:30, the lights would come on, soft voices would whisper, and so forth. We objected, on obscure grounds.

As if the foregoing were not enough to scare people away from his hotel, this same inventor (?) has now figured a way to guarantee that no one will escape after-dinner speeches: he's fixed up the Grand Ballroom (seats 4,000) with 300 watts of audio power blating out through fifty-four directional loudspeakers.

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MODEL CA-40

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Mahogany or Blond Cabinet, \$19.95

THE FISHER

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Complete audio controls and powerful, 25-watt amplifier on one compact chassis. High reserve power for clean reproduction.

OUTSTANDING FEATURES: • Less than 1% distortion at full output • Six input channels • Complete equalization and preamplification for records and tape • Exclusive TunaScore graphically displays Bass and Treble tone control settings. Price, including cabinet shown, **\$139.50**

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Books in Review

WHAT sheer delight it is for anyone who enjoys listening to or reading about music simply to sit (or, better, to lie) back in unbuttoned comfort to browse as his casual fancies and the enticements of his library lead him. Perhaps the nonprofessional never can fully savor the professional's delicious sense of escapade from duty when he encounters a record—or a book—that can be dipped into, sampled and skipped, for sweet entertainment's sake alone. Yet even a layman can feel the same thrill of self-indulgence that comes from enjoying what he likes rather than what is, or should be, good for him—enjoyment further spiced by his sense that if this isn't a sin (as the apocryphal Frenchman exclaimed when he first tasted his crown), it certainly ought to be!

The professional music-book reviewer of course has less time for reading of this sort, but this month, for instance, I've been busy enough to discover several of those appetizing *discoverments* which have enabled me, ironically enough, both to indulge my own tastes and simultaneously, if inadvertently, to accumulate sufficient materials for a whole column of personal reports on books I've enjoyed and which I'm sure many other music lovers will relish with no less gusto. And they, too, are likely to find that they have—painlessly and quite unawares—actually learned as much as, if not more than, they might have in formalized schoolwork.

Bewitched But Not Bewildered

My last current escapade furnished the biggest surprise, for a 685-page *World Treasury of Grand Opera* (Harper, \$6.95) terrorized me both by its size and subject until I discovered that it wasn't the usual collection of plot-"snippets" but a mammoth grab bag filled with some of the best things ever written, pro and con, about the labor-

ious art's triumphs, trials, and great personalities.

Did I wonder, a few columns back, whether anyone ever reads George Moore's *English Junes nowadays*? Well, the present editor, George R. Marek, has—and includes excerpts from not only that novel but also the writings of Cather, Flaubert, Forster, Mann, Pynchon, Tolstoy, and Turgenev. . . . He knows all the outstanding biographers, critics, and chroniclers of opera, of course, and unerringly selects some of the liveliest pieces by a galaxy ranging from Haaslick, Rolland, and Shaw to today's Berk, Downes, Gibman, Kolodin, Newman, Pleasants, Sheeran, Toye, et al. In addition he shrewdly lets some of the creative and executive operatic luminaries speak for themselves: Berlioz, Caruso, Da Ponte, Chick, Lotte Lehmann, Leoncavallo, Rossini, Saint-Saëns, Richard Strauss, and Verdi. Yet he never permits a name to divert his choice from arrestingly vital materials, including those buried in LP-album booklets, the files of *Time*, or other less familiar publications.

Along with Sam McGroarty's *Composers on Music*, cited here in March 1957, this "treasury" by an executive of RCA Victor's record division and a frequent panelist on the Metropolitan Opera Quiz surely ranks as one of the finest musical anthologies and music-lovers' bedside companions ever to appear in this country. Even a non-opera-fan like myself can browse in it with zest (not least over some of the definitions of characteristic operatic extremes), and it's only after putting the volume down—temporarily!—that I revert to my own professional role and scratch my head to find some fault. Sure enough, Mr. Marek inexorably neglected to include anything from Strindberg's *Rosina* and his publishers failed to include a badly needed index or even an alphabetical list of the authors represented.

Old Man of the (London) Times

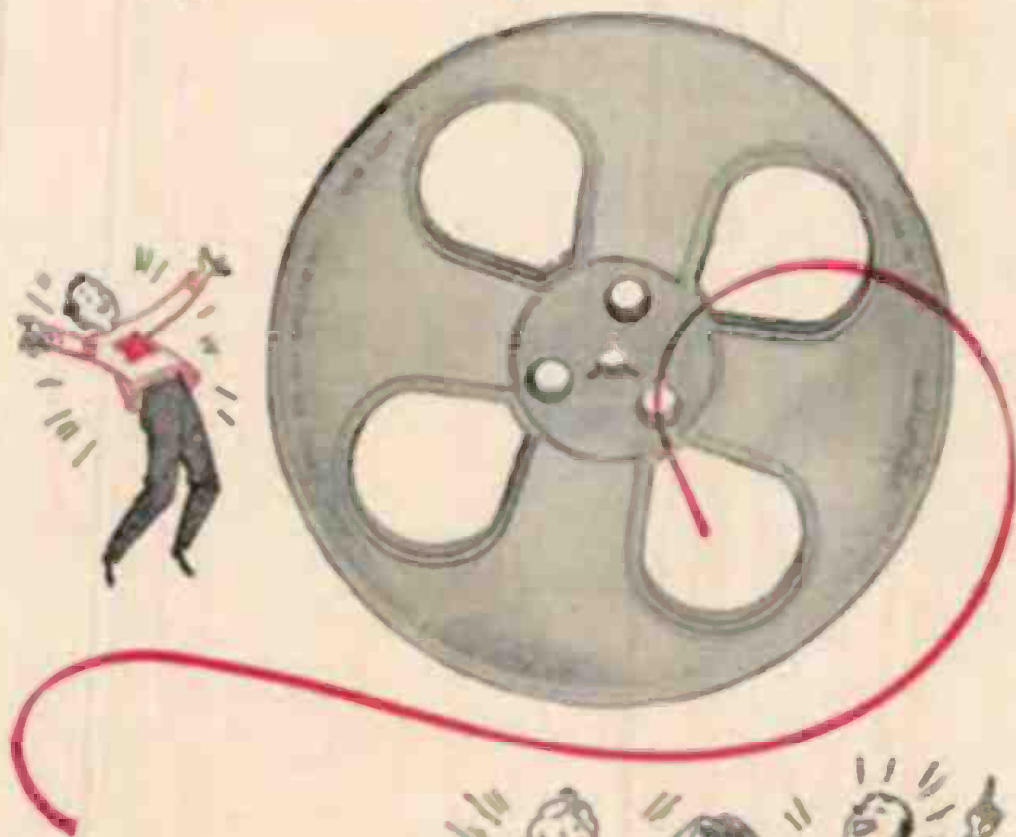
There are almost as many new (to me, anyway) discoveries in the Marek collection as there are well-known reminders of old favorites, and among the former the one which impressed me most of all is the long, barbed, illuminating study of "Faust in Music," by the venerable dean of living music critics, Ernest Newman. Tantalizingly it left my tongue hanging out to taste for myself some of Schumann's Faust music, but more immediately it galvanized me into exploration of the just-received *From the World of Music* (Coward-McCann, \$5.00)—Felix Apperhandian's skillful (though again unindexed) winnowing of a small but vital segment of Newman's writings from 1922 to 1952 in the *Sunday London Times*.

The Old Master was one of my own first mentors, thanks to his now-neglected peer, Philip Hale, who used to quote him at length in the "extra-act" pieces which cultivated the Boston Symphony program boards in my student days. I've always cherished in particular the memory of Newman's review of Walton's *Façade*—and I find that it sparkles more brilliantly than ever on rereading. Indeed, sparkle and bite, insight and wit (and a stubborn refusal to take himself—or even music—too seriously) are typical Newman "thumb-prints," akin to the characteristic melodic formulas he has succeeded in identifying as certain composers' unforgeable "signatures."

Only Newman could have written about one nation's claim to the sole inheritance of Greek culture that this "thesis" has been a favorite one with German writers for many years; it is merely one more exemplification of that engaging modesty that compels the Germans to admit the truth about themselves, even when it appears to verge

Continued on page 26

They're crazy about the C-slot reel!



Tape fans give enthusiastic reply to survey on new easy-threading reel

WHEN our research engineers developed the C-Slot reel, we were so convinced that it was the perfect solution to tape-threading problems that we put it into immediate production. But just to confirm our own enthusiasm, we sent out samples to 260 independent tape recorder owners — professional, educational and home recordists throughout the country. We asked them to test the new reel and tell us how they liked it.

So far, 203 persons have responded. Of these, 189 gave us their spirited approval. That's

93%. The remaining 14 indicated merely that they were neutral. There was not a single negative rating.

It seems to us that this survey, like Audiotape, "speaks for itself." They're crazy about the C-Slot reel! Just look at the comments quoted at the right.

If you haven't yet tried the C-Slot reel, get a 7-inch reel of Audiotape from your dealer and see for yourself. You'll be getting America's finest quality recording tape on the most convenient reel ever designed.

COMMENTS

"I hope the C-Slot reel will be used exclusively for your recording tape."

M. B. • Columbus, Ohio

"We find it especially easy to handle with big fingers."

E. G. A. • Pittsfield, Mass.

"I think it is a great improvement over any other reel now on the market."

C. D. B. • Quarryville, Pa.

"Best to date. You have overcome one of the just causes of tape recording."

D. H. B. • Bronx, N. Y.

"Also holds tape better."

L. A. • Fairport, N. Y.

"It's about time someone improved the reel. I think it's the greatest."

E. B. A. • Los Angeles, Calif.

"Crazy"

J. B. C. • Boston, Mass.

"Very nice reel — good, clean appearance, and physically strong. A pleasure to use."

A. B. A. • Whippany, N. J.

"Threading tape on a reel never was a world-shaking problem. But it was bothersome and messy until your genius produced this. Time saving and beautiful in its simplicity."

G. B. • Falls, Pa.

"At last, 'the' answer to the threading problem."

E. B. A. • Colson, N. J.

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SPECIFICATIONS

Frequency response: 5 to 20,000 Hz to 20,000 CPM at 1 watt.
 Power response: 2:1, 10:20 to 20,000 CPM at 20 watts.
 Distortion: 1% harmonic and 2% intermodulation at 20 watts.
 Feedback: 20 dB plus throughout, 10 dB, around output transformer.
 Outputs: A, B and C plus high impedance for tape recorder.
 Sensitivity: Aux., tuner, tape amp channels—1 volt. Phone channel—200 volts at 20 watt output.
 Bass and treble: 75 dB below rated output on high level inputs.
 Tubes: 6X4, 6X5, 6X6 and 6X8.
 Cabinet: 10 channel gray with brushed brass control plate.
 19" W x 5" H x 9" D, weight 21 lbs.

Net Price \$79.50

15PG 15 Watt High Fidelity Amplifier. The all new 15PG has less power but the same advanced circuitry, the highest quality components and greater flexibility of controls. Features: feedback throughout, record compensation, new loudness control, wide range bass and treble controls, rumble and scratch filters, and six inputs including tape head. Frequency response: 5 to 20,000 Hz to 20,000 CPM. Distortion: 1% harmonic and 2% intermodulation at 15 watts at 1,000 CPM.

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BOOKS IN REVIEW

Continued from page 34

almost on battery." Others have warned of the dangers of overindulgence in dissonance, but never in the vivid terms of Newman's suggestion that "professional students and listeners may possibly be in a condition corresponding to that of the boxer who has been hammered so hard that he has ceased even to know he is being hurt. The technical name for this condition is 'punch-drunk'..."

This is also the man who can write with extraordinary perception about Wozzeck, who can bring golden rays of pure common sense into the murky realms of musical criticism, singing, and operatic acting. Nevertheless, it's the rough side of his tongue-in-cheek which gives him so special a place in musical literature and makes him so edifying to read. After a bracing shot of straight Newman we realize just how subconsciously fed-up we've become with fatuous, mealy-mouthed words on music; and we can most sympathetically echo the famous outburst of a foreign conductor (quoted here in a virtuous little piece on Esperanto as a language for musical criticism) driven to exasperation by his men's constant chattering during rehearsals: "Don't speak! I can stand it then and now but always my God never!"

Don't Shout the Poor Plummy Players!

Although I have long known Abram Chasins (musical director of radio station WQXR in New York City), I never had suspected there was a rough edge to his tongue, too, until—reading avidly through his first book, *Speaking of Pianists...* (Knopf, \$4.00)—I was brought up short by the bitterly eloquent chapters on "The Chain of Management" and "High Fidelity—High Fatality." Here is disillusionment indeed for anyone naive enough to believe that interpretative artistry is rewarded strictly according to its merits and that the LP era has brought unmitigated blessings both to performers and listeners. But what Chasins has to say has long needed saying and the questions he raises about the future

of the arts in this country are as pressing, if on quite different levels, as those which Sputnik I & II point up about the future of our sciences.

For the larger part, however, Chasin's book is written more generally, enriched with reminiscences of the great pianists he has known intimately both as musicians and all-too-human personalities, and shot through with penetrating insights into the essences of keyboard artistry as well as into the individual talents of the leading pianists of recent decades. Those who have themselves struggled at least part way up the *Gradus ad Parnassum* to digital dexterity and those who are especially interested in piano music, composers, and interpreters will find this book—much of it inner-circle shop talk—particularly rewarding. The former will read these pages with renewed thankfulness—both that they had the invaluable experience of once trying to make music with their own fingers, and that by the grace of God they never attempted to make a career of it. And the latter will have to make room on their piano-LP shelves for another indispensable—and well-indexed—volume to place beside Arthur Loesser's *Men, Women, and Pianos*.

The delight with which I've read the other books mentioned so far gives way to a kind of horrid hypnotic fascination with *Forbidden Childhood* (Doubleday, \$3.95), written by former child-prodigy pianist Ruth Slenczynska in collaboration with Louis Biancolli. If Miss Slenczynska is to be believed (and, probably thanks to Biancolli's deft journalistic polishing of her prose, she is shamelessly plausible) this is the case study in excelsis of both a mercilessly exploited prodigy and a maniacal father who hits new lows among the blackest villains of all musical history.

I must admit I couldn't put these confessions down before reaching the final, completely implausible, "happy ending." But the reward, except in gruesome retaliation, is negligible. The lesson, if any, is only: Don't be, or raise your child to be, a prodigy! Miss Slenczynska tries hard to convince us, and

Continued on page 32

Excerpts from PRESS COMMENT on the

AR-2

High Fidelity (Continued in the Room)

"... With the (speaker) control set to full my tests (and described as non-linearities), oscillator tests indicated that bass was efficient and very close to below 40 cycles, was easily extended but not more than 20, and dropped out somewhere around 20 cycles. Its doubling was suitable at any frequency.

From 1,000 to 4,000 cycles there was a slight, broad dip in the response (covering perhaps 2 db down), a gradual rise to original level at 8,000 cycles, and some minor (distortionless) from there out to 12,000 cycles. Then there was a slow drop to 14,000 cycles, with equal output above that.

Because of its (slightly depressed) "presence" range, the AR-2 has what is to me a refreshingly sweet, smooth, and highly interesting sound. Much is reproduced transparently, and with very good detail. Its high end is unobtrusive, but its ability to reproduce the perfume of strong tone and the tearing transition of a trumpet soloist, that it is, without sacrificing high notes needed. (Yes, I feel, it is it should be.

As low end is especially clear and, like the AR-1, promptly discards that bass deep bass could emanate from such a small box.

"... Like the AR-1, the AR-2 should be judged purely on its own merits... and on the theoretical basis of its 'Neotribal' cabinet, also. When so judged, it can stand comparison with many speakers of considerably greater dimensions and price.—A.G.M."



AUDIO ETC.

"... I had my AR-2 remarkably like the AR-1 in overall sound character. Its core timbre is not the same, but there isn't much difference in sound. (I don't like, but that doesn't make much.) In great comparison, (this is a speaker) with plenty of bass component in the very bottom, you can tell the difference between the two in bass response. Most of the time, in ordinary listening, I am not aware of it at all.

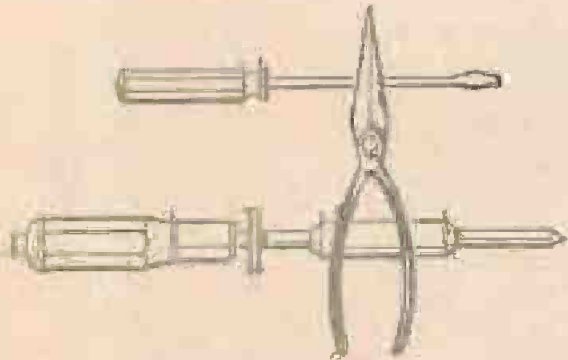
"... I had AR-2, as with AR-1, remarkably clear and unobtrusive in its sound, very on the ears for long periods listening. Very clear in quality in favor of the music itself. Either speaker has a way of simply fading into the surroundings (the one helps) leaving the music unaffected and disembodied in the room. (I cannot describe...)"

Prices for beautiful Research speaker systems, complete with cabinets, (AR-1 and AR-2) are \$49.00 to \$194.00. Also in "Neotribal." Literature is available from your local sound equipment dealer, or on request from:

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HI-FI



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HIGH FIDELITY FM TUNER KIT**

This FM tuner is your least expensive source of high fidelity material! Stabilized oscillator circuit assures negligible drift after initial warmup. Broadband IF circuits assure full fidelity, and 10 microvolt sensitivity pulls in stations with full volume. High-gain cascade RF amplifier, and automatic gain control. Ratio detector gives high-efficiency demodulation. All tunable components prealigned. Edge-illuminated dial for easy tuning. Here is FM for your home at a price you can afford. Shipp. Wt. 7 lbs.

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This tuner differs from an ordinary AM radio in that it has been designed especially for high fidelity. The detector uses crystal diodes, and the IF circuits are "bandbanded" for low signal distortion. Sensitivity and selectivity are excellent. Quiet performance is assured by 6 db signal-to-noise ratio at 25 uv. All tunable components prealigned. Incorporates AVC, two outputs, and two antenna inputs. Edge-lighted glass slide rule dial for easy tuning. Your "best buy" in an AM tuner. Shipp. Wt. 6 lbs.

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This unit is designed to operate as the "master control" for any of the Heathkit Williamson-type amplifiers, and includes features that will do justice to the finest program material. Frequency response within $\pm 1\%$ db from 15 to 35,000 CPS. Full equalization for LP, RIAA, AES, and early 78's. Five switch-selected inputs with separate level controls. Bass and treble control, and volume control, on front panel. Very attractively styled, and an exceptional dollar value. Shipp. Wt. 7 lbs.

(MODEL WA-P2 \$19.75 (with cabinet))

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The very popular model SS-1 Speaker System provides amazing high fidelity performance for its size because it uses high quality speakers in an enclosure especially designed to receive them.

It features an 8" mid-range woofer to cover from 50 to 1000 CPS, and a compression-type tweeter with flared horn to cover from 3000 to 12,000 CPS. Both speakers are by Jensen. The enclosure itself is a ducted-port bass reflex unit, measuring 11 1/2" H x 23" W x 11 1/2" D and is constructed of veneer-surfaced plywood, 3/4" thick. All parts are pre-cut and pre-drilled for quick assembly.

Total frequency range is 50 to 12,000 CPS, within -5 db impedance is 16 ohms. Operates with the "Range Extending" (SS-1B) speaker system kit later, if greater frequency range is desired. Ship. Wt. 20 lbs. **MODEL SS-1 \$39.95**

**HEATHKIT "RANGE EXTENDING"
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The SS-1B uses a 15" woofer and a small super-tweeter to supply very high and very low frequencies and fill out the responses of the "Basic" (SS-1) speaker system at each end of the audio spectrum. The SS-1 and SS-1B, combined, provide an overall response of -5 db from 20 to 18,000 CPS. It includes circuit for crossover at 800, 1600 and 4000 CPS. Impedance is 16 ohms, and power rating is 35 watts. Measures 28" H x 23" W x 17 1/2" D, and is constructed of veneer-surfaced plywood, 3/4" thick. Easy to build! Ship. Wt. 80 lbs.

MODEL SS-1B \$99.95

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The fine quality of the Legato Speaker System Kit is matched only in the most expensive speaker systems available. The listening experience it can bring to you approaches the ultimate in esthetic satisfaction.

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The attractively styled "contemporary" enclosure emphasizes simplicity of line and form to blend with all furnishings. Cabinet parts are pre-cut and pre-drilled from 3/4" veneer-surfaced plywood for easy assembly at home. Impedance is 16 ohms. Power rating is 50 watts for program material. Full smooth frequency response assures you of outstanding high fidelity performance, and an unforgettable listening experience. Order H4-1-C (birch) for light finishes, or H4-1-CH (mahogany) for dark finishes. Ship. Wt. 185 lbs.

MODELS H4-1-C or H4-1-CH \$275.00 each

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This new amplifier features extra power reserve, metered balance circuit, variable damping, and silicon-diode rectifiers replacing vacuum tube rectifiers. A pair of 6BD6 tubes produce full 10-watt output with a special design Peerless output transformer. A quick-change plug selects 4, 8 and 16 ohm or 70 volt output, and the correct feedback resistance. Variable damping optimizes performance for the speaker system of your choice. Frequency response of 1 watt is ± 1 db from 5 CPS to 20 KC with controlled HF roll-off above 100 KC. Harmonic distortion at full output less than 2%, 20 to 20,000 CPS, and intermodulation distortion below 1% at 10db same level. Hum and noise are 60 db below full output. Variable damping from 5 to 10. Designed to use WA-P2 preamplifier. Express only. Ship. Wt. 10 lbs. MODEL W-10M \$109.95

HEATHKIT 25-WATT HIGH FIDELITY AMPLIFIER KIT

The 25-watt Heathkit model W-25 is rated "best buy" in its power class by independent critical faithful sound reproduction is assured with response of ± 1 db from 5 to 100,000 CPS at 1 watt, and harmonic distortion below 1% at 25 watts, and IM distortion below 1% at 20 watts. Hum and noise are 60 db below rated output, assuring quiet, hum-free operation. Output taps are 4, 8 and 16 ohms. Employs KT68 tubes and Peerless output transformer. Designed to use WA-P2 preamplifier. Express only. Ship. Wt. 21 lbs. MODEL W-25M \$149.95

HEATHKIT ELECTRONIC CROSS-OVER KIT

This device separates high and low frequencies electronically, so they may be fed through two separate amplifiers driving separate speakers. The XO-1 is used between the preamplifier and the main amplifiers. Separate amplification of high and low frequencies minimizes IM distortion. Crossover frequencies are selectable at 100, 300, 400, 1000, 1200, 2000, and 3000 CPS. Separate level controls for high and low frequency channels. Attenuation is 12 db per octave. Ship. Wt. 6 lbs.

MODEL XO-1 \$18.95

HEATHKIT W-3AM HIGH FIDELITY AMPLIFIER KIT

Features of this fine Williamson-type amplifier include the famous Acrosound model TO-300 "ultra-linear" transformer, and 6BD6 tubes for broad frequency response, low distortion, and low hum levels. Response is ± 1 db from 5 CPS to 150 KC at 1 watt. Harmonic distortion is below 1% and IM distortion below 1.2% at 20 watts. Hum and noise are 60 db below 20 watts. Provides output taps of 4, 8 or 16 ohms impedance. Designed to use WA-P2 preamplifier. Ship. Wt. 29 lbs. MODEL W-3AM \$49.75

HEATHKIT W-4AM HIGH FIDELITY AMPLIFIER KIT

A true Williamson-type circuit, featuring extended frequency response, low distortion, and low hum levels, this amplifier can give you fine listening enjoyment with a minimum investment. Uses 6BD6 tubes and a Chicago-standard output transformer. Frequency response is ± 1 db from 10 CPS to 100 KC at 1 watt. Less than 1.2% harmonic distortion and 2.7% intermodulation at 1/2 20 watt output. Hum and noise are 60 db below full output. Transformer taps of 4, 8 or 16 ohms. Designed to use WA-P2 preamplifier. Shipped express only. Ship. Wt. 29 lbs. MODEL W-4AM \$39.75



W-3AM
20-WATT AMPLIFIER



W-1AM
20-WATT AMPLIFIER



A-9C
20-WATT AMPLIFIER



A-7D
7-WATT AMPLIFIER

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HEATHKIT A-9C HIGH FIDELITY AMPLIFIER KIT

This amplifier incorporates its own preamplifier for self-contained operation. Provides 20 watt output using push-pull 6L6 tubes. True high fidelity for the home, or for PA applications. Four separate inputs—separate bass and treble controls—and volume control. Covers 20 to 20,000 CPS within ± 1 db. Output transformer tapped at 4, 8, 16 and 500 ohms. Harmonic distortion less than 1% at 3 db below rated output. High quality sound at low cost! Shpg. Wt. 23 lbs. MODEL A-9C \$35.50

HEATHKIT A-7D HIGH FIDELITY AMPLIFIER KIT

This is a true high fidelity amplifier even though its power is somewhat limited. Built-in preamplifier has separate bass and treble controls, and volume control. Frequency response is $\pm 1\frac{1}{2}$ db from 20 to 20,000 CPS, and distortion is held to surprisingly low level. Output transformer tapped at 4, 8 or 16 ohms. Easy to build, and a fine 7-watt performer for one just becoming interested in high fidelity. Shpg. Wt. 10 lbs. MODEL A-7D \$17.95

Model A-7E: Same as the above except with extra tube stage for added preamplification. Two switch-selected inputs, RIAA compensation, and plenty of gain for low-level cartridges. Shpg. Wt. 10 lbs. \$19.95

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BOOKS IN REVIEW

Continued from page 27

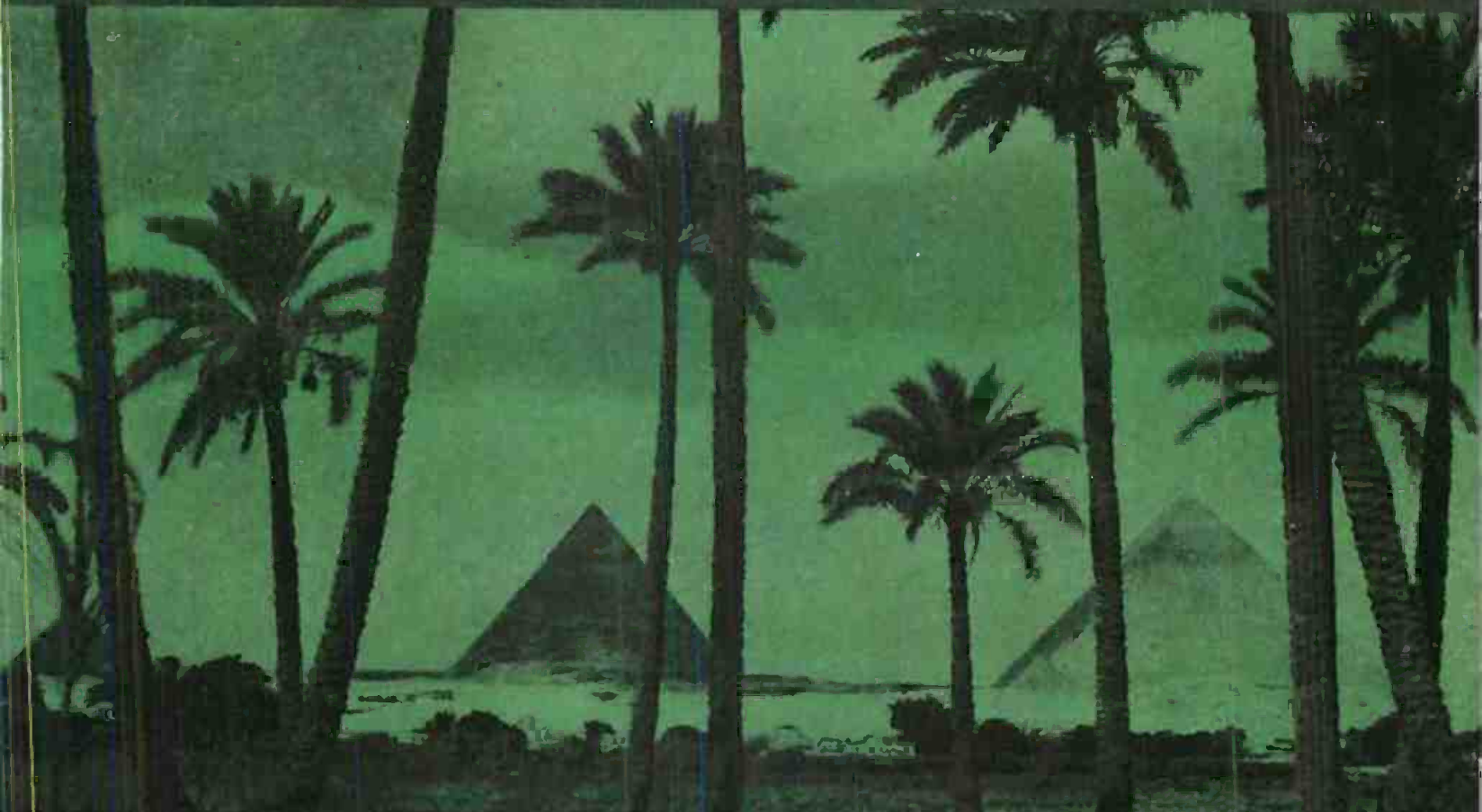
herself, that she has come through as a matured interpreter, but to one skeptical reader there is scant indication that she ever learned anything genuinely vital about the arts of either music or life.

Past Master

From such a study in sadism and masochism let's hurriedly turn with relief to a not entirely serious but always challenging evening's conversation with one of the wisest, kindest, most urbane, and wittily stimulating of scholars and Good Companions—Alfred Einstein, whose still living voice is preserved in many precious volumes. Certainly everyone who knows and treasures his great works on Mozart, Schubert, Gluck, and the Romantic Era (to cite only a few) will delight no less in a sheaf of his posthumously collected *Essays on Music*, edited by Paul Henry Lang (Norton, \$4.00).

Drawn from many journals and written over many years, these mostly brief papers add up to a mine—by Einsteinian standards—miscellany, yet it is one unified, not so much by the fact that some nine out of twenty-two essays deal in one way or another with Mozart, as by the heart-warming glow of the author's own ripe wisdom and personality. Whether he is writing about Mozart or some obscure eighteenth-century composer, about the "Fictions That Have Shaped Musical History" or "The Mortality of Operas," the Einsteinian glow always throws fresh illuminations over a far wider area than the specific subject at hand, always quickens his readers' sympathies and imaginations, and leaves them with the satisfaction that comes from revelatory contact with a first-rate mind and a truly great human being. Two of the most delightful papers here are those on various composers' "Opus 1" and "Opus Ultimum"—and one's pleasure in the latter is shadowed only by the fear that the present volume may be the last installment of Einstein's own legacy. For that reason, if no other, it warrants a place of special honor in every music-lover's library—and heart.

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Go Back Ten Years, and Turn Left . . .

THERE IS a splendid literary exercise I shall call *ifing*, since nobody has named it anything else, in which a number of fine writers have indulged—mainly, I suspect, for their own entertainment. It consists of portraying, within the fictional frame of a short story or a novel, what would have happened (to our own present-day world) if the Mothems had beaten Charles Martel at Tours in 732 A.D. and conquered Europe; if Hero's steam engine had been accepted as a practical device in ancient Alexandria; if Napoleon had been born thirty years early; if Lee instead of Meade had won at Gettysburg.

This being the tenth anniversary of the long-playing record, let us conjecture what would have happened if the LP had not been invented in 1948. I must credit my twice-told punch-line to Dr. Peter Goldmark of CBS, who, of course, had a great deal to do with the fact that the LP was invented in 1948.

So let us have 1948 without LP, but with a developing interest in high fidelity. And, coming on at a great pace, tape. Recorded tape would soon have taken over the high-fidelity and serious music fields, almost certainly, both in home listening and radio broadcasting. Against the 78-rpm shellac record it would have offered continuity, durability, lower noise levels, and a competitive price. Someone would have designed and popularized a quick-loading tape cartridge, possibly incorporating twin reels. The 78-disc would have hung on as a medium of popular hit tunes (we'll assume that the 45-rpm doughnut wasn't invented either), since even a twin-reel tape cartridge would be an uneconomical conveyor of five-minute songs.

There'd have been broadening in the fields both of artists and of repertoire, since the tape machine, as original recording device, can travel, as the studio disc-master cutter could not. There would not have been an enormous proliferation of small companies, since tape copying is more expensive than disc pressing, requiring capital. The common tape speed, in home use, might have become 38 inches per second, by now. And the price of a new *Northwestern Seventh* would be somewhere around six dollars and a half.

But vinyl plastics would have been developed for other uses—airplane windows, dentures, kitchen wraps. And at some point, it is hard to say when, some smug-looking experimenter would have made his way into the office of a recording executive. Under his arm he would have carried a flat package, twelve inches by twelve. He'd have undone his bundle and presented its contents to the executive. No matter how bad his sales talk, he'd have sold it. The disc LP would have arrived.

So there we are, tripped in our *ifing* by a paradox:

if the LP hadn't been invented, it would have been invented. A pretty tame extrapolation.

Perhaps we didn't go back far enough to begin our *ifing*. (I hope time travel doesn't make you dizzy.) Thomas Edison invented acoustico-mechanical sound recording in 1877. Valdemar Poulsen made the first magnetic (wire) recording a dozen years later. It would do us no good to reverse the order of their appearances. What we need is to have Lee de Forest come along with the audion tube in 1890 or thereabouts, instead of in 1911. Without the power tube, you see, magnetic recording was limited in output to the approximate tonal range and volume of a telephone receiver. So let us move Mr. de Forest's epochal invention thirty years back, even though this involves sending a sixteen-year-old inventor out to sell the incredulous world a fairly revolutionary development in electronics. Now, even though Mr. Edison's cylinders and Emile Berliner's discs have had a ten-year start, they will have small chance against veritable high fidelity, appearing in 1895. Spooled wire will become the chief recording medium. Cylinders and/or discs will become toys for the sonic edification of children.

However, our temporal tinkering is (according to the rules of the game) limited to phonography. We cannot prevent World War II, which brings us a shortage of metal and the development of plastics to supplant them. Our steel-core recording wire, coated with iron oxide, becomes unobtainable. The ingenious Germans think of putting their iron oxide on a paper or plastic tape. We conquer Germany and discover this. We are impressed. Tape offers new editing ease and higher fidelity—and it doesn't tangle.

Lights go on at night in the business offices of recording companies, as coups are plotted. Copywriters work late, pledged to secrecy. Research scientists and technicians battle bitterly in private about who thought of what first. And finally iron-oxide recorded tape is sprung on the public, along with machines to play it.

Musical progress (in this particular *ifing* sequence) has been conservative, with a few big companies recording the standard classical repertoire and plenty of operettas, all expensively. Popular hits can't find their way into recording, nor can jazz. The medium simply doesn't fit them. Their profits must come out of live or broadcast performances. And this is a temptation to inventors, not unnaturally.

And so one day, into a recording executive's office comes an experimenter, wearing horn-rimmed glasses and a smug expression. Under his arm he carries a flat package, twelve inches by twelve. . . .

Isn't this where we came to?

J.M.C.

Fifty Thousand Sides Ago:

The first days of LP

by Martin Meyer

"THE PROBLEMS we expected to have," said Peter Goldmark the other day, rocking back and forth on the swivel chair in his cluttered office at the CBS building, "were distortionless cutting and length of time, really two aspects of the same thing, then plating and pressing, a pickup light enough and with a high enough compliance, uniform speed to the reproducing motor, small enough stylus, wear of the stylus, wear of the record—that was about it. Those were just the problems we had, too, every one of them."

To everybody at Columbia Records, the development of the LP disc seems a long time ago, an event already obscured in the mists of history, which now are hastily and partially to be dispersed by the quick words (not to say hot breath) of the forthcoming tenth anniversary celebration. It was in June 1946 that Edward Wallerstein of Columbia announced to a skeptical press and a skittish public the successful mass production of a microgroove phonograph record which would play forty-five minutes of music at a speed of 33½ revolutions per minute. Flanking Wallerstein on one side, while he spoke, was a stack of conventional 78-rpm albums some eight feet high; on the other side was a pile of the new LPs fifteen inches high. Both contained in their grooves the same music. A picture of research director Peter Goldmark, standing before the tower of 78s and holding in his capable (and obviously strong) arms the 101 microgroove records which represented the same playing time, appeared the next week in *Life*, and Columbia's long-playing record was fairly launched.

The long-playing disc was not a new idea. It had been attempted before, most notably in 1931, when

RCA Victor had actually produced and sold 33½-rpm fine-groove recordings which played up to fourteen minutes per side. (The grooves were half again as wide as those on Goldmark's L.P.) As Roland Colett wrote of Columbia's new record in his book *The Fabulous Phonograph*, "Its sole originality lay in the fact that it worked." Because it worked—and because Columbia had thoughtfully designed a reproducing system to go with it—the new LP immediately commanded a market large enough to pay for improving it.

First LP recordings are rarities today, like first impressions from old engravings, but not so valuable. Somewhat more than a million discs were pressed and sold in the first issue, all of them encased in blue and white paper envelopes which were known around Columbia as "tomstones" because of the classic pillars which formed a chaste frame for the information about the record printed inside. But those million, most of them worn to worthlessness now by mistreatment from the ill-designed early two-speed record changers, form the entire stock of originals. When the time came to replace the stock, Columbia engineers remastered the lot.

For many of those first long-play discs were not, in fact, very good. Dr. Goldmark keeps in his office, in playable state, the very first LP record produced in his experimental laboratory, sixteen minutes' worth of the Tchaikovsky Violin Concerto. He likes to play it once in a while, to show how bad it was: "The violin," he says disgustedly, "sounds like a flute." Dr. Goldmark himself, it is believed by awestruck juniors who note his great confidence, his abrupt gestures, his Olympian good humor, may have sprung full grown from the head of Minerva—but his microgroove record was still only a baby when he introduced it.

No other infant of this breed ever had lived before.

and at its coterwauling birth it was hard to foresee what a fine handsome specimen this one would become, or what enormous popularity it would achieve (today the LP accounts for more than half the money volume of the entire record business). All that was evident at the time was that the thing seemed to be alive, and that a three-year labor had been necessary to bring it forth.

THE STORY really goes back to December 1939, and to chief recording engineer Vincent Liebler, a big, cheerful man now in his early fifties, with a large, square face, and white hair for which the LP is in no small part responsible. Liebler had been Columbia's chief engineer for three years before CBS bought the then struggling company in 1935, but his experience had been mostly in popular music, since the old Columbia label had relied on European imports for its classical repertoire. When work began on the latter, everyone felt that something better than the four-minute 78-rpm master disc would help with the results when, for instance, movements from an entire symphony were to be recorded. At the end of 1939, the company began recording all its serious on standard-groove 33½-rpm "master saleties," sixteen inches in diameter. During that first year the saleties were simply filed away after the session, and used only when repair work was necessary on the 78s. By the end of 1940 all takes were factored on the 33½ sixteen-inch discs, and then were transferred later to 78-rpm records.

Godard Lieberson, now president of Columbia, then the recording director of the Masterworks Division, recalls with pleasure the new flexibility offered by the sixteen-inch saleties. And when the LP came around, the master saleties gave the engineers a sound source with an unusually good signal-to-noise ratio from which to do their dubbing.

The existence of the large-diameter saleties was a source for reflection, from the start. "Long before the LP was even thought of," Liebler says, "we were playing around with these saleties. No direction—just thinking about what could be done. We converted twenty-five or thirty albums into continuous play records, experimentally, getting about fifteen minutes a side." Dr. Goldmark also had been thinking along these lines for some time. At a meeting of the CBS (or parrot) Board the new concept was brought up and the project put on the calendar.

War work delayed progress somewhat, but within a week after the Japanese surrender, the lab staff was hard at work on the LP. "We hadn't any of us done any recording work before," Goldmark says. "That's why it went so well: we didn't have any prejudices. Really, it was a big help to us—for a research engineer, a bright chap with a poor memory is the best thing you can have. We didn't have any memory, we didn't know something had been tried and it didn't work, so we could just get on with the job at hand."



Recording South Pacific, first LP best seller: Mary Martin, composer Rodgers, Leo Pines, and Columbia's Liebler.

Goldmark assigned individual researchers to individual problems—cutting-motor and stylus design, pickup design, turntable design, amplifier, radius equalization. The 33½-rpm speed had been established before work began, and it already had become clear that a very narrow groove, something like the .003-inch groove finally adopted, would be necessary to record twenty-two minutes of music in a side. (The figure twenty-two had been decided on after an analysis of major symphonic compositions. Goldmark still has the charts, showing that 98% of all important symphonic works take less than forty-five minutes' playing time.) The need for narrow grooves dictated a highly resilient material for the record itself, because the effective tracking pressure of a small stylus on a narrow groove is far greater than the effective tracking pressure of a larger stylus point in a wide groove. Research had already demonstrated that the laminated compression disc used by Columbia for standard records was not tough enough for LP duty; but vinylite, on which some deluxe 78-rpm albums

Columbia's Barkman, CBS's Goldmark; the baby was but a baby.



were already being pressed, was strong enough to handle the pressure.

Working with existing vinylite compounds and modifications of existing cutting lathes, but with a cutting motor and stylus of their own devising, Goldmark's crew within three months had produced a serviceable microgroove record that would play up to sixteen minutes a side. "Then," Goldmark recalls, "we inched up, minute by minute. The whole thing was built of debris and failures, a tremendous amount of heartache. We worked from the 33-rpm safety masters, checking back and forth constantly to be sure we weren't losing quality. And since we had color TV on our necks all that time, this had to be a side project. A year before the formal announcement, nearly two years after we'd started, we had a record that gave twenty-two minutes of the same sound quality from start to finish."

THE DIFFICULTY that most sorely beset Goldmark and his assistants, and that continued after the introduction of the record, was that of increasing the playing time of the disc while retaining the high frequencies. The major contribution to the solution of this problem was made by William S. Bachman, a youngish, apple-cheeked engineer with a timid, quiet grin who came to Columbia at the end of 1945 to be the record company's own director of research. Previously, he had worked for General Electric, and had designed the G. E. variable reluctance magnetic cartridge.

It was more difficult to cut high frequencies into an LP than a 78 for the simple reason that the record turned more slowly. Halfway through a 78-rpm record, approximately thirty-one inches of groove pass under the stylus each second; half-way through a 33-rpm record, roughly fourteen inches of groove pass below the stylus each second. If the same response was to be attained, high-frequency groove modulations would have to be two and a quarter times finer in an LP than in a 78-rpm recording. There was no difficulty in driving the cutting stylus to perform such delicate work exactly as desired, but what issued from the groove when the cutting stylus had finished was often inferior. If the cutting stylus was ground to ultimate sharpness at its edges, the resulting cut in the disc was, in Bachman's words, "grainy and noisy"; so the cutting edges had to be "dulled." And duller edges were unable to impart very high-frequency modulations in the groove.

During the thirty months between the first experimental record and the introduction of a commercial disc, Goldmark, Bachman, and their staffs worked on cutting-stylus geometry and improvements in vinylite compounds, supplied by Union Carbide, until they had established the best compromise. Even after the first LPs came to market, Bachman continued his research. In 1949 he came up with the answer: a record-cutting process employing an incandescent stylus which cut by vaporization of the disc material.

This stylus also eliminated one of the nuisance problems in record-cutting: the "horn," a ridge thrown up along the outside edges of the groove when a cold stylus chiseled its way through an acetate disc. "On the early LPs," Bachman says, "the horn was often so firm you could get a stylus to trace between the grooves, all the way to the center of the record, if you set it down wrong. It sounds awful, of course, but you do get a distorted echo of the music."

Through slight changes in cutting-stylus geometry and cutting-lathe design, and through improvements in vinylite composition which permitted recording at lesser amplitudes, Goldmark and his crew brought the LP to the desired twenty-two minutes a side. Then, early in 1948, Wallerstein informed Bachman that twenty-two minutes wasn't enough: among the early LP issues there would have to be an *Eroica*, and the first two movements of the *Eroica* ran twenty-nine minutes. There was nothing left for Bachman but to find a new approach.

So he did.

Bachman's idea, later given the name "Variable Groove," was based on the fact that, at constant pitch, grooves must be spaced to accommodate the loudest signals, leaving more space than needed for quieter passages. The carriage which holds the cutting head and stylus runs radially above the acetate disc to be cut, and an independent motor drives it toward the center of the record. To assure the carriage's smooth motion, its driving motor is synchronous, with speed governed by the frequency of the alternating current on which it runs. Before Bachman came up with Variable Groove, progress had been at an even rate, leaving enough "land" between the grooves to assure separation of the horns and guarantee against echo in the loudest passages. Thus, considerable unnecessary "land" was left between the grooves carrying softer music. Bachman decided to increase the LP's playing time by eliminating this unnecessary land and using the precious space for more grooves.

At first, Variable Groove was a handcraft operation. Bachman used a manually controlled oscillator for insertion between the house current and the synchronous motor that drove the carriage. Then he stationed an engineer who could read a score at the controls of the frequency oscillator. Whenever the engineer saw a loud passage ahead, he turned the knob to increase the frequency of the current going to the motor, allowing more space between the grooves; whenever he saw a soft passage in the works, he slowed the carriage to save space. "It wasn't really very difficult to design a machine which could take care of this problem automatically," Bachman says today; but, in fact, nearly three years elapsed between the day when the first hand-governed Variable Groove *Eroica* came off the lathe and the day when Bachman was sufficiently satisfied with his machine to permit its announcement by Columbia's press department.

Continued on page 127

by roland gelatt

ON A JUNE AFTERNOON in 1948, Columbia Records summoned members of the press to a suite in the Waldorf-Astoria and officially unveiled the long-playing micro-groove disc. I wish I could say that I foresaw on that occasion all the consequences of the next decade. But I didn't. And I doubt that anyone else in that crowded room did either—not even Ted Wallerstein of Columbia, or Jimmy Carmine of Fluke, who was to manufacture the Columbia 33 record player, or the other executives assembled there to sound the LP's praises. We all realized that an important new product had been developed. We could see that it would introduce some changes in the record industry. But the two dozen versions of *Scherezade*? The sale of 200,000 Beethoven *Ninth*? The complete organ literature of Bach? The three hundred record labels? The emergence of a large high-fidelity industry? A billion dollars a year spent on records and equipment? Surely no one at that unveiling a decade ago had the prescience and effrontery to imagine all this.

the  pangs
of progress



But I do not intend to celebrate here the LP's glory. This has been simply done already. Jacques Barzun has told us that "it marks an epoch in Western intellectual history." He observes that "the whole literature of one of the arts has sprung into being" and likens the phenomenon to "the Renaissance re-discovering the ancient classics and holding them fast by means of the printing press." And he is right. The LP is a marvel and a solace. But it is not a spotless paragon. There are two sides to every record. Permit me, one of the earliest converts to LP, to examine a few of its defaults.

Perhaps the gravest charge to be leveled at the LP record is that it has stimulated a conspicuous decline of attention. We no longer listen to records with our former devotion and absorption. We have, *pace* Diana Barrymore, been given too much too soon. Our receptivity has been dulled by a glut of merchandise. I am writing this article after having listened on successive evenings to new recordings of *La Sonnambula* and *Der Rosenkavalier*, each of them a distinguished musical re-creation. Two decades ago, either of these sets would have constituted the chief opera treat of an entire season. We would have had months to savor it without competition; indeed, it is very possible that we would have acquired it in installments, act by act, to spread the expense. Today the two operas are pabblers in an avalanche. We have no sooner succumbed to their delights than our attention is diverted by first recordings of *Goyescas* and *Arsabella*, new versions of *Tosca* and *Fidelio*.

A STRONG-MINDED man can, of course, withstand the temptation of omnivorous listening. But does he? I remember when Columbia issued Alban Berg's *Violin Concerto*, played by Louis Kranez and the Cleveland Orchestra under Rodzinski. It was then, circa 1940, the only twelve-tone composition to be found on domestic records, and it taught a whole generation of young listeners to appreciate the strange beauty and communicative power of a new musical language. We learned these six fortynote sides by heart. Today the young person interested in the twelve-tone idiom has access to the complete works of Anton Webern in one album-eight LP sides, well over three hours of difficult listening. I do not wish to depreciate any undertaking as idealistic and arduous as the Webern album must have been in conception and execution. I merely question whether the thirty-three works it contains are being as thoroughly ingested as was the single concerto in the more leisurely days of 78 rpm.

At this point someone may possibly object that I view the current deluge of records from a privileged and untypical standpoint. "After all," a skeptic could protest, "you as a professional record reviewer are naturally swamped with new releases. The ordinary buyer does not have your good luck—or, if you will,

your misfortune. His pays, you know, coin of the realm for his records." There is a grain of truth in this demurrer, but only a grain, for I have watched my friends buy and listen to LP records, and I know that their attention to recorded music has suffered appreciably from an embarrassment of riches. Their purchases may not equal my shipments of review records, but they do pretty well for themselves nonetheless. These days it is not unusual for an active record collector to take home a dozen new issues a month.

This leads me to a somewhat Philistine comparison. You can buy two Mozart piano concertos on LP for the price of a dinner in a not very fancy restaurant. Twenty years ago you could have enjoyed ten dinners at the same restaurant for the cost of those two concertos on 78-rpm records. Do not for a moment imagine that I bewail the cheapness of LPs. I revel in it. But I am not immune to the consequences. Record buying is a far more casual affair now than it was in pre-LP days. A man of moderate means can on impulse acquire two or three recorded symphonies without serious inroads on his weekly budget. This is undoubtedly all to the good, but it makes the records themselves considerably less cherished objects.

The old records were not only expensive; they also had to be changed every four minutes, either by hand or by an automatic changer. Most people who valued their brittle shellac records preferred to change by hand. This was a great nuisance, and the incessant stops and starts seriously interrupted musical continuity. The four-minute side did, however, prevent dozing. It was the LP that spawned the recorded sleeping pill—"Reveries for Languid Lovers," "Melodies for a Lazy Afternoon," and the like. Records at 78 rpm demanded attention. The darn things kept ending, and you kept jumping up to turn them over. After a while, you memorized all the breaks in a symphony or opera, learned just when to get up so as to reach the turntable precisely as the music stopped. The breaks became mileposts, as it were; they told the listener, embarked on a long musical journey, just where he was. (As soon as Rodin's manuscript catches fire at the beginning of *La Bohème*, I know that it is time to get up and unheath Side 2.) The sense of form imparted by four-minute records was unquestionably spacious; I should not waste to have to defend it before a jury of musicologists. But (this I will say) the necessity of changing records kept the muscles active and the responses alert. And you value what you have to work for.

Moreover, the four-minute side was by no means always part of an extended composition. Thousands of complete selections, believe it or not, fitted snugly within its temporal bounds. And how stimulating was to choose a program from among these brief treasures! One didn't have to endure the same stager,

the same conductor, or the same instrumentalist for half an hour; neither was it obligatory to stick to the same composer. One simply made a collation of quick delicacies. The program might open with Beecham conducting the *Nozze di Figaro* Overture, continue with Stravinsky's "Adagio del passato" from *Tractate*, then Liszt's *Gnomespiel* played by Rachmaninoff. Wolf's *Herr*, was *tröst* sung by Mo-Cormack, Kreisler's *Caprice* chosen as only he could play it, and Fauré's *Clair de lune* sung by Nirvan Vallin, before concluding—hereby twenty minutes later—with the *Midsummer Night's Dream* Scherzo conducted by Toscanini. (Does the program seem helter-skelter? So be it. I shall willingly argue its merits with anyone.) We have, in short, lost the pleasure of three or four minutes of concentrated delight. The norm is now a half hour, which is fine for a symphony but ill-suited to the new record.

The LP recital offers a poor substitute for our former miscellanies of short-playing discs. To begin with, the program is not our own; it is the record maker's. And it is usually of varying appeal, not all fifteen selections are going to hit the bull's eye. Of course, one still can pick and choose. A little song called *Háblame de amores* as sung by Victoria de los Angeles and accompanied by Gerold Moore never fails to enchant me. It is on Disc 8 of Side 4 (the "filler" side) of the album containing Falla's *Vida brece*, and occasionally I play just this one band (if I can manage to locate it in a dimly lit room). But the usual procedure with a recital on LP is to start at the beginning and let it spin. By the end we have often had too much of a good thing.

Completeness is a virtue sometimes overrated. One of my favorite records is an old ten-inch HMV whereon John Gielgud and Edith Evans (neither Sir nor Dame when it was made) play a delicious scene from *The Importance of Being Earnest*. It concerns the suitability of Mr. Worthing as a prospective son-in-law of Lady Bracknell's, and it is the very epitome of Wildman wit enunciated with masterly polish and style. Since then Sir John and Dame Edith have recorded the entire play ("complete on two LPs"). I confess, though, that I continue to play the old 78-rpm excerpt, not because the scene is any better performed thereon, but because it satisfies my craving for high comedy in six sparkling minutes.

So far I have examined the LP record solely from the listener's standpoint. What of the performer? He has, of course, profited tremendously from it—in dollars and cents. More musicians are making more records and collecting more royalties than ever before. Bravo for that. But let's give only two cheers for a medium that has encouraged so much slouchy workmanship. Too many musicians have recorded music for which they manifest scant affinity, merely to satisfy a company's craving for repertoire. Even interpreters of great and justified renown have been

persuaded to swim far beyond their depth; for example Walter Gieseking, whose eleven-LP album of Mozart's solo piano music gave an impression of not particularly inspired sight-reading. Abram Chasins is eloquent on this point in his recent book *Speaking of Pianos*. "Great artists are great in what they choose to do," he writes, "not in what they are sometimes coerced and seduced into doing under the undermining influences of a dynamic economy"; and he laments the spectacle of artists "pricked and instigated to record works they do not respect or have not digested, and even works they have no business playing."

A musician imperfectly equipped for the task at hand can, to be sure, overcome certain mechanical problems by taping a piece a number of times; afterward a reasonably note-perfect composite can be made of the best moments from each "take." But does anybody imagine that this artificial tape-splicing results in a truly convincing performance? The LP record ought not to be saddled with the malfunctions of magnetic tape, but the two developments matured simultaneously, and it is difficult now to think of one without the other. Had it not been for the ease and relative cheapness of tape recording, the proliferation of LP records would have proceeded at a considerably slower tempo. To bemoan that ease and cheapness would be absurd. Besides, the adaptability of tape to the bits-and-patches method of taking down a performance does not mean that the new medium necessarily has to be so used. Any veteran recording artist will confirm that the challenge of the unpatchable was blank stimulated a musician to do his utmost, and today more and more performers in the recording studio are getting away from the "we can repair it later" philosophy in favor of a return to the old principles.

I should not wish to imply that every 78-rpm record perpetuated a mature and profound performance. Lord knows there were some frightful dunks in pre-LP days. Neither do I wish to imply that all of today's LPs are hastily or carelessly executed. Beecham, Horowitz, Landovska, and their like continue to make records in the old intransigent manner. What can be said, I believe, is that the LP record has assailed our ears with a disproportionate number of indifferent performances. The kind of aimless interpretation that comes off the top of a musician's head is more prevalent on records now than it was twenty years ago.

NOWADAYS, too, young musicians are not given a chance to grow up. A dozen powerful record companies constantly are competing one against another in an international talent hunt, and no musician is left undiscovered. The case of a Flagstad, who had been staging in relative obscurity for two decades before she burst into world celebrity at the age of forty, would

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by Arthur W. Wayne

SNARK SPOOR

*... A witty Briton
wonders if high fidelity
is not, after all, an impossibility.*

COMING EVENTS cast their shadows before, and even Shakespeare guessed at our advent. "Desiring this man's art, and that man's scope" said he, and followed it up in the next line: "With what I most enjoy contented least." Well, that's a fair enough description of the hi-fi coterie, the most art-loving of us fixing glazed eyes on our scopes, and never happy unless we can produce more watts or a wider response than we did last week.

We imagine that all we want is better reproduction, music more like the real thing in our homes, but we spend a great deal more time listening to what the music sounds like than to the music itself. This attitude hasn't been discouraged by the engineers—outside of the profession, either, with the result that, since the war, objective demands in amplifier design have far outpaced the subjective requirements, the actual essentials of sound reproduction tending to be swamped

by the niceties of engineering systems. Speaking as both a professional engineer and a professional pianist, I would say that the substitution of one designer per laboratory by a tame musician might be a worthwhile innovation.

There are certain tenets held by the audio sodality, a sort of shorter catechism of hi-fi, knowledge of and blind obedience to which are the basic minima for admission to the faith. The most important are the Four Freedoms: freedom from unintentional departures from straight-line response, freedom from harmonic additions, freedom from intermodulation products, and freedom from phase distortion. An enormous industry has grown around the dogma, with a great deal of sincere belief and bright advertising copy bringing the articles of faith to the world in general, and to the hi-fi fan in particular. Amplifier A, designed by B, is, this year, the one most free from the dreadful sins mentioned. I shall quote: "the performance of this . . . amplifier reaches so high a standard that it is unlikely to be surpassed in the future." For the record, that statement was made in 1934, and it was made by no less an authority than *Wireless World*. The response at 4 watts was about ± 4 db from 20 cps to 10 kc; and the point was made that phase distortion is "of little moment in sound reproduction"—a point not wildly original, as almost every physicist of note already had asserted the same thing.

The *Wireless World* figures began to look a little nonderthal when, in 1947, D. T. N. Williamson published a real shocker, the circuit to end all circuits. The figures were nothing short of miraculous, and it sounded pretty good, too. Again we had an amplifier that was unlikely to be surpassed in the future. In 1949 a certain colligate authority, describing a near-original version, stated that at ordinary room-volume powers the intermodulation distortion figure was less than 0.2%; it was also said that 12 watts is more than enough for home volume levels, even with a 10 db safety factor—certainly not negligible. (All these figures are worth remembering, for we are now embarked on an important enterprise, the Hunting of the Snark. Readers who know their Lewis Carroll, and remember the last line, can quit here. They know what I am getting at.)

Well, time does march on, and by 1951 the Williamson apparently was not quite the paragon it was supposed to be. Some more advanced sort of amplifier seemed called for. The Ultra-Linear circuit was introduced, infusing fresh blood into the pack and sending the Snark slinking into the nearest covert, tail well down. In July of 1952 the originators of the circuit published their findings; one of their remarks was that, up to about 7 watts, there was very little difference in intermodulation distortion between the Williamson and U-L amplifiers. There appeared to be no advantage in making use of the latter under domestic conditions. But the Snark reared his ugly nose again, for we were informed, at the same time,

that people who had lived with the new amplifier for several weeks in ordinary apartment-house living rooms were convinced that it sounded better than the old at all levels. It was about then, too, that power requirements began to assume megaloccephalic tendencies, for within a few months it had crept (or rather, galloped) up to 100 watts. At least, so our authority asserted and proved by figures. He asserted something else, too. He said that the 100-watter, which distorted more at 10 watts than did the 12-watter, added immeasurably to the performance of a 10-watt speaker! (The Snark was certainly well ahead by now.)

He gave a field or two in the matter of equalization as well. To quote again from the *Wireless World* article: "Phase distortion . . . is at a minimum when frequency distortion is at a minimum." There is a natural corollary, which substitutes "maximum" for "minimum." Now, frequency distortion is forced on us by the sheer mechanics of recording, both when cutting and when reproducing. What happened to the articles of faith here is embarrassing to mention—anyway, they don't seem to have been seriously invoked. This is where we engineers gave ourselves away most, because with or without benefit of slide rules, we couldn't make up our minds. Witness the kaleidoscopic scroll of equalizations: RCA 78, FFR, Col LP, old AES, NARTB, RLA, Uncle Tom Cobley, and all. And then, for good measure, let us quote from Harold Loak's little "Variolope II" instruction leaflet: "If the record-maker's . . . stated characteristic appears on the input selector, switch accordingly and proceed as above. But you may well find that you prefer an FFR record played on another marking!"

And now the engineers and advertising boys are away again, this time after a hydra-headed Snark, stereo. Up goes the hunt, with matched gain controls, matched tone controls, matched amplifiers, matched speakers; but, so far, no tallyho for matched ears, matched walls, matched reverberation periods. What nonsense all this is! What are the separate channels ultimately to be matched to? The listener's ears? If these, we are in a bad way, for his ears at a live performance would needs be where the microphones are, and even an audio engineer's ears aren't that long! (Anyway, most individuals' ears differ markedly from each other, left from right.) Even so, who decides on the microphone placing? Is there any objective criterion of microphone placing? There should be, we're pontifical enough about the rest. But the miserable truth is, we don't know even now, VU meters *et al.*, where to stick the things, even in familiar surroundings. I have had the honor of being a guest pianist, on many occasions, with what probably is the most popular small ensemble in British broadcasting, but at every rehearsal there is the peripatetic rite of adjusting microphones, a placing here and a placing there, too much piano, too much bass, too much treble, not enough middle—considering my girls, a palpable

misstatement—piano lid up, lid down, until one grows cross-eyed in an attempt to follow the dizzying ballet of balance men. How cold, how faint fades the Snark, how phantom the hunt, how quiet the brazen horn, when we approach the lair, the real horns of the animal! Where the assurance, the brave call, the confident swagger, the banner with its rippling stripes? What, no objective theory of placement? Fie on you, you engineers, you mathematicians, you analysts!

Let us reserve judgment, however, until we find out a little about the actual tools of the trade. The chief Snark-hunting hound is, in this context, a device by the revolting name of the "linear partial differential equations." This is a quite ubiquitous beast, and it pokes its beak into almost all engineering problems concerned with regularly recurring events, including ours. It is an analytical tool of amazing power, particularly in the consideration of idealized wave forms, which may be of any sort: continuous, discontinuous, or half-and-half. (To jog your memory, an example of a continuous wave form is our old friend the sine wave, while the more esoteric square wave is discontinuous.) Well, this may be as is, but how many natural occurrences are sine or square or even hamburger-shaped? Come to think of it, there are comparatively few, some of the more obvious being well known to dynamo designers.

Of course, we represent periodic phenomena by a graph shaped to a conventional "wave form," but that's merely a convenience for which, epistemologically, there's not much justification. As Eric Temple Bell says in *Mathematics, Queen and Servant of Science*: "A 'wave' to a mathematician is usually nothing more than a convenient term for describing the periodic character of certain functions obtained as solutions of differential equations." But this is precisely where we mistake the shadow for the substance, where the designer gets carried away by the exuberance of his own verbosity, and the manufacturer with him. Let us look at a scope pattern, a very simple one, that of an ordinary sine wave. We will take as its source a tuning fork maintained in vibration, the sound from which is picked up by a microphone, fed into an amplifier, and passed on to the scope. There it is, for all to see, glowing vivid green on a gray ground, a pure unadulterated sine wave, nothing



more, nothing less. But, looked at a little critically, is it? Or is it perhaps a voltmeter using light instead of a needle, displaying variations in voltage against a moving datum line? Because that's all it is. All we do is plot, on a straightforward map grid, and in two dimensions only, these variations. "But," you say, "surely this is a play upon words, a quibble." Don't you believe it, it's nothing but the truth, and things are so arranged only for convenience in analysis. Square, up-and-down, Chinese, whether electrically or mechanically, all we're doing is drawing graphs in two, and only two dimensions.

I'm prepared to stick my neck out by suggesting that engineers are a narrow-minded fraternity, so obtuse that they persistently refuse to believe the evidence of their own senses. It's a result of their training, which often neglects to insist that, in a real world, it is blessed to receive as well as to give. In a word, there is the little matter of sensation as well as of stimulation to be considered, and neglect of this half of the job is possible only at peril. Of course, it may be the result of nothing more than academic insularity, but it is not altogether impossible that it's due to the choice of the wrong tools, or perhaps even inability to use the right ones. Many advanced investigations into systems of three dimensions require analysis in four: linear equations ignore, generally, subtleties of sensation, for which tensors are an almost indispensable discipline, while many nonlinear equations are often so difficult and labyrinthine in texture that they have had to await modern computing machines for solution. So it is perhaps not too fanciful to suspect the tools and their handling when considering why investigation into the general laws of sound has been confined, in its analytic aspects, mainly to propagative phenomena.

Another mental fault in my profession is its inconsistency. Hi-Fi is, presumably, the reproduction of sounds, in chosen surroundings, to as near the original as possible. Yet we find so skeptical and clear-headed a writer as Norman Crowhurst saying, apropos bidirectional microphones, in one of his latest books, "For orchestral music ~~one~~ or more of these microphones can be judiciously placed among the musicians, arranging the field pattern so that the weaker instruments are in the direction of strong pickup while the powerful instruments, which want toning down, are placed in the position of minimum pickup." Here he licks with a vengeance, for the listener at the concert can't arrange his ears etc., etc. Neither will he wish to, his standard being the real thing, hi-fi in the raw.

This is no isolated instance of inconsistency: examples occur in article after article, in book after book. The source in this particular instance is unlikely, that's all. And when we come to the bladders by science—well, we are away. The sort of thing is exemplified in a recent article in a popular publication, where praises of the loudness control, as against the more usual tone and volume controls, are pressed. The

author states that the ears aren't good enough to judge what the sounds should be like; only the loudness control is accurate enough! Lord help us, where are we getting to? Not Snark, nor fowl, nor even good red herring—but only the White Knight who was “thinking of a plan to dye one's whiskers green./And always use so large a fan/That they could not been seen.”

Let us consider another bit of science blinding in an even more recent article. The author, describing his transistor phono preamplifier, gives a list of the requirements to be satisfied by such a unit. With much of the list it is impossible to disagree, but one of the sections justifies the most vituperative invective. It demands that the frequency response must be linear from 10 cps to 40,000 cps. Here is all the old gobbledegook again, if ever numbers meant nothing at all, this is the place. “Must be linear from 10 cps to 40,000 cps.” What on earth for? How many records go below 45 cps or above 13,000 cps? Yes, I know, I know, they all do, or so say the makers. But we've too old to believe in fairies at the bottom of the garden, and salt is one of our staple commodities. Any commercial record with a range exceeding 50 to 11,000 cps is a prize above rubies, and a speaker or combination which does better than a genuine, linear 40 to 13,000 cps is equally rare. We go to a lot of trouble to eliminate response below 30 cps, to avoid motor rumble; anything above 13 kc on a record is apt to be nothing but a generator of IM noise; and yet we have the desideratum of 10 to 40,000 cps thrust at us. This author does even better, too, for he tells us later that the response is less than 2 db down at 10 and 75,000 cps! Blinding with science, did I say? Bludgeoning with it, rather, and we all seem to be torred with the same brush. I proudly advertise a small amplifier that goes up to 60,000 cps, but the darn thing sounds just as good—or bad—if it is arranged to cut off at 15,000 cps, as required by certain industrial customers.

And what about the loudspeaker manufacturers and designers? None of their products adds any dialect. No, perhaps not. But that doesn't explain why the best hi-fi dealers have whole batteries of speakers lined up, each available for selection at the turn of a switch. If they are all that's claimed for them, how can there be any choice in the matter? They don't add any coloration of their own, so they must all sound the same, but you still pay yet money and takes yet choice, for they all sound different, one from the other. Indeed, it's the sort of setup where only an idiot could remain sane!

Here I would like to add an anecdote of my own to the collection. In the summer of 1951, following up a customer's inquiry, I called on the maker of a much-advertised loudspeaker. (No, it was not Mr. Briggs.) He very kindly gave me a demonstration of his equipment, the most noticeable feature of which was excessive high-frequency response. Whiskers were everywhere, strings sounded like sandpaper, brass like steam whistles, percussion was a



surrealist dream, and plans a bonky-tonk nightmare. When I remarked on what I innocently considered were faults, I was scornfully informed that “you engineers are so used to ‘mellow’ tones that you can't appreciate the real thing when you hear it. You should learn to train your ears!” I hadn't time to discuss the matter further, as I was almost late for another appointment—at the BBC, where I was booked for a broadcast; but I sincerely hope that the piano I used (it was a luscious new nine-foot Steiner) didn't sound like the hi-fi specimen!

It's worthwhile returning to the question of reproduction as near the original as possible. Actually, the usual definition of hi-fi, by its proponents at least, is the illusion of being in one's favorite seat in the concert hall, although it is possible to recall certain advertisements that improve considerably on this far from modest claim. But whose favorite seat? Yours, five rows back and at the right, or mine, at the rear of the hall, plumb center? How can the microphones, control engineers and all, pick up at one and the same time two such contrasting sound patterns? Granting the miracle, and the two or three others required to bring the right sounds to your room and mine, how are we going to overcome the basic mechanics of the system, the ratio of any wave length to the size of the room? That's one problem to which there is no solution. Turn down the gain, twist the presence control, adjust the intensity to precisely the figure obtaining in the auditorium; leave out such little things as room characteristics, reverberation times, standing-wave patterns, psychological attitudes, still the inescapable mathematics of the matter, that a quart won't go into a pint pot, drops the curtain on any genuine realism. You must accept the fact that what you hear is a noise coming from a hole in a tin, and that that's as far as you will ever get. As an experienced and accommodating listener, you will certainly mentally provide much of the gilt missing from the gingerbread, just as you will provide the atmosphere missing from a photograph of a well-loved object. But it still won't be the real thing or anything like it. No one is going to tell me that a photo of Marilyn Monroe is a reasonable substitute for M. M. herself—even I, with one foot in the grave and the other

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part 2

and will eventually rank with the three greatest Strauss operas, and because we have a first-rate cast to do it with. It would be ridiculous to perform it any other way." We were in an office in the rear of the hall. Legge gestured broadly towards the hall itself, where the cast of singers and the Philharmonia Orchestra were assembled. "Out there," he said, "are the most important stars of German opera."

Much of the day-to-day work of the classical artist director is involved with the recording of new versions of standard repertoire, but whichever company he represents he is usually on the lookout for the chance to do something different—especially if it appears there will be a reasonable return on the company's time and money. The musically-minded public sometimes responds nobly to a new repertoire challenge. Rare Bach and Vivaldi has found enough of an audience to make it commercially feasible to produce. Two years ago Legge produced the first recording of another rarely performed Strauss opera, *Ariadne auf Naxos*; it was met with both critical acclaim and a sizable throng of purchasers.

The producers of classical record albums are sadly unsung in comparison with their counterparts in the fields of movie, theatre, and public music making, although their cultural contributions are certainly as extensive. But among other professionals of the recording industry Legge's reputation is very high. When he recorded Angel's *The Merry Widow* four years ago, his colleagues were willing to regard the result as something of a coup. That supposedly hackneyed operetta had its reputation refurbished when Legge recorded it with fine operatic voices, including that of Elisabeth Schwarzkopf (his wife), and the golden sound of the Philharmonia Orchestra—a now famous ensemble that Legge created more or less as a hobby some twelve years ago.

The groundwork for projects like *Capriccio* requires many months of work, much of it devoted to rounding up the appropriate musical forces and fixing on the time when all can be assembled in the same place. "We wanted a golden cast for *Ariadne*," Legge said. "Schwarzkopf, Siefried, Shick, Von Karajan. For *Capriccio* we have assembled an equally important group—Schwarzkopf, Gedda, Fischer-Dieskau, Hotter."

Legge's experience in the recording world goes back twenty-seven years, but he claims

these men shape your listening



by Hollis Alpert

WALTER LEGGE, who handles some of the principal artist and repertoire functions for EMI (the British combine that issues Angel and HMV records, among others) is firmly convinced that phonograph records represent the most important means of musical communication today. When I met him recently at Kingsway Hall, in London, he was supervising the premiere recording of a Richard Strauss opera, *Capriccio*, a work that Legge feels will come into its own through the electronic medium. "We are doing it," he said, during a lull in the session, "because it is a masterpiece,

his entire life has been spent in the company of a phonograph. The day he was born his father celebrated by buying a talking machine for the household. "I learned to read from record labels," Legge said. Early in his career he began pioneering. It was he who first brought to record listeners the major works of Sibelius, and he also helped rediscover for us the works of Hugo Wolf. The first limited editions club, begun by Legge, was devoted to that composer. And he helped beat the drum in Europe for the kind of orchestral sound Stokowski was achieving in Philadelphia.

"You have no idea what those first opulent Stokowski recordings did to us here," he said. "Every conductor on the Continent tried to make sounds like that in the concert hall. They know what they were hearing without the help of wide-range equipment."

The score of *Capriccio* was on a desk in front of him as we spoke. A take began and ended, and shortly afterwards the stars of German opera came into the office from the unpretentious—not in any dingy—hall outside. They grouped themselves around the desk while an engineer played the tape back. Suddenly the faces of Schwarzkopf, Gilda, Fischer-Dieskau, Hotter (and Wolfgang Sawallisch, the conductor) were alive with surprise, chagrin, amusement, dismay. "There is no doubt about it," Legge announced. "The microphone is better in the far position." It was agreed.

"Another thing," he said. "You will notice that Hotter is too loud all the way through." Vigorous nodding of heads. Hotter, too, nodded his head. The group left the room and returned to their artistic chores in the hall. Through the monitoring speaker came the music again. The sound was rich, and exciting. Legge nodded his head as he studied the score through horn-rimmed glasses and smoked a cigarette. The microphone was in the right position and Hotter was not too loud this time.

"We will stop for lunch," Legge said to the engineer. He turned to me for a last word. "New repertoire to recording is a relatively spontaneous thing, a

matter not only of what one finds, but what one can do. Without Christoff we would not have done *Boris Godunov*. With Gilda, the way to light opera was cleared. With Callas we open the Bellini operas to fuller public gaze." Musicians were placing their instruments in cases as we left the hall. *Capriccio* would resume after lunch.

THERE ARE only four record companies in the United States that produce classical orchestral music with full-sized American orchestras. One of these is Capitol, a firm rooted as much on the West Coast as on the East, which is held as an American subsidiary by EMI. Under contract to it are the Pittsburgh and Los Angeles Orchestras, the Roger Wagner Chorus, the Hollywood String Quartet, and several front-rank conductors and soloists, including Leopold Stokowski, who recently joined the Capitol stable. One can say this imposing array of forces had its beginnings in 1943, when Capitol brought out a "pop" hit called *Cow-Cow Boogie*, a record that helped propel the company into its present major status.

In 1945, Glenn Wallichs, the president, felt it was time to add prestige to the label with a classical catalogue, and an agreement was entered into with Telefunken—German classical masters in return for Continental distribution rights to Capitol's pop hits. But the flow of German records was too slow and sparse, and Capitol began its program of American recording. The first staff-man to come up with a record was Richard Jones, a musical director for the company, who recorded a "first"—Bartók's *Music for Strings, Percussion, and Celesta*. This was a bold stroke indeed for a company based on pop records, but the ten-inch disc sold surprisingly well, and though followed by several competing versions, still remains in the catalogue.

The a & r director now for all Capitol albums is Francis M. Scott III, who bases himself mainly on the West Coast, where Capitol does more recording than any other company. On the East Coast Richard Jones supplements his functions, handling artists, pro-



Francis M. Scott III



Maynard and Seymour Schuman



Richard Jones

adding at recording sessions, and making repertoire suggestions. All classical ventures must be approved not only by Scott, but by a committee representing repertoire, sales, and promotional functions. "My largest role," Scott said, "seems to be to needle people into making things that will sell. I turn green when a suggestion for doing Palestrina comes up, but I console myself by remembering that two or three *La Danzas* generally straighten things out."

Capitol is one of the companies that never has hesitated to cater to the high-fidelity boom. When The Pittsburgh Symphony was acquired in 1951, along with its conductor William Steinberg, fi-fanciers were quick to discern in their first recordings an obvious concern over exactitude in matters sonic, and formed a solid corps of FDS-buyers. Scott claims there is no special secret involved in the FDS (Full Dimensional Sound) technique. "Just care," he said, "and good ears."

As a young and aggressive company, Capitol attracted several name artists, who appreciated the large and effective sales organization, and the lack of competing names on the same roster. The biggest fish was landed in 1956, when Stokowski became a Capitol artist. "We immediately sat down," Scott said, "and tried to figure out what to do with him." Scott himself came up with the first idea, an album called *The Orchestra*, in which each instrumental section would have a chance to display itself—strings; Barber's *Adagio for Strings*; percussion; Farberman's *Evolution*; and so forth. The packaging was special, an explanatory text was included with the album; on the cover was Stokowski's famous hand and hand; The price: premium. The a & r man is expected to come up with ideas of this sort, and what might be termed the "gimmicky" approach usually pays dividends. Capitol's first Stokowski album has proved a huge success.

Stokowski has available to him the services of the Houston Symphony Orchestra, but his first recording was done with a "pick-up" orchestra. Scott, incidentally, is quick to bowass the connotations of that figure of speech. "The pick-up orchestra can be a virtuoso aggregation—and in this case it was. The musicians were all first and second chair men from the New York Philharmonic, the Symphony of the Air, and network orchestras. It is true that an orchestra not used to playing as a unit can have some disadvantages, but with a Stokowski the disadvantages don't exist." The actual recording was done in the ballroom of the Riverside Plaza Hotel in New York; Scott shrugged. "It seems to be an axiom of this profession that the places which record best look just terrible."

ONE of the most thriving of the smaller record companies is Vox, brain child of George Mendelssohn, a Hungariatt-born New Yorker who likes to live in Paris, who once sold tractors in Budapest, and who is phenomenal at selling records. The firm was organized

in 1945; Mendelssohn's activities in Europe have made deep inroads into the German and French markets; slightly less than half of the firm's sales come from the American continent. The American end, in the a & r sphere, is largely run by Ward Botsford, a twenty-nine-year-old who has an enormous affection for baroque music, but who lately found time to produce a documentary album about the Air Force, a job which required his pushing through the sound barrier in a Super-Sabre jet. His engineer refused the assignment, so Botsford took the tape recorder aloft himself.

George Mendelssohn claims for Vox the distinction of having more pre-Mozart music in its catalogue than any other company, and he has visions of eventually recording the complete concertos of Vivaldi, an undertaking of imposing proportions when one considers the fact that the Italian master wrote ninety-five for the bassoon alone. "Naturally," Botsford said, "as a small company we stay off the beaten path, but we by no means merely indulge our own tastes. Ever since we did our first Vivaldi recording—the *Gloria Mass*—we have found a ready public for his music."

When a company like Vox forges into rarely trodden fields of repertoire it both meets a demand on the part of today's sophisticated musical public and at the same time protects its tuneful wares against competition. "We spend a lot of time," Botsford said, "searching for, accumulating, and copying manuscripts. There's little likelihood another company would be willing to duplicate this amount of time and effort, especially if we're out first with the music." Vox already has five three-record sets of Vivaldi in its catalogue, good sellers all, and it is also possible to sample, through Vox records, the music of Locatelli, Gabrieli, Corelli, and Torelli, played by such ensembles as the Pro Musica String Orchestra of Stuttgart, and the Virtuosi di Milano.

A rather far cry from the above is the "Spotlight Series" initiated by Botsford. He originally conceived the idea as a sort of "gimmick" record mainly aimed at hi-fi fans. The first record (and at that time the only projected one) was to explore and demonstrate the range (including frequency range) of some sixty percussion instruments. To provide focus, a chronological approach was used, and a narration added, as well as some printed explanatory material. Botsford found himself involved in an endeavor that was gradually turning, because of the time consumed, and the research, into a labor of love—and of scholarship.

When the record appeared it was greeted with praise for its musical and educational values—the sound, though excellent, got lost in the shuffle. Next came other "Spotlights"—on brass, keyboard, strings, and wood winds. Museums were ransacked for ancient instruments, from the bull roarer to the trambina marina. Botsford, whose clarinet-playing and record-collecting proclivities had led him to neglect his formal education, found himself fast becoming an au-

thority on ancient and modern instruments. It is not improbable that certain modern composers, hearing a bull roarer and a tromba marina for the first time through Hotsford's efforts, may get some ideas.

LACK of academic training has not held Remy Farkas back, either. He is director of a & r in America for London Records, and began his career in the record business twenty-five years ago. Then thirteen—something of a prodigy, he had completed his secondary education at this age—he took a job as delivery boy for a record shop. Inevitably, he became a collector as well. Seven years later, he was an undisputed authority, and naturally was given charge of an imported-record department in New York's Liberty Music Shop. In 1945 he began a series of broadcasts over WQXR, New York, the oldest of all "good music stations," called "Record Rarities." All the records played came from his own collection.

Shortly afterward, E. R. Lewis, president of London Records (English Decca), preparing to invade this country's markets with some stunning sounding 78s—the famous "fir" line—met Farkas in the Liberty Music Shop and offered him his present position. Farkas accepted. The job led him, indirectly, into holy matrimony. While trying to persuade tenor Giuseppe di Stefano to work exclusively for London (an unsuccessful attempt) he met Di Stefano's sister-in-law. They now have two children. And, last year, Di Stefano became a member of the London family, too.

Farkas once had ambitions for an operatic career, but the lack of an "Er" (full-frequency-range) voice proved too much of an obstacle. However, his feeling for opera has led to London's notable concentration on the form. Farkas would rather listen to a new singer than cut. Those he likes best he tries to sign for London. The artist list currently contains such names as Tebaldi, Del Monaco, Gueden, Serpi, and Cerquetti. One of Farkas' responsibilities is to list the suggested repertoire for the coming year. Each November he flies to Europe, and a committee makes final decisions on what to record. The decisions are usually based on trends in public taste. On this committee are Maurice Rosegarten, who is director of

the company for central Europe, musical directors John Culshaw and James Walker, Farkas, and Lewis. Rosegarten controls the purse strings for the company, and his financial blessing must be won before the go-ahead is given a project.

One London project is in the nature of an investment in future musical glory. Seasonally, for several years, John Culshaw has gone to Bayreuth, in the hope of recording eventually a complete Wagner Ring. It has already been recorded complete four times, but the music will not be issued until Culshaw is completely satisfied with the results. Oddly, this past summer Culshaw got what he regards as the high point of his recording career, and it is part of the Ring—but not from Bayreuth. Instead it is a Vienna-made third act of *Die Walkure*, starring Kirsten Flagstad. The D'Oyly Carte Company's rerecording of its Gilbert and Sullivan repertoire, too, now is well under way, according to Farkas. "The old recordings," he said, "are beginning to sound technically out-of-date." London, after all, has its reputation for fine sound to consider.

SEYMOUR AND MAYNARD SOLOMON, thirty-five and twenty-seven respectively, are the heads of the thriving Vanguard Recording Society, a so-called small firm that issues between fifty and seventy-five releases a year, has a recording studio in Vienna, is planning its own building—complete with recording studio—in New York, and does a heavy volume of foreign as well as domestic business. The beginnings of this activity took place seven years ago, when Seymour Solomon, fresh out of N.Y.U. Graduate School, decided to remedy a certain situation. One of his professors, a specialist in Bach, had deplored the lack of recordings with which to illustrate his lectures. Seymour and Maynard formed the Bach Guild—its avowed purpose the recording of all the two-hundred-odd Bach cantatas, only five of which previously had been recorded. The first issue: five cantatas never before recorded.

The records sold, and the brothers were in business. The name Vanguard—initially with some vague connotation of

Continued on page 121



Ward Hotsford



Wilma Court



Walter Legge



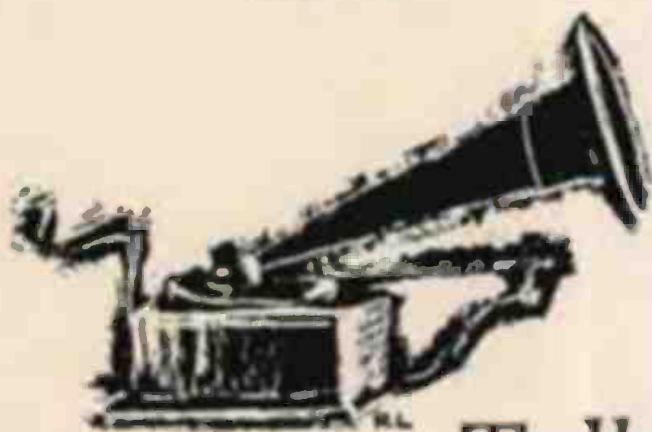
Remy Farkas

The BSO

and

the

Talking Machine



THE ENTIRE Eastern seaboard of the United States was sweltering in the grip of a brutal Indian Summer heat wave on the first day of October 1917. In a hundred homes in Boston, bags were being packed and their owners preparing to take the 7:30 p.m. train bound for Philadelphia. Embarking on a trip was nothing new to these men: they were the hundred members of the Boston Symphony Orchestra and half-a-dozen times each season they went "on the road" for a week or more at a time. As a matter of fact, it was barely two years since they had collected their gear for what had been the most extensive tour in the orchestra's history—a cross-country trip which had taken them to San Francisco for a triumphant series of thirteen concerts at the Panama-Pacific Exposition.

But there was something different about the preparations this time. For one thing, the orchestra had not yet officially begun its 1917-18 season on the familiar stage of Symphony Hall—that was still ten days off, on October 12 and 13—yet here the men already were preparing for an expedition. For another, there was the oppressive, debilitating heat. String players wondered how they would ever be able to keep their instruments in tune. And what about the sensitive timpani skins, how would they survive the twin ordeals of weather and

transportation? And then there was the most important difference of all: the orchestra was going on tour, to be sure, but not for the familiar purpose of playing a series of concerts to a string of cities before enthusiastic audiences. No, the only visible audience for the Boston Symphony musicians would have for their impending performances were to be sound technicians and a couple of enormous acoustical recording horns.

Probably nobody in the official party that day fully realized the significance of the occasion, but the Boston Symphony Orchestra was headed for the Camden, New Jersey, laboratory of the Victor Talking Machine Company, there to become the first symphony orchestra in the United States ever to make a phonograph record.

Actually, the Victor Company was late in entering the field of orchestral recording. The first large-scale symphony orchestra recording, a performance of Tchaikovsky's *Nutcracker Suite* by the London Palace Orchestra under Hermann Finck, was released in April 1909, by the English branch of the German Odeon Company. During the next two years the Gramophone Company in England was releasing recordings, by London Ronald and the New Symphony Orchestra, of such works as the scherzo from Mendelssohn's *A Midsummer*

Night's Dream, the Overture to *The Marriage of Figaro*, and Sibelius' *Finlandia* (a score composed only a dozen years before!). Similarly, in Germany locally made symphony orchestra recordings had been available since 1911, and Odeon in 1913 produced the first complete symphonies ever issued—Beethoven's Fifth and Sixth.

It was with some excitement, despite the weather, that the early birds among the members of the Orchestra began to arrive at South Station. By six in the evening enough of them had gathered so that throughout the waiting room there were small groups of men playing cards, checkers, or chess. Shortly before seven Dr. Karl Muck, their conductor, arrived on the scene. He had come directly from his summer home in Maine; he was wearing knickerbockers, and his face was beaded with perspiration. By 7:15 Manager Charles A. Ellis and Assistant Manager William Brennan had checked in the last member, and at exactly 7:30 the train slowly began to pull out.

The overnight train ride to Philadelphia in that pre-air-conditioned era was miserable. Sleep was virtually impossible and many players spent the night wandering through the cars chatting with their colleagues. In the conductor's stateroom Muck and Leslie Rogers, the Librarian, conferred about the repertory to be recorded. Only the finale from Tchaikovsky's Fourth Symphony was definitely on the schedule, with the remaining pieces yet to be selected. Muck wanted to do movements from other symphonies, Rogers strongly favored shorter, lighter works (and, unknown to Muck, had packed the scores and parts of several such selections, among them the *Prelude to the Third Act of Lohengrin*, the *Marche miniature* from Tchaikovsky's First Suite and the *Rakoczy March* from *The Damnation of Faust*).

Philadelphia's Broad Street Station was like a steam bath when the train arrived early on the morning of Tuesday, October 2. The sleeping cars had to be vacated at 7 a.m. and so, in the semidarkness that precedes the rising of the sun, the hundred weary musicians staggered out of the train and onto the buses which were to take them across the river to Camden.

When they finally arrived at their destination, tempers were regained and nobody was in the least enthusiastic about the work at hand—10 a.m. and 2 p.m. recording sessions in the laboratory each day from Tuesday through Friday.

One of those who greeted the orchestra was Victor Herbert, who three years earlier had formed ASCAP and now was vitally interested

in being present at the sessions. After the preliminary introductions were concluded, the entire orchestra was ushered into the "studio" where the recordings were to be made.

The sight that greeted the musicians' eyes must have looked like something out of a Ruben Goldberg cartoon: The studio was formerly a church, I believe. Inside it were set up two large wooden igloo-type structures, each with a sort of doorlike opening. We were told that all the strings were to sit in one of these hovels, the rest of the orchestra in the other. Outside and in front of these igloos there was set up a stool and a music stand for the conductor, who would have to peek into the openings. It seems to me that there was a horn that came out of these openings and converged on a needle which made the impression upon the wax in front of the conductor." The words are those of Arthur Fiedler, for the past twenty-eight seasons the conductor of the Boston Pops Orchestra and in October 1917 a member of the Boston Symphony Orchestra, playing violin and viola.

Seeing the physical conditions under which they would have to work, the musicians must have been appalled. However, though slowly and glumly, one hundred instrument cases were opened, and the orchestra's solo oboe player, the renowned Georges Longy, sounded his A. One hundred times the sound was echoed as there followed that dynamic, cacophonous bedlam produced when an orchestra tunes up. They steamed and they fumed, but they were all—in spite of themselves—beginning to be infected with the challenge and excitement soon to be felt everywhere in the room.

Shortly before ten o'clock the men were marched into their little "igloos" and Dr. Muck took his position outside. They began to work on the Tchaikovsky. Retake after retake was made, sometimes because the engineers weren't satisfied, sometimes because fatigue and the brutal heat caused mistakes.

Boaz Piller, who played bassoon and contra-bassoon in the orchestra from 1916 until his retirement a few seasons ago, is another who remembers the sessions. "There was trouble getting the different instruments to register," Piller recalls. "There was a very amusing incident in the transition section of the Tchaikovsky finale. No matter how hard he tried, Longy was unable to make his oboe solo register. So he was faked to come out of the little hut and sit right in front of the large horn. Still that was not satisfactory. They finally had him put his instrument right inside the recording horn—and this time it did." Continued on page 124

This
is where
the music
begins



**New Transcription-Type Tone Arm Makes Collaro
World's First True High Fidelity Changer**

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HIGH FIDELITY MAGAZINE

by  ROLAND GELATT

music makers

TWO YEARS have swept by since our last report on Wanda Landowska's work in progress, and the thought of this long hiatus prompted us to phone the lady a few weeks ago and invite ourselves to her home in Lakeville, Connecticut, for an up-to-date briefing on the state of musical affairs there. We arrived at noon on a gray, wintry Saturday, and after an immense lunch we found ourselves sitting in a large room that doubles as a parlor and recording studio, a room filled with dictionaries and reference books, musical scores and notebooks, pens and pencils of every kind and color, Renaissance paintings, and—usually—a Pleyel harpsichord. But on this occasion the harpsichord was missing, its place near the porch window having been usurped by a Steinway grand.

"I am busy now recording some of Haydn's piano music," Landowska explained. "It is something I have long wanted to do. You know, much as I love Mozart's piano sonatas, I find Haydn's richer and more interesting. And today nobody knows them. Oh, I am very happy to be able to play them." The tape machine was turned on and we heard the Variations in F minor, which Landowska had recorded the previous week. We were enchanted anew by her unpredictable and inimitable rhythmic address, by her expansive embellishments and her ability to suggest the Romantic inclinations of this strange piece without having to hammer them home. "I first played these Variations sixty-five years ago, when I was a girl of thirteen," she told us, "and I have always loved them."

Landowska expects to record at least three, probably four, Haydn piano sonatas in addition to the F minor Variations. Meanwhile,

some new harpsichord recordings made in Lakeville during the past year ought to be forthcoming soon from RCA Victor. One will be devoted to the Two-Part and Three-Part Inventions of Bach. Another will contain a Passacaglia by Johann Caspar Ferdinand Fischer, together with Bach's Partita No. 2, Fantasy in C minor, and *Capriccio on the Departure of His Beloved Brother*.

When Landowska is troubled with insomnia in the small hours of the night, she plays her bedside phonograph and in the course of this nocturnal listening generates some strong enthusiasms. When we paid our recent visit she was on a *Figaro* jag. To hear her talk, you would have thought she had just discovered the opera. "I play *Figaro* every evening. But not the whole opera—no, not even a whole act at a time. The LP record is too substantial. I choose one side, and I play it again and again."

On our way out we complimented Mme. Landowska on her radiant complexion. "It is because every day I go to the wood," she explained. "No matter what, I walk at least half an hour in the wood."



The Soria, co-owner of Angel Records.

THE CLOSE of the old year coincided with the demise of Angel Records as a separate company. Angel has been sold by its parent corporation, Electric & Musical In-

dustries of England, to another and far larger EMI subsidiary, Capitol Records.

Glenn E. Wallichs, Capitol's president, has stated that "no changes in the successful Angel formula are contemplated." The Angel trademark and catalogue are to be kept intact. Although manufacture of Angel discs may eventually be transferred to Capitol's factories here, pressings will continue to be imported from the EMI plant in England for the time being. Angel jackets will also continue to be designed and printed abroad for the time being. Merchandising and distribution of the Angel line have been absorbed into Capitol's national sales network, with a greatly increased volume of business expected in consequence.

But—a most important but—Mr. and Mrs. Dario Soria, who have been in charge of Angel Records since its inception in 1953, are leaving the company they largely created. Certain basic policy decisions by the new owners have made the Sorias reluctant to follow Angel to Capitol. The rights and wrongs of the affair are not for us to judge. But it is within our province to pay tribute to the creative flair and high taste that Dario and Dario Soria brought to the record industry. During their four years with Angel they raised the packaging and promotion of LP records to a new level (and by "packaging" we refer not only to handsome jackets but also to carefully supervised annotations and librettos). Angel's recordings, like those of any one company, have been of varying musical and technical quality. We liked some, disliked others. But almost every one, we thought, carried itself with style. The Sorias have announced no immediate plans. Their talents, we suspect, will not remain idle for long.

Capriccio



January

La Scala Opera

TURANDOT (Puccini)

By *Love Possessed* might also be the title of this great last opera of Puccini, set in the legendary Imperial City of Peking. **ABOHI** is the subject, the secret, the solution... The icy Princess Turandot, wooed by lover **MARTA MENICCHINI CALLAS**. The tender slave girl **Lila**, who dies for lover **ELISABETH SCHWARZKOPF**. The Unknown Prince, who does all for lover **EUGENIO FERNANDEZ**... The conductor, **TULLIO SERAFIN**, who has had a life-long *Affaire de Coeur* with Grand Grand Opera. 3 records

Angel Album 2671 C/L (25150-24-26)
Chandos, Illustrated Sleeve

Orchestral

KARAJAN conducts WAGNER

Triton and Isolda: Prelude and Liebestod
Overtures: *Meistersinger* and *Tannhäuser*

Herbert von Karajan's first Wagner album for Angel: his first recording with the great Berlin Philharmonic of which he is lifetime General Director.

Reissue painting of Wagner on cover. Angel 25482

KLEMPERER conducts BRANNS

Symphony No. 1

1st album of Klemperer's Brahms Symphony Series with the Philharmonic Orchestra.

London Sunday Times, Oct. 20, '57: "Klemperer the Magnificent (headline)... an overwhelming audience experienced that sense of being present at a rite." *London Daily Telegraph*: "One of the qualities for which Klemperer is justly lauded is his capacity to make an audience experience the closure as if they were still new works." Angel 25481

CONSTANTIN SILVESTRI conducts

Tchaikovsky Symphony No. 5

Who is Silvestri? ... Unknown here but not abroad where, after the Romanian conductor's 1957 appearances in London, critics wrote: "Technically and temperamentally a master of his art (*New Statesman*)," made a deep impression" (*Daily Telegraph*). "He is romantic, I but a grand piano to a ping-pong ball, we will hear much more of him (*Daily Express*)... With the Philharmonic Orchestra Silvestri recorded the Tchaikovsky 4th, 5th, and 6th Symphonies. Angel 25504

Orchestra and Soprano

KLETZKI conducts MAHLER SYMPHONY No. 4

Soloist: Emmy Loose, Vienna Opera soprano

This distinguished recording with the Philharmonic coincides with Paul Kletzki's 1st American tour as guest conductor: *Chicago Symphony* (Jan. 17-19), *Baltimore Symphony* (Feb. 3), *Philadelphia Orchestra* (Feb. 14, 15, 17 and — in N. Y.'s Carnegie Hall — 18). (booklet with notes) Angel 25570

DARIUS MILHAUD conducts MILHAUD

Soloist: Janina Michaum, Paris Opera soprano

The great French composer presents 8 works with voice: *Duquel Canzons* from *The Song of Songs*, *Four Songs of Renard*, *The Four Elements* (poems by Debussy), *Arias* from the opera *Balthaz*, *Fountains and Springs* (6 poems by Francis Jammes). Paris Conservatoire Orchestra. (booklet with notes) Angel 25441

Pianists and Violinists

GEZA ANDA plays Chopin Studies, Op. 25

Ballade No. 1 in G Minor

Angel 25420

CLAUDIO ARRAU plays 2 Piano Concertos

Grig and Schumann

Philharmonic, Alceo Gallera, conductor.

Angel 25501

EMIL GILELS plays Beethoven Piano Concerto No. 4

Philharmonic, Leopold Ludwig, conductor.

Angel 25511

LEONID KOGAN in 2 New Angel Albums

Tchaikovsky Violin Concerto • *Vivoldi Concerto in G minor* • *Liszt's Sonata in F minor*

Angel 25444

Paganini Violin Concerto No. 1 • *Capriccio in D*

Angel 25502

Paris Conservatoire Orchestra, Andre Mizak, pianist. Conductors: Andre Vandemoort and Charles Bruch.

NOTE: Anda, Arrau, Gilels and Kogan are now on trans-continental American concert tours. We suggest that you treasure their Angel Records but also enjoy them "live" in the concert hall. For tour dates, write us.

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Angel 25470

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Angel Library Series 45910

GEORGE SOLCHANY plays Beethoven Sonatas

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Angel Library Series 45914



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Records in Review



Reviewed by

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CLASSICAL

BACH: *Ein Musikalisches Opfer*, S. 1079
 (arr. Markovitch)

Orchestra National de la Radiodiffusion
 Française, Igor Markovitch, cond.
 ANTON 45000. 12-in. \$3.95

The collaboration is tasteful and the playing is lovely, but Mr. Markovitch does some *glorioso* things with the order of the movements. For one thing, he lumps the canon together with a single grandioso movement and calls it "Thema with Variations." In a way, the canon *etc.*, of course, variations on Fuch with the Canon's theme, but we see all the other portions of the work, secondly, like all other archival transmitters, Mr. Markovitch was faced with the problem of what to do about the three-part *intra organa*, whose instrumentation is specifically indicated by Bach. His solution is to interpolate it in the Trio Sonata, for which Bach indicated exactly the same instrumentation. Unfortunately, this solution ruins the proportions of the Sonata. The Münchinger version of the work, on a London disc, is equally vital and less questionable. N.B.

BARTOK: *Concerto for Orchestra*

Berlin Radio Symphony Orchestra,
 Ferenc Fricsay, cond.
 DORIS 60051. 12-in. \$3.99.

Fricsay is one of the finest of con-

temporary Bartokians, and his version of this famous work may well be the best on records. It is especially noteworthy for the lyricism of its *Elegia* and the driving power of its *Finale*, but the whole is suitably well done and has been very well recorded. A.F.

BEETHOVEN: *Quartets for Strings*, No. 12, in E flat, Op. 127; No. 13, in B flat, Op. 130; No. 14, in C sharp minor, Op. 131; No. 15, in A minor, Op. 132; No. 16, in F, Op. 135, *Cross Fugue*, in B flat, Op. 133

Hollywood String Quartet.
 Capron, run 8084. Five 12-in. \$19.50

"In the last quartets of Beethoven," wrote Oswald Spengler, "... we experience lighted the awesome imagination a whole world of others." It is this quality of secondarily unaltered musical depth, of continually challenging richness of content that makes this music supreme for those who have overcome the complexity of Beethoven's style and grasped its meaning. Unfortunately the final quartets are difficult music, without many of the immediately appealing aspects of the works of the composer's middle period. Moreover, performances which do justice to content must sacrifice some of the possible melodic interest.

These performances by the Hollywood Quartet are not profound, and genuine dedication to the music probably will stand by other solutions that reveal the heights and depths of the music more vividly. But they are reasonable, and to a remarkable degree. The crazy edges have been softened, the angrier passages subdued, and wherever melody can be found it is given prominence.

For those first starting to take interest in these works, this album may be the ideal point of departure.

For it (as an example) the Cavatina of the Op. 130 is lacking the intensity needed to reveal its full emotional content, it is nonetheless stated with an elegance and refinement that one finds throughout the set to a greater degree than in almost any other edition. The recording is good, although the prominence of the cello is sometimes masked, apparently at the expense of the violin. I found that an equalization curve of 500C -10.5 gave best results in spite of the RIAA indication. R.C.M.

BEETHOVEN: *Sonatas for Violin and Piano*, No. 1 in D, Op. 12, No. 1; No. 4, in A minor, Op. 23; No. 5, in F, Op. 24 ("Spring")

Arthur Grumiaux, violin; Clara Haskil, piano.
 EMI LC 3400. 12-in. \$3.99.

With this second release Grumiaux and Haskil are half way through the ten Beethoven sonatas, and I continue to find their approach to the music preferable to that of competitive discs. With these sonatas rather than the usual two on the record, this exceptional musical value is enhanced by a bargain price. R.C.M.

BEETHOVEN: *Symphony No. 9, in D minor, Op. 125 ("Choral")*

Frances Yeend, soprano; Martha Lipton, mezzo; David Lloyd, tenor; Mack Harrell, baritone; Westminster Chorus, John F. Williamson, cond.; New York Philharmonic, Bruno Walter, cond.
 Columbia 60 3200. 12-in. \$3.99.

Although the recordings issued here have been available for some time as in 196, no admirable was the laboratory work in making this transfer that it almost counts as a new set.

The first three movements heard in this version were taped in Columbia's Thirtieth Street studio in New York on April 19, 1949. (You'd never guess they were that old from the way they sound now.) The final movement of that set, originally issued as set 156, was scrapped after a new version was made in Carnegie Hall on March 9, 1953. Composite though it is, the present edition holds together extremely well. The sound is now in better focus than ever before; brighter on top, and with the hollow, poorly defined quality largely eliminated from the lower registers. A break between sides, midway in the slow movement, is the only undesirable feature of the new masters.

The merits of the performance have been cited many times, and all who admire it would be wise to acquire this new transfer. Certainly at the price it's a best buy, and relative to the other Naxos on the market it's one of the finest. My own preference now goes to the tape edition (monaural) of the Toscanini on RCA Victor ac52, but that costs \$10.95. R.C.M.

BENJAMIN: Romantic Fantasy for Violin, Viola, and Orchestra—See Mozart's Symphonie concertante, in E flat, for Violin, Viola, and Orchestra, K. 364.

BRAMHMS: Sonatas for Violin and Piano No. 20, in A, Op. 100; No. 2, in D minor, Op. 108.

Erica Morini, violin; Leon Fommer, piano. WESTMINSTER W-149 12-in. \$3.98.

Other great violinists may play these two sonatas differently, but nobody is going to play them better. Morini brings to the music something of the same quality that Novacek brings to equivalent piano pieces—a soaring lyricism, a matchless instrumental command, and an authority of musical approach. In certain kinds of repertoire Morini is as good as any violinist before the public. Her playing is sweet without being saccharine, clear without being obvious, and instinctively right. Leon Fommer, her regular accompanist, handles the piano part of the two sonatas with more force than he normally does in public, and the relation between piano and violin is all that could be desired. An outstanding release. H.C.S.

BRAMHMS: Symphony No. 2, in D, Op. 73.

Young Philharmonic Orchestra; Rafael Kubelik, cond. LONDON LL 1709 12-in. \$3.98.

One of the better of the fifteen or so available Bruckner's Seventh, a rich-sounding performance, energetic rather than lyric, matching the Vienna Philharmonic



Rachmaninoff: a titan laborer for Chopin.

at its best. Kubelik's tempos are a shade faster than those of most other conductors in this symphony, but he does not give the impression of rushing; nor does his orchestra, which handles the music with noble sonorities. Kubelik, whose rhythm sometimes can be flabby, never lets Bruckner slow on this disc. He obviously is stimulated, and he communicates his stimulation to the listener. H.C.S.

BRITTEN: Peter Grimes; Four Sea Interludes, Op. 33a; Passacaglia, Op. 33b.

Mulholland Promenade Orchestra; Sir Adrian Boult, cond. WESTMINSTER W-149 12-in. \$7.50.

The recording is the last word, as it always has been with Westminster's Laboratory series, whose pretensions to superiority are entirely justified. In my own opinion, the superficially effective music here provided is not worth the premium price, but if you want a disc of these passages, there is certainly no record to disagree with this one. A.P.

BRUCKNER: Symphony No. 9, in D minor.

Amsterdam Concertgebouw Orchestra; Eduard van Bejnum, cond. ERIC LC 3403 12-in. \$3.98.

Bruckner's last—and in many respects most expressive—composition has not been without the adequate disc representation. For several years, Florentina's version in a single Vox record has taken very good care of the demand. More recently a slightly more expansive, more resonant performance by Jochum on three sides of a Decca set, has superseded it to some extent. But now both will have to give way to this truly superior interpretation. Van Bejnum's reading, occupying only two sides, notably takes slightly longer than Jochum's yet it seems to have more forward motion and more compactness without any sacrifice of vibrant expression or tonal richness. Besides, it is just half as ex-

pensive as the Decca and a dollar cheaper than the Vox. All of which turns it into votes. P.A.

CHOPIN: Sonata for Piano, in B flat minor, Op. 36 [Schumann: Carnival, Op. 9]

Sergei Rachmaninoff, piano. RCA CANTON CAL 396 12-in. \$1.98.

What a buy! Two of the important piano works of the nineteenth century, played by a titan pianist of a previous generation, in LP transfers that retain much of the original quality—and all for \$1.98. The Carnival used to be available on a 10-inch disc in Victor's LCT series. This is the first time, however, that Rachmaninoff's version of the Chopin B flat minor Sonata has been transferred to LP, and it should content many piano disciples who have long been clamoring for this happy event.

Rachmaninoff recorded Carnival on April 12, 1929, the Chopin sonata on February 18, 1930. Both are staggering and literally imitable performances. Rachmaninoff was trained around the turn of the century, when pianists and public were not as purist-minded as they are today. It was expected that the artist should enjoy considerable leeway, even to the point of reinforcing certain passages for greater technical effect. Rachmaninoff, himself a composer, was less apt than many of his colleagues to alter a note, but he too touched up passages here and there. His Carnival is relatively restrained, but there are sections in the B flat minor Sonata that are downright arbitrary. Yet by the force of his conception and the consistency of his musical approach, Rachmaninoff makes the Sonata a tremendous experience. He was supposed to have been the first to play the Funeral March of the Sonata as it is heard on this disc: starting pianissimo, building to a ferocious climax up to the trio section, reaching the fortissimo at the end of the trio, and then tapering to a pianissimo at the end. The idea is that of a procession coming from a distance and then receding into the distance. Apart from this, there are many details in the Sonata that leave one gasping. Not the least of these is the miraculous ease with which Rachmaninoff negotiates the tricky figurative in the outer parts of the scherzo. Only Josef Hofmann, in the twentieth century, was capable of this kind of pianism. As for Carnival, it has a force and a degree of pianistic fluency that no pianist on records has ever begun to duplicate.

The RCA Camden cover is marked Vol. 1, which means—I trust—that more is to come. Rachmaninoff made many records throughout his career, and they all should be made available in LP transfers. He also made some test recordings in Camden around 1924, and if these are in any kind of shape, they too should be issued. Finally, there are some important unreleased Rachmaninoffs, including Liszt's Spanish Rhapsody and Au bord d'une source, Chopin's F major Waltz, Strauss's Blue Danube Waltz

(presumably the Schala-Erley transcription), and several others. The Bernstein-Loyola biography of Rachmaninoff, published in 1938, gives a complete listing of all the orchestral Rachmaninoff masters. H.C.S.

DEBUSSY: Images pour orchestra

Orchestra de la Suisse Romande, Ataulfo Argenta, cond.
 LONDON 14, 1735, 12-in. \$3.98.

Superb recording and an interpretation notable for its lightness rhythm under special distinction upon this release. *Cigales* and *Ronde de printemps* come out particularly well, but the *Libelle* is also very good. A.F.

DEBUSSY: Prelude à l'après-midi d'un faune; Two Nocturnes; Nuages; Fêtes (Ravel); Daphnis et Chloé, Suite No. 2; Poème pour une infante défunte

Philharmonia Orchestra, Colin Conduct, cond.
 ANTON 35524, 12-in. \$4.98 (or \$3.98).

All four performances are wonderfully creative and flowingly recorded. If one of the finest conductors of modern times, untimely deceased, is to be remembered through his interpretations of things that everybody else plays all the time, this is a fitting memorial to Colin Conduct. A.F.

**DEBUSSY: Quartet for Strings, in G minor, Op. 19
 (Liszt) Quartet for Strings, No. 2**

Fugate String Quartet.
 LONDON 104, 1904, 12-in. \$3.98.

The performance of the Debussy is highly expert, but the sound is somewhat overblown and lacks the soft which this music requires. The wonderful, beautifully made composition by Benjamin Lees on the other side is, if I am not mistaken, the only string quartet by a modern American composer to be duplicated in current record lists. An excellent recording of it by the Juillard Quartet is available on Columbia. A.F.

DELIBES: Coppélia

Orchestra de la Suisse Romande, Ernest Ansermet, cond.
 LONDON 14, 1717/18 Two 12-in. \$7.98.

This recording presents another welcome example of how much we've been missing by contrasting ourselves (perfectly) with others. Only within the last few years have we been able to hear major ballet scores steadily and hear them whole, and the experience demonstrates that good dance music is in no essential different from good music in general.

Before listening to this magnificent recording I was not inclined to put Delibes in a class with Tchaikovsky, Stravinsky, and Ravel. But Ansermet

has made out a very convincing case for such a grouping. The lighter parts of the score (the "valse") are done with a virtuosity and an flow unmatched in any of the twelve rival versions in the catalogue. Even the usually inept *Valse lente*, in its the dulled part of the score, is at least admirable here, especially since Ansermet makes some creditable motions upon its second appearance. (The only other cut, in my opinion, an unreasonable one, is in the *Discorde et la Course* section of the closing *divertissement*.) The popular *Mazurka* emerges with Chopin-like grace, the wonderful four variations and a gallopade on the distinctly non-Delibes *Tourne dans* could not be done with more bravure or good humor, and the less familiar music is a constant surprise and delight. And with the long *divertissement*, never before recorded, with which the ballet closes may make Coppélia legible as a dramatic structure, it certainly enriches it as a musical experience.

Ansermet's superb orchestra is matched by Lisien's superb technicians, and together they produce some remarkably brilliant and vibrant sound. D.J.

DURAS: L'Apprenti sorcier—See Royal-Norfolk's *Le Bonheur fantasque*.

GRIEG: Holberg Suite, Op. 40—See Mozart; Leo peris d'ora, E. Anh. 18.

GRIEG: Four Great Suites No. 1, Op. 49, No. 2, Op. 53; Lyric Suite, Op. 54

Eileen Farrell, soprano, Boston Pop Orchestra, Arthur Fiedler, cond.
 RCA VICTOR 120 2125, 12-in. \$3.98.

A generous amount of music to get onto this disc. Both *Four Great Suites* are included and, in addition, the brief but dazzling *Dance of the Mountain King's Daughter*, which Grieg originally intended to use as the finale of the second



Coler

Delibes' London fills out a picture.

suite but decided to discard—sorry, I think, since it is something of an anticlimax after Schubert's lovely song. This letter is sung in its original form by Eileen Farrell. One remembers with amazement, in listening to this ravishingly beautiful voice, that America's most accomplished young dramatic soprano has never sung at the Metropolitan. The string playing in *Leo's Death* and *André's Dance* (which are scored for strings alone) could emanate from nowhere else but Boston.

The four-movement *Lyric Suite* provides a further lesson, especially since it gets here its best performance on LP, the *March of the Dwarfs* is perfectly tuned, and the *Norwegian glimmers* with northern calmness. D.J.

HAYDN: Quartets for Strings No. 73 in C, Op. 74, No. 1; No. 83 in G, Op. 77, No. 1

Juillard String Quartet.
 RCA VICTOR 120 2188, 12-in. \$3.98.

This, only the second recording of the Op. 74, No. 1, is its initial appearance on catalogues, leaving it you'll probably wonder if more of the composer's eighty-four quartets aren't worth rediscovery—especially in performances as good as this one.

The Juillard group have an obvious—and in no way common—sense of the composer's style, and they play with authority and gusto. Add excellent recording and you get a disc that demonstrates its rivals in the Op. 77, No. 1 and gives them a standard to reach in the Op. 74, No. 1. We can use a really complete edition of these works, and here is a group that could produce it. R.C.M.

**LARSSON: The Disguised God, Op. 24 ("Lyric Suite")
 (Widén: Symphony No. 4, Op. 27**

Leo Elberg, conductor; Elisabeth Soderstrom, soprano; Erik Sandin, baritone; Martin Lohmann Vocal Ensemble; Stockholm Radio Orchestra, Stig Westerberg, cond. (in the Larsson); Stockholm Radio Orchestra, Stefan Erling, cond. (in the Widén).
 WARRINGTON 100 18325, 12-in. \$3.98.

This record should win many new friends for two of Sweden's leading composers, Lars-Erik Larsson and Dag Widén. The Larsson suite bears its subtitle *Lyric* with good reason, being contemplative in the extreme and highly melodic. It contains sections for voices unaccompanied, others for chorus with and without organ and harmonic support, a capricious-humorous duet, all using as text a Swedish poem about girls who earth out lives by their disguised presence on earth. The performance matches in every way the beauty of the music. The soloists perform with distinction, the chorus is solid, and the Stockholm Radio Orchestra is a superb-sounding ensemble with some first-rate woodwind soloists.

Though the Widén symphony is post-romantic after classical models, it is thus-

roughly contemporary in feeling, with two rather dark-hued, dramatic and movements surrounding a brief, light-hearted scherzo. All of the symphony's thematic material is based on the introduction to the first movement. Again, the Strakoska musicians are in peak form, and DeBing's direction brings out all the warmer Northern coloring in the to the score.

Both performances have been adorned in crystal-clear sound, with fine presence and definition. Even for the only audibly adventurous, this is a disc worth investigating. P.A.

LEES: *Quartet for Strings, No. 1*—See DeBussy: *Quartet for Strings, in G minor, Op. 10*.

LISZT: *Spanish Rhapsody From the 18th Century Paganini Etudes (8)*

Ruth Slenczynska, piano.
Decca DL 9049. 12-in. \$3.98.

This is by far Slenczynska's best record. Nothing else previously has done has suggested that she was capable of this order of virtuosity. She plays the Spanish Rhapsody as written, changing none of the difficulties and making no simplifications. For the 22 studies that Liszt composed after Paganini's capture, she uses the 1851 version as the composer left it (many pianists use the Biscardi edition). The only thing she adds to the piece are several repeats not marked in any edition (Biscardi). Otherwise everything is in good order. Slenczynska's playing is neatly finished, rhythmically regular and in good taste, with the strength to rise to the big moments. About the only thing lacking at present is a touch of personality; she is too regular and straightforward. Where, for example, she seemed nervous and uncertain how to tackle the lyric episode in the Chopin (which, released several months ago, the new Decca disc has done admirably, and a good measure of consistency. In addition there is a degree of sheer technical brilliance that will make some listeners revise their estimate of this pianist's potentialities. H.C.S.

MEYERHOLZ: *Middlemarch Nights' Dream (Incidental Music)*

Jennifer Vyvyan, Martin Laro, soprano; Chorus of Royal Opera House, Covent Garden, London Symphony Orchestra, Peter Maag, cond.
London LA 1707. 12-in. \$3.98.

In addition to the Overture, there are twelve sections to the score that Mendelssohn assembled as incidental music to A Middlemarch Nights' Dream. The entire score can be found in the Old Vic recording of the play. But on Nos. 4, 6, 8, and 10 are instrumental bridges, which conductors who present the work in concert form often at least cover on eight sections. Maag, in this recording, conducts the Overture, Scherzo, Intermezzo, Nocturne, Wedding March, the

third chorus (The spotted animal, The Dance of the Clowns, and the Finale). Of these eight sections, only two call for side singers and choruses—The spotted animal and the Finale. Mendelssohn achieved the extraordinary feat of composing the Overture at the age of 23.



Peter Maag is heavy with Mendelssohn.

then, the rest of the score was written, an enthusiastic, sixteen years later.

Maag handles the music very well. He has a heavy approach rather than the self-conscious airy-fairy (as Gilbert says in *Indochina*) attitude some conductors have when confronted with MND. The singing is delicately done, and the two sopranos, with their high, clear voices, sound excellent. Even the words of the chorus can be understood. This version of the MND (incidental music) is easily as good as any on the market, in my opinion it is the best, even if Frayser's fine Decca version offers one section of the score (No. 2) not in the present disc. H.C.S.

MILHAUD: *Les Malheurs d'Orphée, Le pauvre marié*

Jacqueline Brunson, soprano (in both works); Bernard Demigny, baritone; vocal ensemble (in *Les Malheurs*); Jean Girardoux, tenor; Xavier Dupou, bass-baritone; André Verdier, bass (in *Le pauvre marié*); members of Orchestre du Théâtre National de l'Opéra, Daniel Milhaud, cond.
Worchester new 11411/11412. Two 12-in. \$4.98 each.

Les Malheurs d'Orphée, composed in 1926 for the famous private theater of the Théâtre de la Colonne, was the first of Milhaud's numerous chamber operas and remains, perhaps, the best of them. The libretto by Armand Lunel is based upon Milhaud's own conception of Orphée as a kind of European village virtuoso who has won the love of wild animals through his music rather than through song. He marries Eurydice, a pygmy, but is unable to raise an illness into which she falls. Her gray sisters, the avenging Ceres sisters, kill him to revenge for her death.

The prime quality of this work—and generally characteristic of Milhaud's operas—is its lyricism. Orphée may be a physician rather than a poet, but he really sings, nevertheless, in the great tradition of his mythical role. The vocal line flows beautifully and melodiously; Eurydice's death and the immediately subsequent lament of the wild beasts are especially affecting, but the whole score is a little masterpiece of song.

Le pauvre marié, composed two years later, is quite different. Jean Cocteau's book is entitled "A Lament to Three Acts," but it might better be called "Earth Arises at the Grand Guignol." The action returns to its folk-like style after fifteen years' absence. To test his ability, he pretends to be a friend of her husband who, he says, is alive but destitute. Since the stranger is obviously loaded with money and jewels, the wife insists and asks him to pay her own debts and those of the husband whom return she has been led to expect.

The style here is vibrantly if not broadly dramatic. The vocal line underlines Cocteau's text, and the orchestral treatment upon it tenderly, placing great stress on a distorted bar-room atmosphere (much of the action takes place in the wife's waterfront café) and an earlier scene the scene of the murder is based entirely on slow the Mac Duff. No wonder this opera was especially successful in the Germany of Weimar in his autobiography Milhaud says it ran for three wild years in Berlin, and in the Theatre it was brought to this country by the German group known as the Salzburg Opera Guild.

The performers have the authenticity that comes from the composer's own direction, and the recordings are first class. The balance between the voices and the vigorous, open texture of the chamber orchestra is altogether admirable, one wishes only that the singers had occasionally been more secure in their pitch. Full texts in French and English are provided. A.P.

MOZART: *Les quatre temps, K. Anh. 10 (Clavier) Salzburg Suite, Op. 40*

Stuttgart Chamber Orchestra, Karl Münchinger, cond.
London LA 1685. 12-in. \$3.98.

The overture and scherzo short movements written in Paris for the celebrated ballet master Noverre are his and pieces from Mozart's French workshop, but like the bagatelles of Beethoven, they bear the stamp of a master. This unpretentious composition is so pretentiously played by Münchinger. For the music of Corelli, however, the conductor shifts to a quite different approach, for although the work is entitled "Suite in Olden Style," from Halberstadt's time is thoroughly romantic in spirit and substance. Corelli evidently took great pains with this transcription (the five pieces constituting the suite were originally written for piano); he

employs only strings but the instrumentation is varied and rich. The performance is first-rate. As for the recording, the violin tone is only slightly unreal.

N.B.

MOZART: Quartets for Strings, No. 14, in G, K. 387, No. 19, in C, K. 465

Juilliard String Quartet,
RCA Victor LM 2187, 12-in. \$3.98.

The Juilliard Quartet has been admired since its inception for its exciting and understanding performances of contemporary works, but reservations sometimes have been expressed concerning its treatment of the standard classics. The present performances show that such reservations are no longer justified. In addition to the combination of fully satisfying individual playing with practically perfect ensemble playing, there is evident here a kind of repose, a tranquility, that seems to grow out of a deepened insight and is not, as it used to seem, merely the throttling down of a natural exuberance. I have not heard the fugal finale of the G major Quartet better played anywhere; and as for the rest of these quartets—the first and last of the set dedicated to Haydn—only the Unoposto version, it seems to me, is superior.

N.B.

MOZART: Symphonie concertante, in E flat, for Violin, Viola, and Orchestra, K. 364

Benjamin Borovitz, Violin; William Primrose, Viola; Symphony Orchestra, Izler Solomon, cond.

RCA Victor LM 2149, 12-in. \$3.98.

The Mozart performance is a little cool, a little impersonal, but this aside is not hurt by such an approach, and from every other point of view the playing is first-class. The tempo is somewhat slower than in the excellent Fuchs (Decca) and Stern-Primrose (Columbia) recordings; this permits Victor to get the whole *Symphonie* onto one side. The new work thus gained is unfortunately no hour, consisting as it does of a string of beautifully played clichés which would have made a fine background to an old Joan Crawford movie.

N.B.

MOZART: Symphony No. 35, in D, K. 385 ("Haydn") (with Herbert Wernersley, Quartet, Op. 1; Ein Dämonen de Faust, Three excerpts)

Members of the National Orchestral Association, Louis Bazin, cond.
COLUMBIA ML 3176, 12-in. \$3.98.

One day about twenty years ago I stand before a new display in the window of Serfner's bookshop on Fifth Avenue; it was a long time before I could tear myself away from it. There in the center was an open case, covered in blue plush and bearing the arms of the King of

Havaria, and inside the case, its first page clearly visible to any passer-by, was the original manuscript of the *Hofner* Symphony. Near it was a small card bearing the price—it was either \$10,000 or \$20,000, I forget which. Some time later the precious autograph was bought by a lady who presented it to the National Orchestral Association, which still owns it.

The present recording is in the nature of a tribute to that Association, and a well-deserved one it is. For more than two decades Louis Bazin has been training talented young players in orchestral routine. Each year Bazin hammers callow youths into professional performers. Each year the graduates go forth to places in the various orchestras in the land, and the indefatigable Bazin tackles a new batch of recruits. Nowhere else, outside of a few of the largest conservatories, can students get the intensive and thoroughly professional orchestral experience that they get here—and at all free.

The quality of the material produced by the Association is shown on this disc. This get-together group of aboriginal sounds under its old teacher like a major symphony orchestra. Only a very occasional roughness betrays the fact that these are not players who have been performing together for years. The Columbia engineers have caught the sound with superb clarity and richness.

N.B.

RAVEL: Daphnis et Chloé, Suite No. 2, Passepour une jeune défunte—See Debussy: Prélude à l'après-midi d'un faune; Trois Nocturnes; Miroirs; Fêtes.

RAVEL: Tzigane—See Wieniawski: Concerto for Violin and Orchestra, No. 2, in D minor, Op. 22.



George Saltz sets the Toyshop dancing.

ROSSINI-RESPIGHI: La Boutique fantaisie
Quintet: L'Apprenti sorcier.

Israel Philharmonic Orchestra, George Saltz, cond.
LONDON LA 1713, 12-in. \$3.98.

La Boutique fantaisie (The Fantastic

Toyshop) is a Diaghilev ballet with choreography by Leonid Maslennikov and a score arranged and orchestrated by Respighi from a number of Rossini piano pieces. Of the several available recorded versions, this is one of the few that is complete. Saltz presents a vibrant performance, probably paced evenly enough for dancing, yet certainly sufficiently varied in style and color to make for interesting listening.

The treatment of *The Sorcerer's Apprentice* is among the most transparent I have heard, and coupled with this clarity is a fine feeling for the work's dramatic and supernatural qualities.

The Israel Philharmonic, already well served by Ansel, sounds even more brilliant in this London recording, thanks to the excellence of both the playing and engineering.

P.A.

SAINT-SAËNS: Concerto for Violin and Orchestra, No. 3, in B minor, Op. 61; Introduction and Rondo capriccioso, Op. 28; Havanaise, Op. 83

Arthur Grumiaux, Violin; Orchestre des Concerts Lamoureux, Jean Fournet, cond.

ERIC LC 3390, 12-in. \$3.98.

Arthur Grumiaux's beautifully smooth tone and self-effacing musical taste, as exemplified in every one of his recordings, are decidedly—and refreshingly—in contrast to the flashy style adopted by so many present-day artists. Furthermore, he has had the advantage of a disc repertoire congenial to his talents and of especially appropriate couplings.

On this disc, for instance, is all the important music that Saint-Saëns wrote for violin and orchestra, and it has been exquisitely interpreted. In the *Concerto* Grumiaux subordinates his flawless technique completely and gives his entire attention to the matters of tone and interpretation. This is most apparent in the slow movement, where the velvety sounds and meticulous phrasing, culminating with a perfectly executed set of harmonics, are a joy to hear. The *Havanaise*, too, is notable for its sweet tone. Even the *Introduction and Rondo capriccioso* begins very calmly, and yet builds up to a thoroughly brilliant climax. Such a climax, as well as sections of the *Havanaise* and the end movements of the *Concerto*, demands a goodly amount of virtuosity; the virtuosity is there in abundance but never for its own sake.

Fournet and the orchestra enhance the beauty and poised effectiveness of the violinist's performance, and there is a wonderful show to the reproduced sound.

P.A.

SAINT-SAËNS: Introduction and Rondo capriccioso, Op. 28—See Wieniawski: Concerto for Violin and Orchestra, No. 2, in D minor, Op. 22.

SCHUBERT: Quintet for Piano and Strings, in A, Op. 114 ("Trout")

Victor Bahin, piano; Festival Quartet;
RCA Victor LM 2147, 12-in. \$3.98.

This performance has some of the elements of a great *Trout* Quintet—namely, violinist Szymon Goldberg and violist William Primrose. If Victor could have matched them with Casals and Serkin, there would be music making for you! Mr. Smiley might remain as double bass player since he has the great requisite for that thankless post, discretion. But Mr. Babin and Nikolai Graman, cellist, excellent musicians in their way, would have to retire. Babin has not successfully made the transition from the steady-angled partner of Vranzky to the joyous and easygoing master of ceremonies which his part in the ensemble ought to be. Witness his sadly mechanical phrasing of the dotted rhythms in the first

movement's second subject. Primrose and Goldberg, repeating the delicious little theme after him, are like two kindly masters showing a youngster how it ought to have been done. Nonetheless Babin never obstructs unpleasantly, and when Schubert calls upon him to do the brilliant filigree at which he is best (as in the third of the *Trout* variations) he makes one want to stand up and cheer. Graman is a colossus of excellent taste but not much temperament. He keeps falling to rise in the heat of this pleasurable music, though his part is studded with many a tempting bit (Schubert wrote the gift of a commission from a cellist).

An ideal recording of this work does

not exist, however, nor did one exist back in the days of 78s. Under the circumstances, this is as good a performance of the quintet as the catalogue offers (its nearest rivals: Horowitz and the Budapest Quartet). The recorded sound is excellent, but the review copy contained a good deal of surface noise. D.J.

SCHUMANN: *Carnaval*, Op. 9—See Chopin: *Sonata for Piano*, in B flat minor, Op. 38.

SCHUMANN: *Etudes symphoniques*, Op. 13; *Kreutzeriana*, Op. 10

Wilhelm Kempff, piano.
DECCA DL 9548. 12-in. \$3.98.

The relative popularity of these two works is reflected in the catalogues: nine performances currently (several have been discontinued) of the *Symphonic Etudes*; three of *Kreutzeriana*. In the concert hall the ratio is slanted even more in favor of the former work. *Kreutzeriana* is hard to hold together; even Schumann's most intimate works, it does not do a bit. Kempff does a magnificent job holding it together. His is a mature, cultivated reading. He does not try to overpower the piece, he has a wide tonal palette, and he has great sympathy for the idiom. The same remarks apply to the *Symphonic Etudes* (where Kempff takes every single repeat but the first one in the finale; he does not, however, play any of the posthumous variations). There's no poetry and sincerity to this playing. And, by his Angel recording of both works, is a little more impetuous. On the whole, I prefer Kempff. Few of the other *Etudes* and *Kreutzeriana* now available have much to recommend except for the *Etudes of Novae* (*Vox*), an intriguing pianistic conception. H.C.S.

STRAUSS, RICHARD: *Sinfonia domestica*, Op. 53

Chicago Symphony Orchestra, Fritz Reiter, cond.
RCA VICTOR LHM 2103. 12-in. \$3.98.

The perfect domestic symphony will perhaps never be heard. Strauss asks impossible things of the orchestra in the virtually last of his tone poems, including intricate woodwinds counterpoint which are supposed to be heard while the eight horns, four trumpets, thirty-two strings, etc. are working themselves at full volume. It is a disturbing experience to follow the full score during a performance, recorded or live. One sees the above demands for the back during during all sorts of nice little things on the page that they are also doing their *vice versa* one must take on trust.

Which is merely an indication in saying that technically honest and the Chicago Symphony Orchestra give all that due care reasonably ask of them. A great deal of detail flows on and, what is more important, there is a

Continued on page 62

A Blend of Ages: Agon and the Canticum



Igor Stravinsky

NOW that Schoenberg, Webern, and Berg are dead, their twelve-tone idiom takes its place in the omniscient omnium-gatherum of learned reference on which Stravinsky has been drawing for the past thirty years. In both *Agon* and the *Canticum Sacrum*, however, twelve-tone procedures are superimposed upon much older idioms. *Agon* is twelve-tone plus *Arbeau*, the *Canticum Sacrum* twelve-tone plus *Chabrier*. It is as if such work existed on two levels of tradition, the one recent, the other remote. Thanks in part to the tonality and parallel built up by this procedure, but thanks primarily to the fact that Stravinsky is Stravinsky, both compositions are instantly and completely enchanting.

Agon (the word means "drama") was completed in 1956. Described as a ballet for twelve dancers, it is in thirteen short movements, many of them subdivided into still shorter movements; according to Robert Craft's notes, all are "modeled after examples in a French dance manual of the mid-seventeenth century." This Stravinsky handles these

rhythms with the utmost brilliance, fervor, and wit, and needs to be said. Along with this goes an utterly magical inventiveness in the matter of orchestral color. One gathers from *Agon* that, after fifty years as the world's most resourceful orchestral innovator, Stravinsky is only beginning to explore the subtleties of timbre of which the Western ensemble is capable.

The *Canticum Sacrum* was composed in 1955 for St. Mark's Cathedral in Venice. Its text is taken from both Old and New Testaments and has to do with the preaching of the word of God. In characteristic twelve-tone style, its final section, wherein the words refer to the fact that the gospel has gone forth, is a precise retrogression of the music heard at the beginning, since the work opens with an exhortation to spread the gospel before every creature.

Much of the color of the *Canticum* suggests the composers who served St. Mark's at its height; in other words, ensembles of brass and organ are prominent, and the whole has a golden resonance like that of the cathedral's famous mosaics. The solo voices are handled in priestly, chantlike style; the chorus massively, often with intricate polyphony. In general the *Canticum* continues in the line of the *Symphony of Psalm*, and one suspects it will be as widely admired.

The recording was made at the concert given to celebrate Stravinsky's seventy-fifth birthday, at the University of California in Los Angeles on June 17, 1957. It is one of the most completely flawless recordings in Columbia's catalogue. The performances are, of course, beyond criticism.

ALFRED FRANKENTON

STRAVINSKY: *Agon*; *Canticum Sacrum*

Richard Robinson, tenor; Howard Chaffin, baritone. Los Angeles Festival Chorus (in *Canticum Sacrum*); Los Angeles Festival Symphony Orchestra, Igor Stravinsky, cond. (in both works).
COLUMBIA ML 3215. 12-in. \$3.98.



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SCHUBERT FANTASY IN G; SONATA IN A ("DUM"), RAFAEL BRUIAN, VIOLIN; JOHN SIMMS, PIANO, MGS0150

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PROKOFIEV SUITE FROM THE "LOVE FOR THREE ORANGES"; SCYTHIAN SUITE, LONDON SYMPHONY, BORATL MGS0157

SUPPÉ OVERTURES, LIGHT CAVALRY, JOLLY ROBBERS, POET AND PEASANT; FIVE BARS AND OTHERS, HALLÉ ORCHESTRA, BARBERELLA MGS0160

BRAMMS VARIATIONS ON A THEME BY HAYDN; HUNGARIAN DANCES, LONDON SYMPHONY, BORATL MGS0154

MARCH TIME, EASTMAN SYMPHONIC WIND ENSEMBLE, FENNELL MGS0170

AND IN THE UNRIVALLED PERFECTION OF STEREOPHONIC TAPE

MARCH TIME, EASTMAN SYMPHONIC WIND ENSEMBLE, FENNELL, MGS0170

WAGNER BARN AND NEGROES'S SHINE JOURNEY, DEAPRIED IOYLL, DETROIT SYMPHONY, PARAY, MGS 0-30

RAVEL MA MERE LOVE CHAMBER SOURCE FANTASQUE, DETROIT SYMPHONY, PARAY, MGS 0-33

CHADWICK SYMPHONIC SKETCHES, EASTMAN-ROCHESTER SYMPHONY, HANSON, MGS 0-34

GRIGI PIANO CONCERTO IN A MAJOR, OP. 18, RICHARD PARDELL, PIANIST, HALLÉ ORCHESTRA, WELDON, MGS 0-37

PIESTA IN M-FL, EASTMAN-ROCHESTER SYMPHONY, HANSON, MGS 0-38



Pop-Music

virtuosity of ensemble that I stand wanting to the recently issued Decca version. And yet, I am disappointed. The recording is too businesslike, too—as if over-consciousness of ornament. The *Winged* ought to sound like a mother's caressing and the lovely folk song which Strauss introduces toward the end of the work (page 92 of the miniature score) ought to be played just as it is marked, rubric and *ritard*. These qualities, precision and simplicity, are what this performance lacks, though the big low-voice part are done superbly.

The Gramercy version on London remains my favorite, its recorded sound, however, is decidedly inferior to the present disc's. D.J.

STRAVINSKY: *Povoyshno*

Claude Malher, narrator; Nicolas Godin, tenor; Choeur de l'Université de Paris; Orchestre de la Société des Concerts du Conservatoire de Paris, André Cluytens, cond.

ANNA 33404. 12-in. \$1.95 (or \$1.00).

A few months ago Columbia brought out the first recording of this work ever made, with Stravinsky himself conducting. As usual, comparison between the two versions is all to the advantage of Stravinsky's own. For one thing, the Columbia recording is spatially superior to the Angel; Columbia's sound has a dimensionality, depth, and relief, in the unplayed space of that word, which the newer tone lacks. Stravinsky's interpretation, also, is more burlesque, dramatic, and varied; Cluytens' performance seems respectable enough until you put on the old master's and then it sounds like *Le Diable à quatre*. The solos are, about equally good in both versions, but the general superiority of the Columbia leaves no room for choice. A.F.

TARTINI: Sonata for Violin and Piano, in G minor ("Devil's Trill"); Sonata for Violin and Piano, in G minor ("Didone Abbandonata"); Variations on a Theme by Corelli

Erica Morid, violin; Leon Fouernier, piano.
WARRINGTON ROW 18194. 12-in. \$3.95.

Giuseppe Tartini (1682-1770) won't get turning out purveyor's work when he wrote the pieces recorded here. In the first place, he was a most conscientious artist, interested in acoustics, hearing, and the best quality of sound production. Secondly, he was a strong believer in program music for the violin. The *Variations on a Theme by Corelli* are really a set of fifty studies in the art of bowing, of which only two are offered here; the famous *Devil's Trill* sonata, though reportedly inspired by a doctor, is intended to develop the left hand through the extreme production of infinite trills and double-trills. The other sonata on this disc is a musical interpretation of the immolation of Dido.

Erica Morid is most successful in bringing all of Tartini's technical and interpretive aims to fruition. Her per-



Tartini falls to bedded Erica Morid.

formances are pure, strong, and affectingly simple, and she is ably surrounded by Fouernier. The reproduction is clear without exaggeration in range. F.A.

TCHAIKOVSKY: *Aurore's Wedding*

Ballets Russes Orchestra, Milan Horvath, cond.
CONCORD HALL 18184. 12-in. \$4.95.

Aurore's Wedding is a one-act act of ballet divertissements excerpted and revised by Diaghilev and Nijinska, after the former's revival of the full-length *Sleeping Beauty* in the early 1920s proved an artistic success but a financial failure. It utilizes music from the Prologue and Act II, but is concerned mainly with the famous dances from Act III. Several months ago Mercury issued a version of the work edited from the recording of the complete ballet score by Antal Dorati, in which there were some departures from the original *Aurore's Wedding*. According to the notes to the present album, it is performed "precisely as it was first presented at the Opéra de Paris" by Diaghilev. This may be true, but I have some doubts, for there are several questionable cuts. What is there to played with few parts by Horvath, mostly of dances that are a palatable composition between dance and concert music. The work of the orchestra, while not always as polished as it might be, is generally clear and satisfactory, and has been transferred in disc with well-balanced, unexaggerated sound. F.A.

TCHAIKOVSKY: *Symphonic No. 4, in F minor, Op. 91*

Orchestra National de la Radiodiffusion Française, Igor Markevitch, cond.
ANNA 33448. 12-in. \$4.95 (or \$3.95).

If this isn't the top Tchaikovsky Fourth on microphone it comes close. The cuts are mostly minor, but the tempo and organizationally helpful to the first movement. The orchestra is France's greatest. Listen to the marvelous trans-

port of the first movement, especially to the peculiar wind entry that begins its middle section, or to the distant wails of the outer string body in the final-cut a single atmosphere is blurred or lost, although the tempo is allegro con fuoco and the dynamics are *f*.

The conductor is that wily gander Igor Markevitch. May he never settle down to one post if his perspective produces results like that! When you hear this recording, you will, I think, be struck by Markevitch's affinity with Toscanini. The perfectionist, the architect who never loses sight of the whole despite his passionate concern for the parts, the supreme individualist who yet gives the impression that he has subverted his personality to that of the composer—these are some of the characteristics that the two men share. Markevitch has not yet recorded on opera, but I predict that when his disc it will be an event. (He will record Chloé's *A Life for the Czar* this winter—Ed.) D.J.

TURINA: *Canto a Sevilla*

Victoria de los Angeles, soprano; London Symphony Orchestra, Antonio Fendler, cond.
ANNA 33462. 12-in. \$4.95 (or \$3.95).

Certain to rate as one of the best vocal albums of the year, the matchless singing of Victoria de los Angeles is here combined with her unique capabilities as an interpreter of Spanish music and an evocative voice, recorded in full for the first time. Admirers of either the artist, the composer, or the album will find this a major addition to their collections. R.C.M.

WIENIAWSKI: Concerto for Violin and Orchestra, No. 2, in D minor, Op. 29; Saint-Saëns: Introduction and Rondo capriccioso, Op. 28; (Ravel: *Talpa*)

Isaac Stern, violin; Philadelphia Orchestra, Eugene Ormandy, cond.
CONCORD HALL 18195. 12-in. \$3.95.

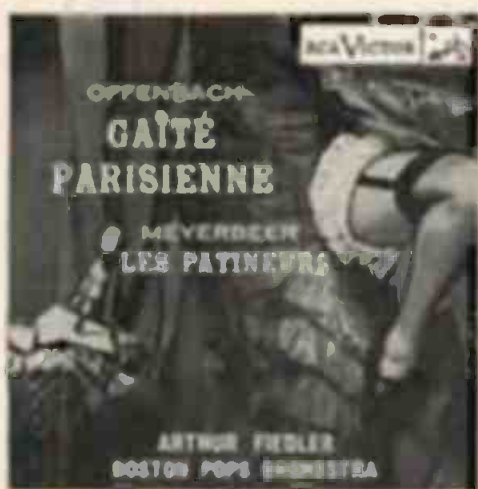
From the standpoint of interpretative height and total virtuosity, Isaac Stern seems to be improving with each new recording. His performance of the Wieniawski Concerto, a success to an earlier recording he made with the New York Philharmonic, is the best yet to reach disc. Its chief competitor, the Victor version on RCA Victor, is enclosed on several occasions. Not only is Stern's tone sweeter and his interpretation more evenly paced but the orchestral introduction in the first movement, drastically curtailed in the Victor recording, is present in complete, and Columbia's sound is more resonant and flexible.

This disc also includes an often brilliant account of the Saint-Saëns *Introduction and Rondo capriccioso*. But perhaps its chief interest is the truly thrilling performance of the *Talpa*.

Continued on page 64

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WIREN: *Symphony No. 4, Op. 37*—
See Larsson: *The Disputed God, Op. 24* ("Lyrical Suite")

More Briefly Noted

Berthoven: *Fantasy for Piano, Chorus, and Orchestra, in C major, Op. 80, Sonata for Piano, No. 8 (Pastorale); Trio No. 2, in E flat, Colsonum cat. 255.*

The *Fantasy* (Richter, piano, with the Moscow Radio Chorus and National Philharmonic Orchestra under Kurt Sanderling) and *Trio* (Eugl Cahla, Kogan, and Rostropovich) have their points of interest, but the quality of sound is about that of American recordings in the late Thirties.

Brahms: *Sonatas for Violin and Piano, No. 1, in G, Op. 78; No. 2, in D minor, Op. 100, Angel 35323.*

Edwin Fischer at the piano offers noble readings, but Graciosa de Vito's violin playing is deficient in both technique and interpretation.

Chopin: *Boleros (4); Impromptus (3); Fantasy-Impromptu, Opus 36403.*

All fingers here show neither the temperament nor the technique for these difficult pieces. Natural, unforced piano sound is about the only merit of the disc.

Chopin: *Sonata for Piano, No. 2, in B flat minor, Op. 35; Bolero, No. 1, in G major, Op. 23; Polonaise, No. 6, in A flat, Op. 53; Variations on a Theme by Haydn, Op. 12, Colsonum cat. 256.*

Tatiana Nireljewa, a 1937 graduate of the Moscow Conservatory, plays the *Variations*—giving a very lively rendition of one of the composer's weakest works. The other pieces are played by Emil Cahla, energetically but unimaginatively. Sound seems restricted in dynamics.

Chopin: *Trio for Piano and Strings, in C minor, Op. 8, Colsonum cat. 251.*

This same performance with David Oistrakh, violin, Sviatoslav Knushevitsky, viola, and Lev Oberin, piano, was brought out over a year ago by Westminster in a much better recording. The filler pieces differ, but it doesn't much matter; Colsonum's sound is distinctive.

Chitra: *The Red Pepper Ballet Suite (with Ippolito-Ivanov, Concertino Sketches), RCA Victor cat. 3133.*

Schubert's reading of the *Chitra* score for Westminster is less obvious and more virtuosic than Anatole Fischer's performance here (with the London Philharmonic) for RCA Victor. But the Ippolito-Ivanov sketches are masterly, even better than the Kierulff and Radtke versions.

Coig: *Lytic Process Book 3, Op. 34; Book 6, Op. 57, M-G-M cat. 3188.*

The third is a projected complete recording of Coig's keyboard soloist. Michael Freuler's playing of Book 6 is very commendable, but his performance of Book 3 is rather mediocre. Unless you want this material in its entirety, the Glenside recordings on two Angel discs are to be preferred.

Milani: *Maestro de oboe de rano (with Orla; Maestro de oboe de rano), Archive cat. 3078.*

A selection of pieces, brought out by Luis Milani in 1936, for an instrument that seems to have been a cross between a guitar and lute. Here it is played on the lute by Walter Gervig, and there are songs by great Brazilian Michalis, with lute accompaniment. The latter probably are the more favorably received. Orla's attractive music is performed on the viola da gamba (August Weening) and lute (Richard Miller), with the happy introduction also of the soprano voice of Margot Gullerstein.

Mozart: *Symphony No. 25, in G minor, K. 183 (with Beethoven: *Louise Overture No. 2; Berlin Overture to Waverley, Op. 1*), Liberty cat. 15002.*

Nikolai Rabinovich, conducting the Leningrad State Philharmonic Orchestra, seems to feel the only, busy Beethoven work closest to his sympathies. The Mozart is unimaginative, and the Beethoven lacks drama. Soud is better than one expects from Russian tapes.

Palotina: *Missa Papae Maverilly Stabat Mater, Impromptu Archive cat. 3074.*

The Mass, sung by the Anchorage Dramatic Club, is here given a preliminary performance, inferior to that on an Equidisc. The *Impromptu* and the *Stabat Mater* (the latter with the Anchorage Dramatic) are much better. Theodor B. Robinson is the conductor.

Presterhan: *Gesellschafts-Tänze (8) (with Rho; Weibliche Zwillinge), Archive cat. 3072.*

The three-part settings of the Protestant German composer Michael Presterhan (1571-1621) are sung masterfully by a well-trained children's choir, conducted by Erich Beuter. The two-part secular songs published and perhaps written by Luther's contemporary George Rho are accompanied competently by viol (the Presterhan) and continuo by recorder (Presterhan Conrad). Two of the songs are for viol and recorder alone.

Rosini: *Overtures: La Scala di ora, La Conservatori; La Corra lava, Il Barone di Sicilia; L'Alfama in Algeria; Il Signor Bracciano, Mercury cat. 50138.*

The Minneapolis Symphony is a highly efficient orchestra, but Antal Doroff's excessively slow tempi and heavy accents, together with the cello and unblended spots of the recording, hardly make this disc a satisfying contribution to Rosini's.

Spohr: *Overt in E, Op. 38 (with Paganini Overt), London cat. 1610.*

Spohr's Overt, probably composed about 1820, is facile and sweet, but not particularly memorable. Marcel Felt, present head of the Brussels Conservatoire, also is a fine technician but a rather uninteresting composer. Excellent performances by the Vienna Overt and exceptionally realistic vocal.

Struss, Johann II: *Waltzes, Mercury cat. 50131.*

The subtlety essential to a truly Viennese concert presentation of this information music is generally lacking from Doroff's interpretation with the Minneapolis Symphony. Performances are sometimes a bit halting, as is the reproduction. Listen to Oursky, Poldi, and Kraus.

Tchaikovsky: *Concerto for Piano and Orchestra, No. 1, in B flat minor, Op. 23 (with Brahms: *Hungarian Dances, Nos. 1, 2, 3, 10*), Liberty cat. 15076.*

Kyle Greenbaum not only serves totally inadequate to the virtuosic demands of this music but compounds her errors by indulging in grotesque mannerisms. The orchestral accompaniment by the Sinfonia of London led by Richard Addis is inept, and the vocal effect is disappointing.

Tchaikovsky: *The Nutcracker, Op. 71; Suite (with Mendelssohn: *Middlemarch Night's Dream; incidental music*), Capitol cat. 8401.*

This record offers only samplings from both scores (the complete Mendelssohn is available in the Old Vic recording, the Tchaikovsky in versions by, Dostal, Debnick and Radtke), but Felix Sklarin and the Hollywood Bowl orchestra play with considerable finesse and they are brightly recorded.

RECITALS AND MISCELLANY

BOYD NEEL ORCHESTRA: "Concert in Contrast"

Coelli: *Concerto Grosso, in D, Op. 6, No. 1. A. Scarlatti: Concerto, in F minor. Corelli's Concerto Grosso, in E minor, Op. 3, No. 3 (First Version, 1733; Second Version, 1735).*

Boyd Neel Orchestra, Thornton Dart, cond.
Orestis-Lyra cat. 50138. 12-in. 9498.

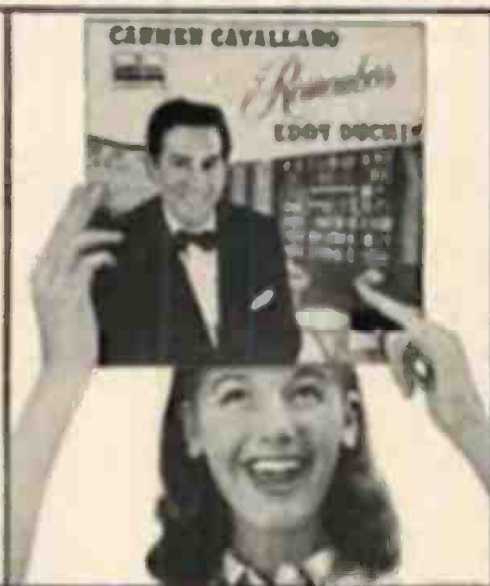
These works are designed to show something of the changes in taste that shaped, and ultimately destroyed, the concerto grosso. I am not sure the aim is fulfilled. Coelli's composition is of course one of those that established the basic structure of the concerto grosso. The Scarlatti represents a different

Continued on page 66

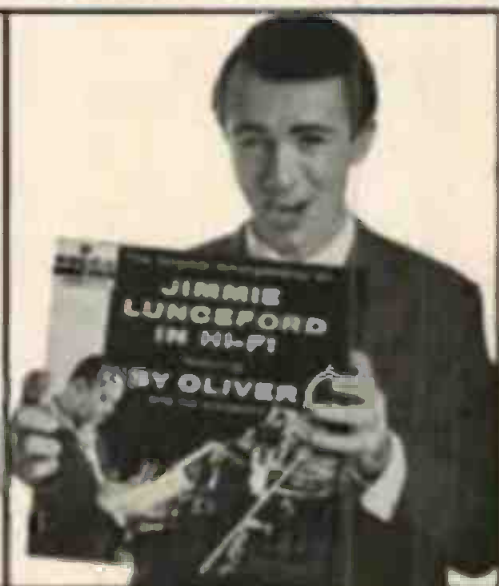
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type—the convoluted contours—which grew up alongside the concerto genre. The two versions of the Concerto present some interesting differences, but these are not as radical as Mr. Dart's notes seem to imply. In 1753 even the jugged-up version of the Concerto must have seemed very old-fashioned to a progressive composer like Johann Stamitz.

But perhaps this point is not as important as that all three of these attractive compositions are played with a good deal of vitality and with fine style. It is not often that one encounters both of these qualities in performances of baroque orchestral music. Using reproductions of early eighteenth-century bows and enhancing the heavy vibrato of the romantic style, Mr. Dart's players manage to achieve a bright, singing tone that is as beguiling as it is rare. N.B.

JOSEPH EGER'S "Ascend the Horn"

Mozart: Concerto for Horn, No. 2 in E flat, K. 417; Haydn: Trio in E flat, Bassoon Prelude, Theme and Variations; Schubert: Sonatas (trans. Eger); Die Fledermaus, Barlith's For Children, Nos. 17, 33 (trans. Eger); Bernstein: Edgry for Micky I; Gershwin: Prelude No. 2 (trans. Hunkins); Gubin: The Hornmaster Plays (trans. Eger-Rosenstock).

Joseph Eger, conductor, French horn. The Eger Players, RCA Victor Orchestra, Joseph Rosenstock, cond.
RCA Victor LSC 3146 12-in. \$3.98

If the death of Dmitri Shostakovich left one wondering who might replace him as the leading virtuoso of the French horn, here is a young American who seems qualified to bid for that place. This record is an interesting, if somewhat uneven, demonstration of what a skilled player can do with the instrument, particularly in a solo role.

Gershwin's piano prelude is typical of the arrangements in being most effective only when it approximates the texture of the original form, but when Eger is playing music written specifically for the horn he has greater success. The Barlith, here

recorded for the first time, is a wonderfully amusing virtuoso piece, well worth the price of the collection. Whether the Eger or Rosen version of the Mozart is the best is a question I'll let others debate. This is at the very least a fine account of the score, agreeably recorded.

Eger's band of contemporary is a welcome feature, with some well-selected illustrations of the horn's historical antecedents and various comparisons' use of the modern instrument. R.C.M.

HOWARD UNIVERSITY CHOIR: Spirituals

Howard University Choir, Warren Lawrence, cond.
RCA Victor LSC 3156 12-in. \$3.98

The Howard University Choir sings eighteen popular spirituals in the conventionally liturgical settings that have won this folk art a place in the concert hall. These arrangements have sacrificed some of the primitive vigor and color of the originals, but having said this, one need make no further reservations. In matters of tone, balance, volume, and precision, the Howard group is the peer of any American college choir, and the special vibrant texture of some of the solo voices gives it additional distinction. Like the best Negro artists, the chorus sings with an innate dignity that enhances vitality and total conviction. Nathaniel Dett's familiar arrangement of Listen to the Lamb does all the choir at its best, it ends with an ethereally soft tone little short of sublime. R.E.

LOUIS KRATNER: Chopin-Liszt Recital

Chopin: Impromptu No. 1, in A flat, Op. 29; Fantasy-Impromptu, in C sharp minor, Op. 66; Nocturne, in D flat, Op. 27, No. 3; Liszt: Sonata del Preludio 47, 104, and 123 (Nos. 4, 8, and 9 of Années de Pélerinage, Deuxième Année); Concerto-Liszt: Valse de l'opéra "Faust."

Louis Kratner, piano.
Carnegie + 8406 12-in. \$3.98

Very satisfactory, all around. Everything on this disc is the product of a mature, experienced pianist and a fine technician. On the whole this is not Liszt's best, despite the fact that Kratner handles the technique without any apparent difficulty. Later it is always lyric and stylish—over the dated Faust Waltz, with all its pyrotechnics. There are no reservations in the playing, although Kratner's rubato in the three Chopin pieces might raise a few eyebrows. It is not a rubato that I find entirely convincing; but Kratner handles it with good taste and it must be accepted on his terms. In the Sonata 104 he rises to a fine peak of passion. This is perhaps the best thing on a disc that contains only fine things. H.C.B.

NATHAN MILSTEIN: "Vignettes" Witold Lutoski's Polonaise Brillante, in D,

Op. 4; Schwan-Tanzstille, Op. 16; Fables Antiques: Jota (trans. Kochanski); Ravel: Esquisses sur le nom de Gabriel Fauré; Esquisses: Romanes Andalous; Schumann: Träumerei, Op. 15, No. 7; Suite Air (trans. Wittich); Norvegien: Fjerdags Melodie, Tchaikovsky: Mille-dre, Op. 42, No. 2; Debussy: La fille aux cheveux de lin (trans. Hartmann).

Nathan Milstein, violin; Levin Dolinoy, piano.
Carnegie + 8386 12-in. \$4.98

It is doubtful if any of the performances on numerous other "vignettes" discs will match, let alone surpass, these for warmth or perfection. Milstein is particularly at home in the more brilliant chapters, and notably the two by Witold Lutoski, but he also can evoke a spirit of lyricism and purity in such gems as the Ravel and Debussy. He is very close to the subtleties of all times, yet this virtuosity only serves to enhance the quality of these subtleties without ever revealing a forced or spurious tone. A fine balance is also maintained between the violin and Dolinoy's carefully wrought piano accompaniment. P.A.

PIERRE MONTEUX: "Music of France"

Mikhail: Symphonie Sinfonia No. 2, Op. 57 (Prokofiev); Debussy: Sacchande (trans. Ravel); Berlioz: La Damnation de Faust, Op. 24; Marche Hongroise ("Rakoczy"); D'ady: Fervor, Op. 40; Introduction to Act 1, Op. 42; Symphonie Variations.

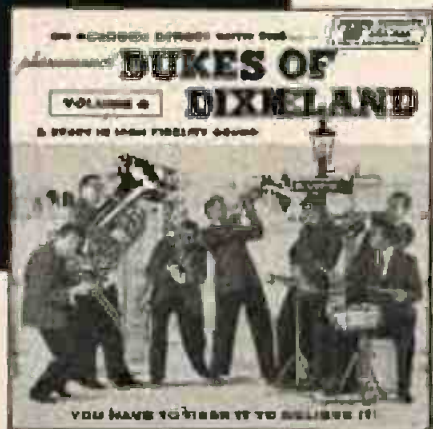
San Francisco Symphony Orchestra, Pierre Monteux, cond.
RCA Carnegi cat. 386 12-in. \$1.98

Though he is now one of our "grand old men" of the music, Pierre Monteux always has retained young musical blood—a fact evident from the catholicity and chronological range of the French music on this record, all of it dubbed from 78-rpm discs made with the San Francisco Symphony about a decade ago. There is much vitality in these performances, especially in the exciting Rakoczy March and in Mikhail's Second Symphony Suite. Even the sound is well above par for recordings of this vintage, and the imaginative variations in tempo of later are strongly veiled in the higher frequencies (which is more than later was when she covered the underworld). Still, this is a fine sampling of Pierre Monteux's activity in interpreting the music of his native land, and at \$1.98 is another of Columbia's outstanding bargains. P.A.

NADEZHDA OBORONOVA: "Obshchaya kora to Song" "Obshchaya kora"

Nadezhda Oboronova, mezzo-soprano; Marcel Sabhanov, piano.
Witold Lutoski: Polonaise Brillante, in D, Op. 4, No. 2.
Two 12-in. \$3.98 each.

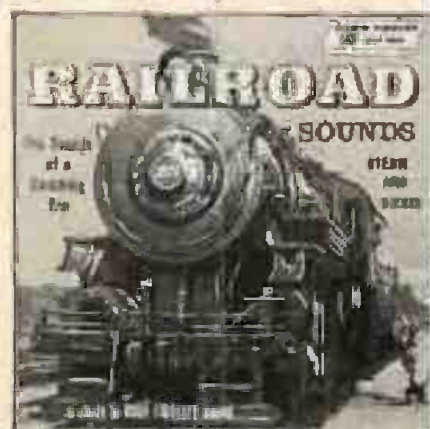
Continued on page 68



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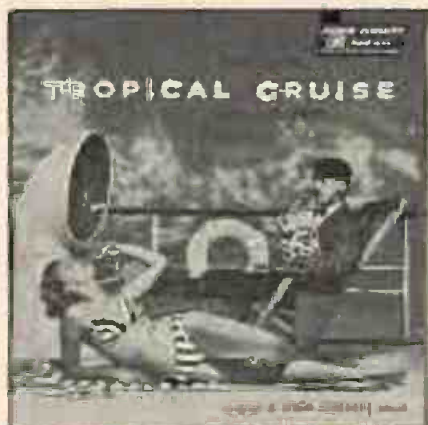
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Who is Obolukhova? What is she? That Westminster that commends her? These, I confess, were my first questions on viewing these two LPs, and I was obliged to hang my head in shame when I read on the sleeve that she is considered both by critics and the public as the outstanding representative of the Russian vocal school. Actually this says less for the quality of Madame Obolukhova's singing than it does for the lack of it in her rivals. Her is by no means a great voice, although it is a rather intimidatingly big one. The vocal production is thick and uneven, the phrasing is breathless and inept, and there is a disagreeable, nasal shrillness in the upper range of the voice. Granted that as one goes on listening there emerges a kind of massive, unimaginative integrity, the voice still lacks subtlety of approach and variety of color.

If you are inclined to sample one of these discs I would recommend the second (XWV 18510), which contains by far the more interesting music. It offers seven Tchaikovsky songs, all lovely things, as is the single selection from Dargomizsky; the three by Clinka, however, are stumpy, folksy, and dull. The music of the other album, by submerged nineteenth-century Russian composers, is unaccommodatingly two-dimensional. Twelve of the thirteen songs are in minor keys, and all except the one with the ear-tearing title of "Up and down the street the snow storm blows" are lugubrious.

The recorded sound is suspicious if one compares it with the only other available samples of this lady's art, two hideously engineered Coliseum discs entitled "Tchaikovsky Romances." No texts included. D.J.

PRO MUSICA ANTIQUA: Recital

Anonymous: Chansons (8) from the *Notebooks for Margaret of Austria*. Theodor Szabo: *Dances* (18).

Pro Musica Antiqua, Suffolk Caps, disc ANCIQUA 510 3071, 12-in. \$5.98.

Margaret of Austria, governess of the Netherlands in the first decades of the sixteenth century, was very fond of music. The present chansons were chosen from two manuscript collections made for her. They are mostly for three or four voices; some are sung and the others are performed by instruments. All are love songs, and most of them are wonderful. I was especially struck by the lovely *Parvency* (16), written by Pierre de la Rue, one of Margaret's favorite composers, and the poetic *Antifone* (10), whose text is French, the Song of Solomon and whose composer is unknown. The Pro Musica singers have some moments of uncertainty byonation, as in the anonymous #1 and #2, but otherwise use their usual capable voices.

The dances on the other side are from a collection published by Sweelinck at Antwerp in 1551. This is a pleasing and lively group of pieces, performed on the kind of instruments that might

have played them originally. They might be especially interesting to ballet people, or anyone else looking for authentic Renaissance dance music. N.B.

ELISABETH SCHWARZKOPF: "More Songs You Love"

Gruber: *Stille Nacht*; Brahms: *Sandmännchen*; Gluck: *In einem kühlen Grunde*; Franck: *Pauls Angelica*; Himmelreich: *Weihnachten*; Traditional: *O Come, All Ye Faithful*; *O du heilich!*; *The First Nowell*; *In dulci jubilo*; *Vom Himmel hoch*; *I Saw Three Ships*; *Maria auf dem Berge*; *Ein fröhlicher Gesang*.

Elisabeth Schwarzkopf, soprano; orchestra, chorus, and organ; Charles Mackerras, cond.

Angel 35530, 12-in. \$4.98 (or \$3.98).

This is essentially a Christmas album, nine of the thirteen songs celebrating the Nativity. Angel has made a handsome musical package out of these traditional songs, hymns, and carols by surrounding Miss Schwarzkopf's exquisite vocalism with chirpy and instrumental ensembles in arrangements by Charles Mackerras that are at once fresh and sophisticated. One or two of the arrangements border on the brute, but they stay at a comfortable distance from the Hollywood-baroque treatment.

Only one of the songs has not been transformed by Mr. Glockeras: *Stille Nacht*, which is sung in its original form (according to the record liner) "for two solo voices with choir and the accompaniment of one guitar." The melody differs slightly from the common version; Miss Schwarzkopf sings both parts of the duet with intimate simplicity. Elsewhere, she sings from words of exaltation (*Ein fröhlicher Gesang*) to tenderness (*Maria auf dem Berge*) to frenzied excitement (*I Saw Three Ships* sung at a breath-taking pace). Very occasionally her vocalism becomes refined almost to the point of preciosity, but never quite. R.E.

SOVIET ARMY CHORUS AND BAND: "A Program of Favorites"

Clinka: *Pilka*; Rubinstein: *Curly Hair*; Koval: *Emelian Pugachov*; *Free Will*; Popular songs: *A Toast to Friendship*; *Shig*; *Little Nightingale*; *Wait for Your Soldier*; *To an Army Man*; Folk songs: *The Cliff on the Volga*; *A Soldier's Farewell*; *My Prayer*; *Dubnushka*; *The Little Boat from beyond the Island*.

Soviet Army Chorus and Band, Dmitri Alexandrov, cond.

Musicon LP 323, 12-in. \$4.98.

The four so-called "popular" songs here are closer to Viennese operetta than to our own current hit tunes, but they are quite delightful and are sung by the splendid-sounding chorus with a relaxed discipline and skill that make it like the best male counterparts in the West. And until the group gets to a couple of the old folk songs, they avoid the dreary

elements of the Don Cosmolet ensembles. The presence of balalaikas and accordions in the band gives the accompaniments added color and charm. Of the "classical" songs, the delicious Clinka *Pilka* is in as "popular" a vein as could be wished; the excerpt from Koval's *Emelian Pugachov* suggests that this is a better work than some other contemporary Russian operas that have been recorded; and Anton Rubinstein's *Curly Hair* from the *Perkins* Songs cycle is surprisingly beautiful in its orientalism. It is sung with great sensitivity by Arthur Elmer, bass, the best of the many fine soloists. Two Czech folk songs are sung in the original language. The sound is a little muffled but not really unsatisfactory. R.E.

More Briefly Noted

Ballet Music: "Enter the Ballet." RCA Victor LM 2141.

Indifferent performances of ballet music by Gluck, Verdi, Saint-Saëns, Tchaikovsky, Gounod, and Ponchielli played by half a dozen different orchestras recorded at different times and under different conditions. The low point is reached with the longest selection, Fiedler's Boston Pops playing the *Fant* ballet music. An inexcusable record of this late date.

Frank Boggs: "The Splendor of Sacred Song." Word w 7001.

The singing of Frank Boggs, bass, is tonally handsome and virile; but the arrangements of these gospel hymns and other familiar religious songs in slavishly sweet orchestration à la Mantovani probably will make the disc of limited appeal.

Alfred Deller: Shakespeare Songs and Late Songs. Angel 45011.

It is interesting to have the settings of Shakespeare texts together on one disc, but this is a pleasant collection of Elizabethan airs and late pieces per se. Alfred Deller's counterpoint and Desmond Dupré's late playing.

Bronislaw Gimpel: "Impetral Kreidler." Vox vx 25151.

Original Kreidler compositions and transcriptions for the violin played with discreet orchestral accompaniments from the Pin Music Orchestra (Stuttgart) led by Curt Crocker. Gimpel gives a fine account of the music, but Rafael Drumé displays greater breadth and assurance on his accessory disc.

Guionar Novace: "This Is Novace." Vox vx 1.

A "Maximale," being a selection from Novace's previous recordings of Beethoven, Chopin, Liszt, Brahms, Schumann, Bach, Debussy, and Grieg. Excellent pianistic technique, coupled with singing tone and very fine coloristic abilities.

Continued on page 70

Texts of the poems, from which the post-readers frequently depart, are included. J.C.

THE LIVING TALMUD

Selections in Hebrew and in English, read by the translator, Judah Cabbid. **Moscow 12-A2. 12-in. \$5.95.**

Here Professor Cabbid endeavors to present to the public a glimpse into the labyrinthine maze of Jewish writings known as the Talmud. These writings are the monumental (or non-biblical) Hebrew literature written by learned and devout rabbis of a period ranging from about 300 B.C. until the year 500 A.D. Perhaps we could describe them as the Jewish counterpart of what Christians call the Church Fathers. One notable feature found among these writings is the *Pirke Aboi*, or *Wisdom of the Fathers*, in which there is considerable discussion as to the exact meaning of many passages in the Old Testament. Each rabbi lists the opinions of those who preceded him and concludes with his own opinion, thus adding to what the next generation would have to learn. It actually is not very unlike a divinity school course in Biblical criticism, at least as far as procedure is concerned. Much of it is historically important; some of it is interesting; and it is a good deal to do, as also are many of what is found in the Church Fathers and other patristic literature.

But Professor Cabbid is quite obviously thrilled with his subject—certainly the best requisite of good teaching. His style is academic rather than dramatic, but he has an admirable quality of speaking strength, not just strongly announcing it. He performs the remarkable feat of making Talmudic writing easy to listen to, at least I found it much easier to listen to the record than to read the same material in book form.

In Part II, on the second side of the record, Professor Cabbid gives a reading from the *Pirke Aboi* in the original Mishnaic Hebrew and delivers an interesting account of its language, which considerably differs from Biblical Hebrew. In the course of centuries the old barriers between Jew and Gentile in many ways broke down, and, as an inevitable result, many Greek and Latin words crept into the Hebrew of the Mishna. Just to add difficulty to difficulty the language also had undergone a change in pronunciation in the process.

This record will be of interest to devout Jews, especially to rabbis and others who enjoy the higher learning of their religious tradition. To some extent it also should interest any student of religion, whose number is increasing so rapidly these days.

WALTER B. WOODR, S.T.B.

**THE SONG OF SONGS
THE LETTERS OF HELOISE AND ABELARD**

Readings by Claire Bloom and Charles Rains, with Nancy Wickwire. **CARDON TC 1055. 12-in. \$5.95.**

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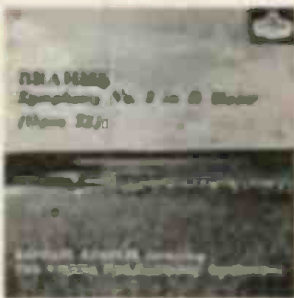
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Behind the juxtaposition on a single disc of these two quite unlike works—conceived here as an ancient Oriental epiphany of an extremely somnolent, and inert, kind; the other the self-conscious letters of two intensely intellectual, and ill-fated, lovers of the twelfth century—seems to be the editors' conviction that only such relatively insignificant factors permit the full communication of poetic emotion. It might be facile to suggest that from Strophe to Shakespeare, not to speak of modern writers, the "deep currents of passion" also seem to have run; and perhaps it is unimportant.

In the excerpts from *The Song of Songs* (also available, read in both Hebrew and English, on an Expensive Associates recording) Claude Lévi-Strauss makes a nice Sholemite maiden (if sometimes a bit baffled and bewildered, which a country girl of such a mighty patriarch's court very well might have been), and Claude Lévi-Strauss is a fine, Schuman to all his glory. A third voice apparently represents the Daughters of Jerusalem. It's impossible to grasp exactly what's transpiring, but in over two thousand years no one's offered a very reasonable explanation of this obscure poem in any case.

The explanation of the letters of Heloise and Abbeard is historical fact. The romantic story of their tragic love affair is well-known—on the jacket notes of this record. As a beautiful blue stocking of about 1140, Heloise was seduced by Peter Abbeard, distinguished theologian some twenty years her senior and a lawyer in the hope of her uncle and guardian, Fulbert, a cousin of Notre-Dame. After the birth of their child, a clandestine marriage took place. Not to interfere with Abbeard's career, Heloise then withdrew to a convent, of which she eventually became abbess. Charged by the whole town of evildoers, Fulbert had Abbeard arrested by thugs and castrated. The former lovers did not again meet but they wrote to each other, Heloise pouring out all the confessional feelings which even a nun's vows could not contain, Abbeard telling her, in effect, to just lay off on higher things. Abbeard died in 1142, Heloise in 1164; they are buried in the same tomb in the cemetery of St. Leu-des-Freres. The tale is a sorry one, woe and even bitterness, but these epistles are tremendously acclaimed among the world's greatest love letters, and presumably all the world loves a lover. J.G.

Also Received

Dr. Watson Meets Sherlock Holmes, *The Final Problem*, London 11, 1988, 12-in. \$3.00.

Famous Poems that Tell Great Stories, Decca 10, 00-05, 12-in. \$4.50.

Robert Graves, reading from his poetry and from *The White Goddess*, Columbia 10 1088, 12-in. \$5.95.

Arvo Part, reading 16th and 17th century and other verse by Parts of New York, Polygram 10 9703, 12-in. \$5.95.

Little and Learn German, Dover Publications, Three 10-in. \$4.95.

The West Coast Story: A documentary of a child's battle against leukemia, Polygram 10 2210 (produced for the American Cancer Society), 12-in. \$5.95.

FI MAN'S FANCY

by Philip C. Gevert

"Capricorn on the Caspian," Harry Farmer at the Hammond Organ, London 11, 1730.

Amidst the current crop of mighty Warblers, a slender laurel of jazz and class on the Warbler's electronic record counts in constantly refreshing. Harry Farmer is certainly adept with the Hammond. He rips through *Mexican Hot Dance and Samba Rite* with the same facility that he brings to Herold's *Zampa Overture* or the evocative film Richard's *William Tell*. His mastery of the instrument appears to be complete and unrelieved. It seems almost impossible that anyone could keep up such a continuous barrage of rising and falling 32nd notes as Harry does in *Zampa* and, to lesser degree, in *Straw's Flute Solo*. The recording is excellent—albeit wide in range and dynamic, indulgent in distortion.

"Coronad Music in III FL" Johnny Duffy at the Warbler organ, Liberty 10 1053.

Johnny Duffy offers a delightful mixture of easily-dance jump and bounce with rolling up-and-down melodies. At both he's a musician. His humor is irresistible. The Scotch *Madley* dances with fun and flair, and his amazing ballads (*Visiting Madley*, *Irish Madley*) are as sentimental and tender as a baby's spring evening. He handles the keys of an embowered "mighty Warbler" with supreme authority, and the recording is as full-bodied, lively, and dramatically potent as numbers displaying an athlete.

"The Electronic Organ Windery of Mark Leub," Golden Crest 10 3120.

This is a set of demonstration disc on which Mark Leub, a relative newcomer to the recording field, plays two pieces each on the at most popular electronic organ currently in use: the Baldwin, Conn. Hammond, Lowrey, Thomas, and Warbler. Organ lovers will find the record a surprisingly illuminating display. The music is light (*Like Me Again*, *You for You*, *Dandelion*) and well fitted to the particular instrument on display. On the first hand of side A, Leub plays a low strain of *You for You* on each organ. Golden Crest customers have watched this show-all record with show-off recording to its best tradition.

Continued on page 76

World of Entertainment

Here at Home

"For a Lazy Afternoon." Ned Wolfe. Vols. 1101. \$3.98.

One of the best recordings of pop piano I've heard in a long time. Ned Wolfe has taste and technique. He knows the chords, jazz, and Broadway—and dips into each for special effects. His arrangements are inventive and colored with exciting chords and a discreet background of guitar, bass, and drums. Mr. Wolfe may well turn out to be the most accomplished pop pianist to hit the contemporary trail since George Foyen.

"Fabulous Vintage Years in Music."

Various orchestras (see below). Keep. This excellent musical recording of pop tunes comprises seven LP records and ranges from the Nineties to the present.

The best of the lot is *The Fabulous Gay Nineties* (pop. 7000, \$4.98), which features the Cherry Hill Songsters and the New Dixie Gay 80's Orchestra. Tuned out with an attractive song book, it presents a wide selection of songs, well-played and sung, without the humming that can so easily destroy this music. Songs of the *Fabulous Thirties* (cat. 5004, two discs, \$7.98) to line as far as it goes, but it lamentably gives short shrift to swing. David Rose and his orchestra concentrate on the decade's sweet stuff. *The Fabulous Forties* (cat. 5003, two discs, \$7.98) and *Fabulous Fifties* (cat. 5002, two discs, \$7.98) are entrusted to the pianist Roger Williams, plus orchestra. I wish Mr. Williams could more for the music and less for his piano technology.

"Myra." Myra Fox. Liberty LSP 3050. \$3.98.

Myra Fox, a lady with a spirited voice, has drive in her rhythm numbers and electricity in her ballads. The slightly gusty quality of her voice is explained aptly by dramatic emphasis. Miss Fox obviously believes she owes her audience a performance, and she is well supported by Monty Kelly and his orchestra.

"Margaret Whiting Gets Places." Dot LSP 2072. \$3.98.

Miss Whiting has a solid brassy style for rhythm songs that suggests Ethel Merman. In addition—and this was a pleasant surprise—she has something for each member as *Over the Rainbow*. A few times, unfortunately, she had to fight the orchestra.

"Blue Star." Kay Starr. RCA Victor LSP 1840. \$3.98.

Kay Starr's ebullient, dancing style has lost none of its infectious bounce, pound-

Nobody Can Imitate Rudolf Friml Except Rudolf Friml

RUDOLF FRIML, whose enthusiasm somehow defies age, spent an hour or so the other day proving that no man is large enough for a man who clings to the operatic technique of story telling. Mr. Friml theoretically was narrating his adventures in the recent world under the empire of Westminster. Actually, the new record (*Friml Plays Friml*, featuring the composer as conductor of a symphony orchestra) was just a small portion of Mr. Friml's tale as he managed to leap—almost literally, as well as figuratively—over nearly seventy years of his life. For the creator of twenty-seven operettas—*High Society*, *Rose Marie*, *The Vealhead King*, *The Fanny*, and *Funny Face* among them—attacks a conversation with the delightful fervor of a Tin Pan Alley composer selling a song at the piano.

It is not enough for Mr. Friml to say that his orchestra's tempo lagged during a portion of his *Three Musketeers*. He stands, paces, and goes through ducking motions to explain the spirit of his work. He is not contented to announce that ballroom dancing today is improved. He kicks back his chair and gives a hilarious imitation of jostling and cha-cha, his small, spry body shuddering and bounding into lameness, his thin hair flying, his hazel eyes gleaming. Only the wavy mustache and huge ears remain unaffected. When he mentions one of his songs—any *Dreamy Serenade*, *Symphony*, *Indian Love Call*, *Rose Marie*, *Glorious Ma*—he sings it and conducts an imaginary orchestra (quite a large one, too).

As might be expected, Mr. Friml has strong convictions. Others may test the

Broadway musical and jazz as American art forms. The Prague-born composer literally smokes down his brother's nose. "What is the Broadway musical?" he demands. "It is a play with a little music. It has singers who are strictly people who can put over a comedy song, who have not much voice. The melodies are not for singers, they are for crooners. I think the beautiful ballad is a thing of the past. And jazz! I hate jazz. I'm fighting jazz. It's not music. And musicians who play jazz are not finished musicians. Things will have to change and go back to more serious music."



His songs are for singers, not crooners.

With only the briefest of pauses for breath, Mr. Friml reviewed his career. He became a composer by accident. His father, a halutz, had a few scholarships and went out and bought a piano. When you have a piano someone must play. This path led to the conservatory, the

orchestra of a ballet company, the study of composition under Dvorak. As a concert pianist he came to the United States early in the century with the Czech violinist Jan Křiváček. But it was on a subsequent trip to New York City that he attracted attention as a sort of musical freak billed as "the greatest improvisator since Mozart." He would hang out a few short classical bits, then members of the audience would scribble bits of music on cards and he would weave them into a series of improvisations.

Mr. Friml at this point in our conversation gave imitations of himself picking up cards, studying them at the piano, and playing. "It was very silly," he recalled, but it kept him alive while he tried song writing.

Life in the operetta world began, as might have been predicted, in a clash of temperament. He was asked to write an operetta for Emma Trentini. He and Miss Trentini hashed one another on sight. He turned out *Fanny* for her without exchanging a single courteous word. The closest she came to praising him was when she called him "that funny-looking guy." Mutual success created mutual tolerance, however, even admiration.

Mr. Friml became dreamy. He pulled at his ears. "I still write, you know." He dug into the pockets of a quarry jacket and exhibited pages that looked as if they had been ripped from small notebooks. On each of the papers was pre-cluded music. "I will never stop writing music," he vowed. "But," he added, "it will be music that is for real singers, not crooners." M.S.

ing rhythm, and luminous touches. Just right when company is truly in jobless background.

"To Smile the Savage." Babe Ruzita.
Dot MLP 3060 \$3.98.

Babe Ruzita, abetted by a contingent of strings, makes his tenor as rich, whisper, and coos through *I Surrender Dear, Body and Soul, Another Love, and other melodies of a similar stamp. He would sound even better with a lute of brass in the background.*

"Pet Beans Sing Irving Berlin." Dot
MLP 3977. \$3.98.

The unaffected and pleasant Mr. Beans continues to drift away from the jarring.

reliable-gulping world of rock 'n' roll. Here, however, he does not even quite pass of his style. He shows to better advantage on *Howe We Love* (Dot MLP 3065).

"Moonlight and Shadows." Ronnie Collier.
Dot MLP 3066. \$3.98.

An example of too much engineering spoiling the musical truth. Ronnie Collier has an unusually good, fresh voice. If it were left unengineered by the echo chamber, she would be in a class with Gladys MacKenzie, but as heard here in a collection of "sweet songs"—*Caroline Moon, Shine on Harvest Moon, and the like*—the effect leaves a good deal to be desired.

"Tanzania." Columbia ca. 1055. \$3.98.

This disc version of the television show is weakened by excessive reverb and too little dialogue. Alec Wilder's music, moreover, is not particularly inspired.

MURRAY SCHUMACH

Foreign Flavor

"Beer Garden Music." WJ Clabe and his Orchestra. London ca. 1710. \$3.98.

That beer tapping knows no frontiers is attested by the presence of German, Austrian, English, Bohemian, and American drinking customs in this captivating album. Courtliness is inherent in the music and in the warm, occasion-based treatment of Clabe's own. Their rickety version of *One Two Drink Up* is virtually guaranteed to drive you to the plain. To top the treat, London's engineers have never been in better form; the vocal is splendid.

"Belting!"—La Fiesta Bravo Vol. 4."

Rosita Taurina, Copaco Nunez, vocal.
Audio Fidelity MLP 1835. \$5.98.

The Rosita Taurina of Mexico makes another appearance under the Audio Fidelity banner to music of the curtila. In this fourth time around the hearing, the Rosita seems to be flagging. In any case, here they present a spirited run-through of a group of rancheras that can be characterized, charitably, only as second rate. Unless you are rabid to plumb the depths of this genre, you would do well to stick with Volumes 1 or 2 of this series. Good: bright, clear, ultra-modern.

"Holiday in Spain." Low Raymond Orchestra; vocals by Dina Castell and Mireia Anariz. Tapes 1. 1955. \$1.98.

Spain's Tape is collecting from a geographical miscellany of classic proportions, for less than half the selections on this disc had been the Florian Festivals. In addition, the unadorned soloists adhering the dance steps a comb-over melisma and a sweep-bath about as intelligent to Spain as Iceland.

These staggering quibbles aside, this assortment of Spanish and Latin-American tunes is extremely well chosen; there is not a dud among them. From the Chanson love song *Ay Ay Ay* to the Mexican ballad *concierto La Virgen de la Manzanilla*, all are classics of their kind. Low Raymond's consistent play with wavy, and vocalists Castell and Anariz sing with genuine conviction.

No one will find Spain in this collection of a record, but no one will fail to find a full range of entertainment. Yiddishers to the boss man the otherwise bright sound.

"Japanese Sketches." The Shin Ensemble of Tokyo. Rums Don, vocal. Capitol v 10123. \$4.95.

Composer Dorothy Geyer Britten, born in Japan and educated in England, has fashioned two groups of ten pieces—*Yuki Impressions and Yuki Fantasy*. Musically they impress me as a laugh-

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ing who of a sea-changed Vaughan Williams. Miss Britton has orchestrated her works for a mélange of Western and Japanese instruments, and the resultant sound, a composite of East and West, is possibly evocative of present-day Nippon. However, Miss Britton's shadings are perhaps a mile too distant, Japan is not a land of total tranquillity. Her calm portrait of Tokyo's turbulent Canal is a far cry from the horn-blowing, crowd-awakening Canal of my memory. Nor do her vignettes of the older Yoko period do justice to the interminable violence that convulsed it. But this is, literally, singing. In final effect, the works are moving and bear the stamp of a high mental integrity. Both the composer and Capitol deserve a loud huzzah for this portrait of a country that many an American GI has learned to love. The sound is exceptional, and Sirrus Dan's reading can be accepted as definitive.

"Parts of Pleasure." Les Baxter with his Chorus and Orchestra. Capitol 7 888. 64.98.

The verisimilitude of Les Baxter's Asian parts—as represented in this cycle of short two-piece—may be judged from the gay portrait he paints of Shanghai in a series of rollicking trading clichés. A happy rickshaw boy leads "a fair-skinned English lady in search of jeweled treasures." Well, in the Shanghai I know, fair-skinned English ladies were conspicuous by their absence and the only bargains available were in midnight alleys off Bubbling Well Road and Nan-king Lu. And today's Shanghai, from all reports, possesses all the gaiety of a large tractor factory.

Master Baxter's "Parts of Pleasure" comprise a slick and superficial musical travesty. From Hongkong to Saigon, he paints highly colored pictures of a lush Hollywood world that never really was. Nowhere is there an indication that he has drawn upon the actual musical idioms of any of the areas involved. The record's most realistic attribute is the stirring sound that frames it.

"Rendezvous Avee Liane." Liane, with the Bar Robinson Trio Vanguard 10012. 64.98.

Liane, the throaty, multilingual Viennese singer whose name is virtually a byword for Continental sophistication, returns with a repertoire of French songs of rather uneven quality. But Liane performs them all with a kind of lusty abandon and the Bar Robinson Trio supports her with smooth self-assertion.

"Borghese of Rome." Bud Wharton and his Monte Street Players. Liberty 100 3088. 61.98.

A lapping unctuous, happily free of dissonance, marks Bud Wharton's luscious recorded treatment of this set of Italian melodies. The tunes—of the order of Arturo Toscanini and Luca Ronconi—all have a rich Italian complexion, and all have proved remarkably durable.

Wharton, a Belgian who has served a hitch as Edith Piaf's accompanist, directs his men with a light but firm hand. However, someone in the group

is a virtuous whistler and Wharton tends to overdo a good thing by featuring him in every arrangement. Nevertheless, the disc is eminently listenable and features clean, well-balanced sound.

"Tango." Pedro Garcia and his Del Prado Orchestra. Audio Fidelity 4717 1108. 55.95.

After an ardent jacket description of the tango as a "glamorous backdrop for the glaze of love and desire," and as "irresistible in its romantic appeal," Audio Fidelity doesn't disappoint the hat-eyed purchaser. A series of dance diagrams on the same jacket shows even the most tangle-tortured eye how to join the Frenchie-derived fun.

Musically, the renowned Argentine

dance is admirably served by Pedro Garcia and his orchestra. Garcia's direction is simple, the orchestral tone is suave. The engineers have checked him with lightning states.

"The World's Favorite Love Songs." Montevant and his Orchestra. London 12 1742. 63.98.

Since this is the indelible Montevant's twenty-first LP for London, his is understandably running low on material, hence the presence of such titles as *And This Is My Beloved* and *Carlson's At Dinning*. Members of Montevant will dipart themselves in this verdant orchestral meadow, others with more jaundiced eyes will detect in it just another acre of tall corn. O. B. HARRINGTON.

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FI MAN'S FANCY

Continued from page 72

"Sounds of Steam Railroading," O. Winston Link Railway Productions. (No record number.)
"Railroad Sounds—Steam and Diesel," Audio Fidelity AF1P 1842.

Refined locomotive recordings have long held a special place in the hearts of dynamo-to-the-wool high-fidelity addicts simply because of the pure volume of crackling sound they carry. Here are two worthy additions to the railroad repertoire. The O. Winston Link production is perhaps more realistic in that it contains long passages filled with the sounds of far-distant steam engines puffing up steep inclines, cow scraping and coughing in the switch yard, accumulating train attendants occasionally forgetting not to cough, and evening whist, animal, and insect noises. The recording is good on the whole, but unfortunately it does not quite capture the deep, cavernous thundering of a real steam locomotive plunging full-throated around the bend. There is an such lack on the Audio Fidelity disc, which has some of the most overpowering (although at times overloaded) locomotive passages on record. The in-between passages are fewer, and are filled with more interesting—and more colorful—clatterings. This is done at some slight expense of realism, since high-level tapes have been spliced on in to produce an almost continuous deluge of sound, and one keeps anticipating a collision.

"Rhapsody of Baghdad—Music of the Middle East, Vol. 2," Mohammed El-Bakhar and his Oriental Ensemble, Audio Fidelity AF1P 1836.

This record is even more tempting and intriguing than the first volume of the series, Part 1. The wonderful brass chime piece rousing listeners and tantalizing listeners' backgrounds is pregnant with exotic excitement, and the crisp recording does full justice to the Arabian-like spell cast by Mohammed El-Bakhar's apparently broken band of music makers.

"Class Worktime Pipe Organ—Vol. 2," Louie Levy at the Chicago Hub Risk organ, Audio Fidelity AF1P 1829.

This record might well be called "Music to Chase It" were it not for the difficulty a slider might encounter when Louie Levy releases some of the more piercing percussive arrangements of the Hub Risk organ. He has a passion for hitting metallic phrases with traps, drums, sleighbells, chimes, and anything else he can get his nimble fingers on. The result is not altogether displeasing, though occasionally does stray a bit at times. If you have a normal head, sleazeballs, beach-taking shore-off organ, this disc is decidedly your dish. The recording has been well captured—the sound effects are delightfully realistic—and my pressing hadn't a flaw.

THE BEST OF JAZZ

by John S. Wilson

TOSHIKO AKIYOSHI: Her Trio Her Quartet
STEREOLAB 018 6498.

After two years' study in this country, this young Japanese pianist is developing a strong, assured attack and a sense of form not evident in her earlier work. On five of the eight selections on this disc, she is joined by alto saxophonist Bruce Mitchell who plays with such winning ease and intuition that any pianist less able than Miss Akiyoshi would have been completely overwhelmed. Between them, however, they make this an unusually satisfying disc.

HARRY ARNOLD AND HIS ORCHESTRA: The Jovialist Mystery Band
JAZZYONE 1270 6488.

Arnold is a Swedish avenger who has assembled a band which includes several of Sweden's best jazzmen—Arne Domnerus, Bengt Hallberg, Åke Persson, are among them. It has the sheen and power that are hallmarks of Ted Heath's band but a much stronger jazz urge; it shines through these performances with deservedly staggering assurance, swinging with a nerve power that hasn't been heard in an American band in years. Big band jazz isn't really dead. It has just moved to Sweden.

BARNEY BIGARD: Jazz Hall of Fame Series
LANCERY 3872 6388.

Bigard's mellow, New Orleans clarinet, which seemed to be running steadily downhill when he was with Louis Armstrong several years ago, returns in full flower here as part of one of the finest small groups to appear on discs in a long time. It includes Jackie Coon, who has a completely personal way of playing a driving traditional trumpet and is a rugged, strapping performer on the meliphone; Bruce MacDonald, a firm and versatile pianist; Bert Johnson, a hearty tubist; and a superb drummer, Charlie Linding. There are reflections of Bigard's association with both Ellington and Armstrong, but the general tone is direct, spirited swing capped by a beautiful recombination of *Mood Indigo*.

JOHN COLTRANE: Coltrane
PANTYER 7105 6488.

Coltrane's hard-boiled, hard-core saxophone moves with authority through the warrier trumpet lines and sings with fascinating confidence in an unusual treatment of a ballad, *White My Lady Sleeps*. Coltrane seems to have a greater sense of form than many of his blow-happy contemporaries, and he has the apt assistance of a pair of firm-centered pianists, Red Garland and Mal Waldron.

Dean Coltrane also is capable of humanity, as he demonstrates on one ballad, but he is an infinitely more developed and better integrated performer than the two horns which share front-line duties with him, trumpeter Johnny Splawn and baritone saxophonist Sahib Shihab.

DIZZY GILLESPIE AND STUFF SMITH
Vanguard 8214, \$4.98.

Juxtaposing two striking musical personalities is no guarantee that anything of consequence will happen; but in this instance Gillespie and Smith spark each other through two long, charming, ravagely swinging performances—*Rio Pakistan* and *Purple Sounds*—with the result that three less distinguished efforts can be overlooked. *Rio Pakistan*, in particular, is a magnificently sardonic, electrically charged mood piece built to haunting heights by Smith's slashing, enthralling attack. This is brilliant and breath-taking stuff.

TED HEATH AND HIS MUSIC: Tribute to the Fabulous Dorsey
London 1743, \$3.98.

Brisk, opulent versions of tunes associated with Tommy and Jimmy Dorsey, a few with tenuous jazz roots. Alto saxophonist Leslie Cilliers' immaculate, perceptive re-creation of *Oodles of Noodles* is probably the most apt memorial that Jimmy Dorsey could have.

ANDRE HODEIR: American Jazz with Play Andre Hodeir's Ensemble
Savoy 13104, \$4.98.

Hodeir, the French composer and critic, has written a series of "essays" performed on this disc by a group which includes Eddie Costa (playing earthy, blues-bred vibraphone), Idrees Suliman, Donald Byrd, Frank Rehak, Hal McKisick, and Bobby Jugns. Hodeir has hit a happy middle ground between the outright blowing session and the cramped quarters of the too tightly written work. He centers his attention on the ensemble, weaving his soloists in and out of a background written in skillfully idiomatic jazz terms. This, admittedly, is one of the older forms of jazz but it has fallen into neglect among modernists. Hodeir and his American musicians have brought it strikingly back into the spotlight on this disc.

JOHN LEWIS AND SACMA DISTEL: Afternoon in Paris
Atlantic 1207, \$4.98.

Recorded in Paris, Lewis is heard with two musically personable French jazzmen, guitarist Distel and tenor saxophonist Barney Wilen. Distel's playing is thoughtful, measured, and deeply expressive. Wilen is aggressive, biting, and has a commendable structural sense. The overall style of the group might be identified as unvarnished Modern Jazz Quartet—flowing but contained, free but controlled—with solos that are stringently stated but never overplayed. Wilen, at nineteen, seems particularly worth watching.

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Indian Summer; High Noon; Home On the Range; Indian Love Call; By the Waters of Minnetonka; Ramona; 8 others. LL 1722

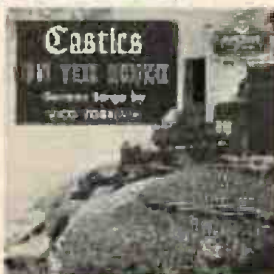


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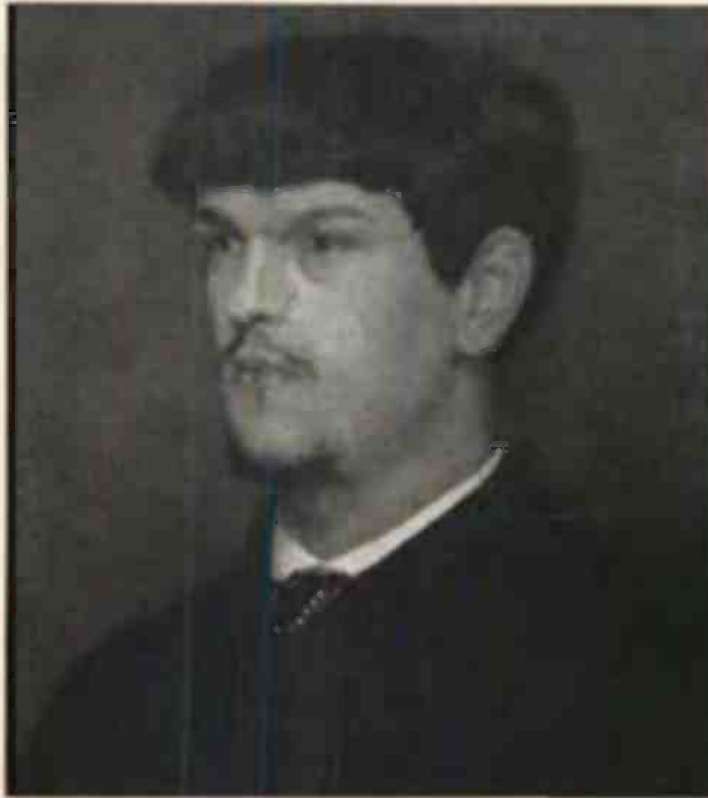
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HIGH FIDELITY DISCOGRAPHY No. 38

Debussy: *Orchestral and Vocal Music*

by ALFRED FRANKENSTEIN

Every forward step in the art of recording contributes especially to the advantage of a composer like Claude Debussy, whose music depends to so marked a degree upon subtleties of shading and color. An intelligent choice among the numerous discs of his works can not be determined solely by sonic merits, however. Some interpreters are notably important Debussyans, and an old recording by a Montreux or an Ansermet may be preferable to a new one by a conductor whose understanding of the music is less penetrating. This discography will attempt to evaluate all the factors—including such extraneous but important matters as the inclusion or omission of song texts—that should influence a choice of recorded versions of Debussy's orchestral and vocal music.

Under the heading of orchestral music are included Debussy's own works for orchestra, and piano pieces by him orchestrated by others. (I firmly decline, however, to take note of all the numerous orchestrated versions of *Clois de lune* from the *Suite Bergamasque*.) Under the heading of vocal music I include

songs, choral pieces, and stage works. Debussy's piano pieces and concerted chamber music will be dealt with in another discography at a future date.

When there is a choice between two or more recordings, they are listed in descending order of preference. All are twelve-inch micro-groove records currently and generally available in the United States, except as noted. Records not submitted for comparison in this study are marked with asterisks.

Except in the case of the *Children's Corner*, Debussy's only work originally published with an English title, all titles are given in French regardless of the language used on the record label or jacket. In incidental references and in listings, the unwieldy title *Prélude à l'après-midi d'un faneur* is abbreviated to its last word. Dates given are those of completion according to the current *Chronos*.

Comment is provided on certain relatively obscure works, but it is assumed that such compositions as *La Mer*, the *Nocturnes*, and *Pelléas* need no discussion.

ORIGINAL ORCHESTRAL WORKS

MARCHE ECOSSAISE (1891) (1 Edition)

This delightful, little-known piece was first written as a piano duet and published under the marvelous title *Marche des Anciens Comtes de Ross, dédiée à leur Descendance, le Général Meredith Ross, Grand-Croix de l'Ordre Royal du Redempteur*. Debussy orchestrated it about 1908. It is not simply a transcription of an old Scottish tune but a symphonic movement of some size in a free variation form. It sounds more like Borodin than like Debussy, but as Debussy himself remarked when it was resurrected years after he had forgotten it, *c'est jol!* The one performance and recording are extremely good.

-D. E. Inghelbrecht, Orchestre National de la Radiodiffusion Française. ANORA 35103 (with *Faune*; *Trois Nocturnes*). \$4.98 (or \$3.98).

PRELUDE A L'APRES MIDI D'UN FAUNE (1894) (14 Editions)

Of all the versions submitted for this study, the Markevitch is the most interesting because it is the least traditional. Perhaps because he has the bullet in mind, Markevitch's sonorities are less lush than the others' and his rhythms are a bit more alert; consequently he makes the music really sound like the afternoon of a fair and not like the afternoon of a retreat camp president mooning to his club.

The more traditional approach, with richer orchestral sound and more somnolent movement, is heartily upheld by Ormandy, Münch, Ansermet, Cantelli, and Inghelbrecht, whose recordings I should rate in that order, although they are all very close in quality. A choice between them is to be made usually on the basis of price and the other offerings on the disc.

The other editions submitted do not matter much. Stokowski's Victor version preserves a famous performance, but the recording shows its age. His recent Capitol version is laborious in tempo and mannered in style. The rest are weak in recording or interpretation or both.

-Igor Markevitch, Philharmonia Orchestra. ANCA 35151 (with Satie's *Parades*; Wolfer-Berlin's *Spécime de la rose*; Ravel's *Daphnis et Chloé*, Suite No. 2). \$4.98 (or \$3.98).

-Eugene Ormandy, Philadelphia Orchestra. COLUMBIA ML 5112 (with *Trois Nocturnes*; Ravel's *Daphnis et Chloé*, Suite No. 2). \$3.98.

-Charles Münch, Boston Symphony Orchestra, RCA Victor LM 1084 (with Ravel's *Ballets espagnols*; *Le Valais*. Disc is entitled "The Virtuoso Orchestra"). \$3.98.

-Ernest Ansermet, Orchestre de la Suisse Romande. LONDON LL 1552 (with *Danse macabre et profanes*; Ravel's *Introduction and Allegro*; *Alborada del gracioso*). \$3.98.

-Cigdo Cantelli, Philharmonia Orchestra. ANCA 35525 (with *Nuages*; *Fêtes*; Ravel's *Daphnis et Chloé*, Suite No. 2; *Revue pour une Infante allemande*). \$4.98 (or \$3.98).

-Inghelbrecht, Orchestre National de la Radiodiffusion Française. ANORA 35103 (with *Trois Nocturnes*; *Marche écossaise*). \$4.98 (or \$3.98).

-Leopold Stokowski, Symphony Orchestra. RCA Victor LM 1154 (with *Clair de lune*; *Trois Nocturnes*). \$3.98.

-Stokowski, Symphony Orchestra. Capitol, # 8398 (with *Clair de lune*; *Bach: Toccata and Fugue*, in D minor; Strauss: *Blue Danube Waltz*; Sibelius: *Finlandia*; Suen of *Tunela*. This disc is entitled "Leopold Stokowski's Landmarks of a Distinguished Career."). \$4.98.

-Paul Paray, Detroit Symphony Orchestra. Mercury MR 30101 (with *Madrigal*; *La Mer*). \$3.98.

-Wills Page, New Orchestral Society of Boston. COOK 10683 (with *Nuages*; *Fêtes*; *Dance*; *Berber*; *Adagio for Strings*; *Honegger: Pacific 231*). \$4.98.

-Jean Martinon, Orchestre des Concerts Lamoureux. EMI LC 3658 (with *Homage: Fests de l'Armignac*; Dukas: *L'Apprenti sorcier*; Honegger's *Pastorale d'été*; Faure's *Parade*). \$3.98.

-Joseph Berendt, Philharmonia Orchestra. ALLICHO 3079 (with piano works by Debussy). \$1.98.

-Karl List, Berlin Symphony Orchestra. ROYALE 1313 (with Ravel's *Boléro*). \$1.98.

-Bernardino Molinari, Orchestra of the Accademia di Santa Cecilia. TRURO 2038 (with *Trois Nocturnes*; *Clair de lune*; *Polish Festival*; *Liszt: Mephisto Waltz*). \$5.07.

TROIS NOCTURNES (1899) (8 Complete Editions; 3 Partial Editions)

Monteux's interpretation of this music might well serve as a textbook example of what one means by the phrase "Gaulic lucidity." Without sacrificing any of Debussy's impressionistic atmosphere, he gives us the orchestral texture as clear and transparent as Beethoven's; furthermore, he resists the temptation to linger, sentimentalize, or gush. Ormandy provides a richer sonority, superbly recorded. The Durati is very descriptive and individual in its profile. These three are the best.

Ansermet and Inghelbrecht have also been well recorded but seem a bit on the pedantic side. Stokowski takes excessive liberties with tempo and instrumental balance. Fajner's recording is rather mediocre. The indefensible, auto-didactic practice of omitting *Andrés* (the third *Nocturne*), with its wordless chorus, is followed by Cantelli, Page, and Ferrero.

-Mette Montoux, Boston Symphony Orchestra, RCA Victor LM 1030 (with *La Mer*). \$3.98.

-Ormandy, Philadelphia Orchestra. COLUMBIA ML 5112 (with *Faune*; Ravel's *Daphnis et Chloé*, Suite No. 2). \$3.98.

-Antal Dorati, Minneapolis Symphony Orchestra. Mercury 50005 (with *Berber: Roman Carnival Overture*; Ravel's *Faune*; *Alborada del gracioso*). \$3.98.

-Same, with Stravinsky: *Fire Bird*, Suite, Mercury 50025. \$3.98.

-Ansermet, Orchestre de la Suisse Romande. LONDON LL 388 (with Ravel's *Ballets espagnols*). \$3.98.

-Inghelbrecht, Orchestre National de la Radiodiffusion Française. ANORA 35103 (with *Faune*; *Marche écossaise*). \$4.98 (or \$3.98).

-Stokowski, Symphony Orchestra. RCA Victor LM 1154 (with *Faune*; *Clair de lune*). \$3.98.

-Jean Ponnart, Orchestre de la Société des Concerts du Conservatoire de Paris. EMI LC 3048 (with Ravel's *Ballets espagnols*; *Mouvet antique*). \$3.98.

-*Nuages and Fêtes only*. Cantelli, Philharmonia Orchestra. ANCA 35524 (with *Faune*; Ravel's *Daphnis et Chloé*, Suite No. 2). \$4.98 (or \$3.98).

-*Nuages and Fêtes only*. Page, New Orchestral Society of Boston. COOK 10683. \$4.98.

-*Nuages and Fêtes only*. Willy Ferrero, Italian Radio Orchestra. TRURO 2038 (with *Faune*; *Clair de lune*; *Polish Festival*; *Liszt: Mephisto Waltz*). \$5.07.

LA MER (1903) (11 Editions)

Much the same observations apply here as to the *Nocturnes*. Montoux provides the most lucid and transparent interpretation of them all. The orchestration is relatively heavy in *La Mer*, which is Debussy's closest approach to a symphony in the traditional sense of the word, but Montoux makes every sound tell with the utmost artistic economy, and the recording backs him up. Tomcanik, whose interpretation of *La Mer* was a speciality *de la maison*, takes a much bigger symphonic line; and his recording, despite its age, retains its subtlety and strength. A third interpretation of great authority and power, beautifully recorded, is that of Ansermet.

The Golshmann is a gorgeous recording of a soundly respectable performance. Columbia has also done extremely well by Rodzinski (at a bargain price too, on its new Harmony label) and Mitropoulos; as usual, the latter conductor's interpretation runs to exceptionally pungent extremes of tempo and dynamics. Inghelbrecht's wildly symphonic approach contrasts dramatically with the much more delicate, almost chamber-orchestra approach of Paray, since both conductors can (and probably do) claim the special French tradition, Erich Leinsdorf and Herbert von Karajan cannot claim the French tradition, but here again the contrast is marked. Leinsdorf's, to my ear, is much the more perceptive performance.

-Montoux, Boston Symphony Orchestra, RCA Victor LM 1030 (with *Trois Nocturnes*). \$3.98.

-Arturo Toscanini, NBC Symphony Orchestra, RCA Victor LM 1833 (with *Madrigal*). \$3.98.

-Ansermet, Orchestre de la Suisse Romande. LONDON LL 388 (with Ravel's *Marche Caprice* Suite). \$3.98.

-Vladimir Golshmann, St. Louis Symphony Orchestra. COLUMBIA ML 3153 (with Ravel's *Le Valais*; *Valais unies de cantonnements*). \$3.98.

-Dimitri Mitropoulos, New York Philharmonic. COLUMBIA ML 4434 (with *Madrigal*). \$3.98.

-Artur Rodzinski, Cleveland Orchestra. HARMONY ML 7058 (with *Enescu: Ru-*

musical Espagnoly No. 3; Louis Meylan's
Waltz). \$1.98.

—Inghelbrecht, Orchestre du Théâtre
des Champs-Élysées, London arr. 03017
(with *Libra*). \$1.98.

—Farey, Detroit Symphony Orchestra,
Muscovet arr 50101 (with *Faune*;
Libra). \$1.98.

—Erich Leinsdorf, Los Angeles Phil-
harmonic Orchestra, Carrara v 6389
(with Ravel; *Daphnis et Chloé*, Suite
No. 2). \$4.98.

—Herbert von Karajan, Philharmonic
Orchestra, Anton 35081 (with Ravel;
Espagnoly espagnole). \$4.98 (or \$3.98).

—"List, Berlin Symphony Orchestra,
Riviera 1601 (with Haydn; *Symphony*
No. 104). \$1.98.

IMAGES (1912) (Complete, 3 Editions)

The three orchestral Images spring from
Debussy's interest in folk music. The
first, *Gigue*, is English in inspiration
and the last, *Rondes de printemps*,
French; in between comes the famous
Libra. The folk color of *Libra* is much
more obvious and more picturesque than
that of the other two compositions in
the series, with the result that the
Spanish masterpiece is one of Debussy's
most popular creations while its English
and French counterparts are about in-
telligible unknown to the general public.
This is unfortunate, for *Gigue* and
Rondes de printemps are first-rate works,
the latter one of Debussy's most typically
diaphanous and "modern" sounding scores.

Of the three complete recordings, the
Argente deals most beautifully with the
logical orchestration, and Argente's per-
formance of *Gigue* and *Rondes de
printemps* is the strongest in rhythmic
line. But the Montoux remains the out-
stander in every respect. This is, in fact,
one of Montoux's most remarkable re-
cords. Despite its age, it still sounds ex-
traordinarily fine; it is one of Victor's
series of "Vault Treasures," and it con-
firms the truth of its label. I praise this
disc with a certain enthusiasm be-
cause I myself wrote its jacket notes,
at the same time, I do not wish to do
injustice to a great conductor and an
outstanding recording.

—Montoux, San Francisco Symphony
Orchestra, RCA Victor arr 1008. \$3.98.

—Edvard van Bezen, Amsterdam Con-
servatoire Orchestra, Epic ac 3147.
\$1.98.

—Maurice Arago, Orchestre de la Salle
Pleyel, London la 1735. \$2.98.

IMAGES (Items only) (3 Editions)

Farey traces briefly along the Spanish
highway, Inghelbrecht labors. Ormandy
has by far the best recording and pro-
vides a very fine performance. Toman's
interpretation is superbly unob-
scured, but the recording is old. Schöler
takes everyone else's dust.

—Ormandy, Philadelphia Orchestra, Ca-
lifornia arr 6434 (with *La Mer*). \$3.98.

—Toman, with Alberto: *Libra*, Columbia
ca 951. \$1.98.

—Toscanini, NBC Symphony Orchestra,
RCA Victor arr 1613 (with *La Mer*).
\$3.98.

—Farey, Detroit Symphony Orchestra,

Muscovet 50101 (with *Faune*, *La Mer*).
\$3.98.

—Inghelbrecht, Orchestre du Théâtre
des Champs-Élysées, London arr. 03017
(with *La Mer*). \$1.98.

—Johannes Schöler, Frankfurt Saxon Or-
chestra, Unasoa 7130 (with Alberto:
Libra). \$1.98.

WORKS FOR SOLO INSTRUMENTS AND ORCHESTRA

FANTASIE POUR PIANO ET ORCHESTRE (1890) (2 Editions)

A bland, sweet, unimportant concerto
in three movements which was neither
published nor performed during the
composer's lifetime and might well have
been left unstarted. Of the two re-
corded versions, the Lyricbird is decid-
edly the better both in performance and
recording.

—Helmuth Schöler, piano, Erich Klees,
Frankfurt Saxon Symphony Orchestra,
Lyricbird la 38 (with *Rhapsodie pour
orchestre avec saxophone*; *Clair de
Lune*). \$4.98.

—Fabrice Jaccard, piano, Anatole
Frenkel, Westminster Symphony Or-
chestra, M-G-M u 3080 (with *Passion:
Andale*). \$3.98.

DANCE SUTHER, DANCE PRELUDE (1904) (4 Editions)

These two dances for chamber lute
and string orchestra are quiet, polite,
classically evocative things, and they
tend to get a little dull in performance.
Vito attempts to compensate for this by
using a very free, rubato style of inter-
pretation, but that does not solve the
problem. Gradually is the best music-
ian to record the work, but the attend-
ant of his disc is Inghelbrecht is well
recorded but uninteresting, and the same
criticism applies to Starikov. In other



works, none of the existing records is
really good.

—Maxel Grandjean, harp, Sylvio
Lova, Victor String Orchestra, RCA
Columbia cas 328 (with Ravel; *Introduc-
tion and Allegro Hespé Solo* by Grand-
jean, Handel, Bach, Bell, Liszt, and
Franz Liszt, Dan) is entitled "The Art of
Maxel Grandjean,"). \$1.98.

—Edvard Van, harp, Strathairn Rec-
ords String Quartet, Strathairn 1007
(with Ravel; *Introduction and Allegro
Hespé Solo*; *Pavane*; *Pavane*; *Je-
pus*). \$4.98.

—Ann Mason Shickler, harp, Felix
Skiba, Concert Arts Orchestra, Cap-

itol v 8014 (with Ravel; *Introduction
and Allegro*; Schreberg, *Verklärte
Nacht*, Disc is entitled "Maxel Grand-
jean Solo,"). \$4.98.

—Flis Berglund, harp, Van Bezen,
Chamber Music Society of Amsterdam,
London la 1533 (with *Faune*; Ravel;
Introduction and Allegro; *Andale del
guitar*). \$1.98.

RAFAEL VEGA ORQUESTINA AVEC SAZO- PHONE (1903) (2 Editions)

Berglund has produced some marvelous
blowings, but none more fearful and
wonderful than Mrs. Ellen Hall, a
wealthy middle-aged lady who was play-
ing solo on the saxophone in the great
salon of each day around 1900 and
commissioned Debussy to write the
work. It is not one of his masterpieces,
but it has its moments; Debussy called
it a "Moonish" rhapsody, and that de-
scription will do in view of the exotic,
melancholic character of the music, in
which the saxophone can do more but
plays a very distinct role. Of the two
recorded performances, the De Vries is
much the stronger and more perceptive.

—Jules de Vries, saxophone, Klaus,
Frankfurt Saxon Symphony Orchestra,
Lyricbird la 38 (with *Clair de lune*;
Pavane pour piano et orchestre). \$4.98.

—Marcel Mabi, saxophone, Marcel
Korndorff, Paris Philharmonic Or-
chestra, Carrara v 8231 (with *Libra*; *Con-
certino de Camera*). 10-in. \$2.98.

PRELUDE RAPHODIE POUR ORQUESTRE AVEC CLARINETTE (1910) (1 Edition)

The clarinet rhapsody is Debussy's finest
work for a solo instrument with orches-
tra. He had served as a judge in the
wind instrument competition at the
Paris Conservatory; he liked the cre-
dents, was interested in the challenges
of the composer, and planned to write
a series of compositions expressing prob-
lems of virtuosity in his own transparent
and evocative style. Characteristically,
he dropped the project after completing
the first piece in the series, although
this is called the *Prelude* rhapsody,
there was never a *debut*. Kell's per-
formance is very fine, but it with piano.
Our hopes that he or some other top
clarinetist will step give us a recording
with orchestra.

—Reginald Kell, clarinet, Charles
Rena, piano, Decca 2670 (with *Hind-
emith*; *Sonata for Clarinet and Piano*;
Stravinsky; *Three Pieces for Clarinet
Solo*). \$3.98.

—Sizor, with Wippen Conrad Dan for
Clarinet and Piano, Schramm; *For-
maldehyde*; *Durra* 9741. \$2.98.

PIANO PIECES ORCHESTRATED BY OTHERS

PETER SUITE, BY BIZET (1899) (3 Editions)

All three versions are well recorded.
The Fournet is especially witty in inter-
pretation. Ravel elaborates upon the
romantic, Verklärte-erupt aspects of the
music, and with great refinement. *Stille*
trials toward a solo style, revealing
how often the *Pavane* solo is played in
total isolation.

—Fournet, Orchestre des Concerts Lamoureux, Epic LC 3165 (with Ravel's *Bacchus et Ariane*), \$3.98.
 —Fritz Reiner, NBC Symphony Orchestra, RCA Victor LM 724 (with Ravel's *Le Tombeau de Couperin*; Mendelssohn's *A Midsummer Night's Dream*, Suite), \$3.98.
 —Felix Sladkin, Concert Arts Orchestra, Capitol P 8328 (with *Children's Corner*), \$4.98.

DANCE, arr. Ravel (1890) (3 Editions)
 Ravel's orchestration makes this little piece, originally published under the Spitz-like title *Tarantelle Styrienne*, sound like an early sketch for *Fêtes*, the second of the *Trois Nocturnes*. The performance

is vigorous, the recording effectively brilliant.
 —Fuga, New Orchestral Society of Boston, Cook 10683 (with *Voages, Fêtes; Faune; Barcarol; Adagio for Strings; Hoerger's Pacific 231*), \$4.98.

CHILDREN'S CORNER, arr. Cluytens (1908) (4 Editions)
 The modest dimensions and slight sonorities of this children's suite do not lead themselves convincingly to orchestral treatment. Cluytens provides the best performance, but Sladkin has the best recording. If you really want a record of the *Children's Corner*, get one of the original piano versions.
 —André Cluytens, Orchestre National

de la Radio-Télévision Française, Anacet, 35172 (with *La Boite à sifflets*), \$4.98 (or \$3.98).
 —Sladkin, Concert Arts Orchestra, Capitol P 8328 (with *Petite suite*), \$4.98.
 —Stokowski, Symphony Orchestra, RCA Victor LM 9023 (with Tchaikovsky's *Nutcracker Suite*), \$3.98.
 —Fournet, Orchestre des Concerts Lamoureux, Epic LC 3289 (with Bizet's *Petite suite; Scherzo bohémien*), \$3.98.

SIX EPYGRAPHES ANTIQUES, arr. Ansermet (1914) (1 Edition)
 The *Petite suite, Danse, and Children's Corner* are slight works, but the *Six épygraphes antiques* constitute a big work, and in transcribing them Ansermet has given us a Debussyan orchestral masterpiece to set beside *La Mer* or the *Nocturnes*. They were sketched around 1897 as fragmentary accompaniments—for harp, celesta, and two flutes—to a reading of certain poems from the *Chansons de Balthus* of Pierre Louys. In 1914 Debussy rewrote these sketches as a suite for two pianos and stated his intention of orchestrating them, but the orchestral version was never produced; Ansermet has carried out Debussy's plan with brilliant success. The music is in the sensuous "antique" vein which was one of Debussy's most striking inventions; Ansermet has scored it precisely as Debussy himself would have arranged it, he performs it to perfection, and it has been well recorded. If the present discography draws nothing more than scant attention to this magnificent little known disc, its publication will be largely justified.
 —Ansermet, Orchestre de la Suisse Romande, London LL 992 (with *Jeux*), \$3.98.

BALLETS
Jeux (1912) (1 Edition)
 This ballet about a round game and numerous gags-up in connection therewith had the misfortune to be staged by Diaghilev just two weeks before the premiere of Stravinsky's *Sacre*; as a result, it was forgotten in the uproar, and it has not been paid a great deal of attention since that time. The music carries to an extreme the atomistic, mosaiclike technique in the handling of rhythm and orchestral color which is characteristic of Debussy's last years, and it therefore requires a conductor of exceptional capacity to keep it from falling apart. This it has in Ansermet, whose superb interpretation has been beautifully recorded.
 —Ansermet, Orchestre de la Suisse Romande, London LL 992 (with *Six épygraphes antiques*), \$3.98.

LA BOITE A JOUJONS (1913) (3 Editions)
 André Hallé, a designer of toys and author of children's books, induced Debussy to write this completely uncharming score for a toy-box ballet. Hallé's equally enchanting design for the stage set adorns the jacket of the Cluytens version; unfortunately, however, Cluytens' recording is markedly inferior to

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version, does the role with an unaffected purity of style that has somewhere between the other two. So far as the principal work are concerned, Angel has the edge; James is the smallest and most youthful-sounding of the three, and James is transcendent as Caland; in fact, Caland is the central figure of the Angel performance.

Amoroso, who conducts for London, underlines the mysterious, enigmatic, fatal, and pathetic aspects of the music. Fournet (Epic) lays greater stress on its dramatic values. His trumpets are more successful than Amoroso's and his palette of masses is sharper in its contrasts. Chytrus' interpretation (Angel) has less intellectual grandeur than the others. This conductor falls in behind the singers more often than his colleagues, but his version is still very strong in its lyric quality.

Chytrus has the best of the three recordings. Angel's sound has great depth, richness, and texture, but the other two are extremely good.

Amoroso takes eight sides, Fournet and Chytrus six, but all three present the entire story. Amoroso's sides are shorter, and if there is any truth to the idea that discs wear unevenly toward the center, they should last longer than Fournet's and Chytrus'.

London and Angel provide the Shostakovich in French and English. Epic does not. -Victoria de los Angeles (a), Miliuska, Françoise Ogier (a), Yehudi, Jeanne Collier (a), Gewandhaus, Jacques Janon (b), Pellias, Gerard Simey (b), Caland, Pierre Frenschky (b), Arlet, Jean Virelles (bc), Miliuska and Berger, Chytrus, Orchestre National de la Radio-Télévision Française and Chœur Symphonique St. Paul. ANTH. 3511, \$14.94.

-Suzanne Danco (a), Miliuska, Flaw Wood (a), Yehudi, Helene Bouvier (a), Gewandhaus, Pierre Mollet (b), Pellias, Helene Bouvier (bc), Caland, André Venet (bc), Arlet, David Olive (bc), Miliuska and Berger, Amoroso, Orchestre de la Salle Wanda, and Chœur. London U.S. 11, \$15.02.

-Janet Mitchell (a), Miliuska, Anah Simon (a), Yehudi, Rita Carr (aa), Gewandhaus, Camille Maurion (i), Pelias, Michel Roux (b), Caland, Xavier Duprez (bc), Arlet, Marcel Vigoroni (bc), Miliuska and Berger, Fournet, Orchestre des Concerts Lamoureux and Elizabeth Bouvier Choir. Epic or 6000, \$11.94.

La Morte en Sere Structure (1811)
(4 Editions)

Caland's Amoroso's work, a tragic mystery play is dead beyond all possibility of resurrection, but the large quantity of music which Debussy wrote for it seems to be growing in its appeal. This was when only the short suite from the Morte appeared on concert programs or on discs, but today on a single record of the suite is offered; instead, we have four versions of the complete score in stereo form.

The best of these, for general purposes, is the Amoroso. Amoroso gives us the music, with a few minor cuts, and in his jacket notes, he provides a de-

tailed sketch of the action and the full text of the song portions, in French and English. This is important, because one must understand the words to understand what Debussy is doing with them; and the score and libretto, both of them long out of print, may be secured only in large libraries. That Amoroso performs the work superbly almost goes without saying, since he is one of the most authoritative Debussists of the present day, and his recording is first class.

The Morte also is fairly recorded, but the performance is not as vivid as Amoroso's. The conductor reads some of the spoken lines of the play—rather dubiously provides a flavor of narrative between the musical portions. The full text employed appears in an inserted pamphlet.

Inghelbrecht's version is quite different from the others. Inghelbrecht believes that "the score must be mounted in the most striking pages of the text." This means that he adds words and parts of J'Amoroso, some of it typed over the music. As a result, Inghelbrecht takes four sides for his recording, while the other conductors need only two. His version is immensely effective if one understands the narrative, but a lone if one doesn't. Not a word of the text appears on the jacket, but the whole play can be found in the French magazine, L'Illustration Théâtrale No. 181, May 27, 1911, and this of this publication are not available in this country. (The text does not seem to be published in any other form.)

The Amoroso version is surprisingly good. The Oklahoma City Symphony is not one of the country's most celebrated orchestras, but it makes excellent sounds under the leadership of this excellent musician, now conductor of the San Antonio Symphony.

-Suzanne Danco, soprano; Henry Vaughn, mezzo; Léo de Camillelin, mezzo; Helene Bouvier de la Tour-A-Pelle, Amoroso, Orchestre de la Salle Wanda. London A 4103, \$4.98.

-Phyllis Curtis, soprano; Florence Kaplan, mezzo; Catherine Allen, mezzo; New England Conservatory Chorus; March, Boston Symphony Orchestra. RCA Victor LRP 3330, \$3.98.

-Clairmont Collier, soprano; Judith Collier, mezzo; Christiane Cayman, mezzo; André Falava, mezzo; Chœur de la Radio-Télévision and Télévision Française; Inghelbrecht, Orchestre du Théâtre des Champs-Élysées. London U.S. 3050-L, \$7.95.

-Francis Yeveah, soprano; Miriam Seymour, soprano; Anna Kahan, mezzo; Victor Abramson, Oklahoma City Symphony Orchestra and Chœur. ALHAMBRA-ELITE 804, \$3.98.

CHORAL WORK

La Damselle Elan (1885) (3 Editions)

Written on Debussy seems to be unaware of the fact that Dante Gabriel Rossetti's poem The Blessed Damozel was written as a reply to Poe's Sonnet. Poe hopefully mourns his "lost Lenore."

Bonatti's license is actually that last
 Levere waiting "at the gold bar of
 Heaven" for the author of *The Black
 Cat*.

All three versions are well sung and
 commendably well recorded, but the Victor
 is the liveliest in performance and has
 the finest sequence of notes. All three are
 sung in French. Victor and Columbia
 provide the text in English. London
 provides no text at all. The French text,
 rather strongly, is hard to come by,
 and it should have been given with all
 three of these records.

-Victoria de los Angeles, soprano, Ca-
 pol Spanish Opera, Radio City Choral So-
 ciety, Munich, Boston Symphony Or-
 chestra, RCA Victor 141 1047 (with
 British *Nights of Sicily*). \$3.98.

-Nath Stryan, soprano, Randall Nash,
 organ, Women's Chorus of the Univer-
 sity of Pennsylvania, Orchestra, Phila-
 delphia Orchestra, Columbia 34 4073
 (with Ravel: *Concerto for Piano, for the
 Left Hand*). \$3.98.

-Madeleine Gorge, soprano, Japanese
 July, organ, Inghilterra, Chorus and
 Orchestra of the Théâtre des Champs-
 Élysées, London 975 83000 (with *L'Es-
 tival japonais: Noël des enfants qui
 n'ont plus de parents*). \$3.98.

SONGS

Most of the songs by Debussy now
 available on American discs are con-
 tained in four collections, each made by
 a single artist. The reader will want to
 know the contents of each collection be-
 fore we proceed to comparing versions.
 They are as follows:

MARIE TOYTE IN FRENCH ART SONGS
 Alfred Cortot, piano. This collection,
 dubbed from a famous 78-gram set made
 about twenty years ago, is one of RCA
 Victor's "Vault Treasures" series. It con-
 tains thirty songs by Debussy from any
 other edition. Miss Toyte offers four
 song cycles, each comprising three songs,
 and single excerpts from two other cy-
 cles. The complete cycles are the *Filles
 malines*, *Les noces* and *Jeux* series,
 the *Trois chansons de Bédouin*, and the
Préludes de deux amants. The single
 songs are the *Ballets des femmes de
 Paris*, from the *Trois ballets de Fran-
 çois Villon*, and *De Grief*, from *Prélude
 symphonique*. RCA Victor 141 1011 (with
 songs by Duparc, Faure, Hahn, and Pales-
 tre). No text. \$3.98.

**Singing in Duet, Lament in Spanish
 and Hero Waltz**

Suzanne Dixon, soprano, Guido Agosti,
 piano. The Debussy side contains the six
 Artistic editions, the *Trois chansons de
 Bédouin*, and the three songs of the *Pré-
 ludes de deux amants*. London 11
 1120. Text in English only. \$3.98.

FRENCH SONGS

Mrs. Morrison, soprano, Gerald Manna,
 piano. *Trois chansons de Bédouin*, *Filles
 malines*, *Les noces*, and three other
 songs. *Musicalité*, *Ballets des femmes de
 Paris*, and the *let d'ore* from the *Cinq
 pastores de Charles Baudelaire*. Arizon,
 35217 (with songs by Berlioz, Faure,

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Chanson, Dupon, and Revet.) Text in French and English. \$4.95 (or \$7.95).

Sans Cyrcles, Fanny, Denise
 Hugues Cuervo, tenor, Jacqueline Man-
 card, piano. Artistic edition, and two
 single songs—L'Enlèvement des hairs,
 from the Trois collines, and Mandoline.
 Many of the French songs in this set
 employ the same texts as the songs by
 Debussy. Vancouver vol. 414. Text in
 French and English. \$4.95.

In the comments that follow, wherein
 each recorded song or cycle will be taken
 up in chronological order, the above
 collections will be referred to solely by
 the name of the singer.

Mandoline (1943) (2 Editions)
 Meriziani's interpretation of this early,
 Spanish-sounding song is faster in tempo
 and lighter in spirit than Cuervo's, but
 one cannot justly express a preference
 for either version.

**Artiste cubaine (1951) (2 Editions, one
 incomplete)**

Of the two artists who have done all
 six of these songs, Denise is the more
 subtle and plastic singer, Cuervo the
 more direct. As between songs and
 choros, I prefer the songs, especially
 since the cycle, dedicated to Mary Cas-
 dina, seems more suitable for a woman's
 voice than a man's. Teyssie, who has
 recorded the first three of the six songs,
 does them in a white, murmuring style,
 with marvelous piano accompaniment.
 The details regarding this singer are
 as follows:

—**Guillaume Teyssie**, soprano; Francis
 Poulenc, piano. Havaïe Sérénity vol. 154
 (with songs by Poulenc and Roussel).
 \$5.55.

**Le jet d'eau (from Choe Poèmes de
 Charles Simulohé, 1938)**

One of Debussy's longest songs, sung
 with wonderful sensitivity and color by
 Meriziani. She ought to do the entire
 cycle, especially since Jeanne Touret's
 recording of it is no longer to be had.

**L'Enlèvement des hairs (from Trois
 collines, 1901)**

The scheme of this Verlaine cycle is
 deftly sung by Cuervo.

**Filles galantes, first series (1952) (2
 Editions)**

Teyssie's treatment of the three songs is a
 bit of a classic, with every note per-
 fectly in place and every inflection of
 shading scrupulously observed. Meriziani's
 interpretation is the whiter, how-
 ever, and she makes some points with
 Verlaine's words and meanings.

**France Argentine (1953) (2 Editions, 1
 incomplete)**

Teyssie provides one song (De Cuba)
 from this dramatic and important cycle,
 but Cuervo does all four very beau-
 tifully, and her last program has been very
 well recorded. Unfortunately the sound
 of the piano is flat.

—**Véronique Cuervo**, soprano; Robert Ver-
 loren, piano. Music Legends T044 (with
 songs by Fauré). No text, \$5.00.

**Trois chansons de Bédouin (1947) (2 Edi-
 tions)**

At the risk of seeming ungrateful, I
 should like to vote for the Chansons de
 Bédouin as Debussy's best song cycle and
 for its leader, Le Tambour des saoudes,
 as his best single song. I have been
 listening to it, man and boy, for thirty
 years, and it never fails to produce its
 effect. The classic Teyssie-Cuervo ver-
 sion is still the best, but Meriziani
 and Denise make it beautiful. Meriziani
 with her dusky timbre and Denise with
 her fine lyrics. Only the Meriziani
 version provides Pierre Lamoignon's
 without an understanding of which this
 masterpiece is meaningless.

**Filles galantes, second series (1954) (1
 Edition)**

The choice is simple because there is no
 choice. Teyssie alone provides this beauti-
 ful cycle, sung with characteristic sensi-
 tivity, integrity, and simple tone.

**Trois ballades de François Villon (1910)
 (2 Editions, 2 incomplete)**

Here is one case wherein a male voice
 is not only preferable but necessary.
 Teyssie and Meriziani have done the
 Ballade des femmes de Paris as suitable,
 respectively, to a femme de Louvain and
 a femme de Los Angeles, but the music
 really calls for a man's voice. Meriziani
 does the complete cycle beautifully and
 in the original version, which adds
 conviction to the color and drama of
 the whole. Unfortunately the text is not
 provided, but Villon is almost always
 superb.

—**Camille Maurana**, baritone; Fauré,
 Orchestra des Concerts Colonne. EPC 12

2335 (with songs by Britten and Revet).
 \$2.95.

**Le Promenoir de deux amants (1910)
 (2 Editions)**

There is little to choose between Teyssie
 and Denise so far as this cycle is con-
 cerned; both do it superbly.

**Nuit des enfants qui n'ont plus de
 mères (1915) (1 Edition)**

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High Fidelity

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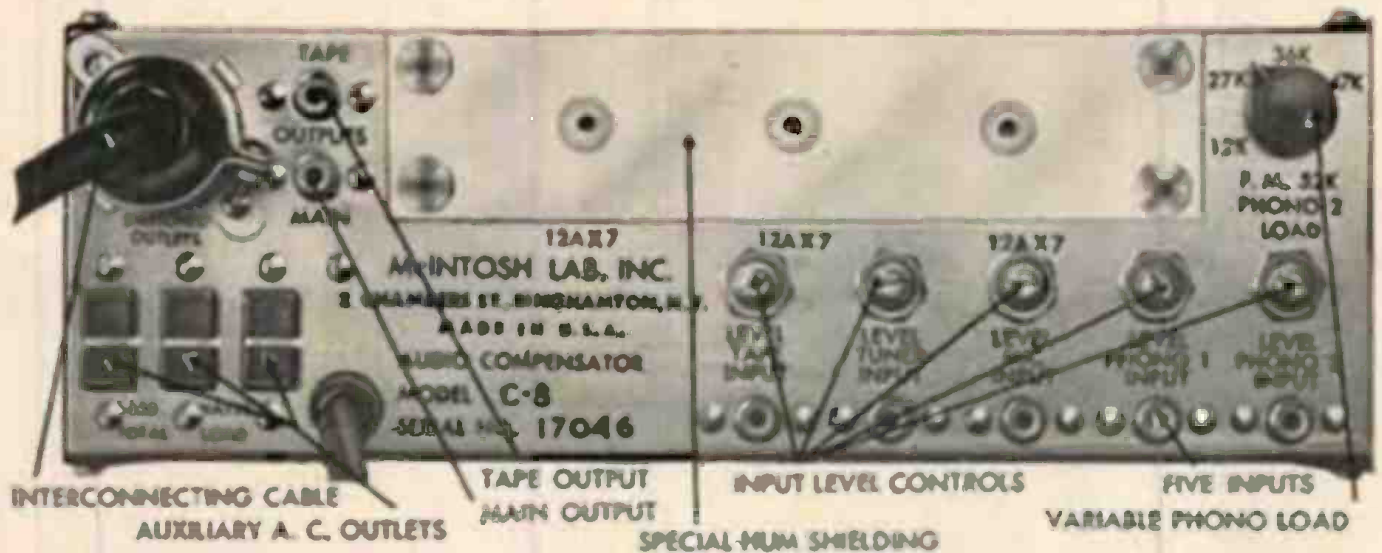
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HIGH FIDELITY MAGAZINE

STEREO

On a Change of Title

It was just twenty issues ago that HIGH FIDELITY launched a new department called "The Tape Deck" and entrusted it to that voracious veteran R. D. Darrrell. And it was just eighteen issues ago, in July 1956, that the first reviews of stereo tapes appeared on these pages. "Flabbergasting" was the word Mr. Darrrell used to describe his first experiences with stereo sound in his own home. Since then thousands of other listeners have had the same enraptured reaction. Nothing has so surprised the equipment and recording industries as the accelerating tempo of stereo tape sales in the last year and a half. When Mr. Darrrell reviewed his first stereo tapes, they were very much a novelty. Only one of the major record companies, RCA Victor, was then issuing stereo tapes, and it was doing so on a purely experimental basis. Today almost every important record maker is in the stereo business. And as the stereo repertoire grows, so does the market for it. It is estimated that the number of stereo playback sets is now increasing at the rate of 5,000 to 10,000 units a month.

All this is by way of prelude to announcing that "The

Tape Deck" is being retired in favor of the more "Stereo." The change reflects our conviction that the future of recorded tape is inextricably linked with stereo sound. As a medium for the reproduction of music in the home, recorded tape's chief reason for being is its ability to carry—with superb fidelity—the two channels of sound necessary for stereo listening. The change of title, however, also signifies the editors' awareness that tape is not the sole medium for stereo sound. Before too long, perhaps later this year, the first stogie-groove stereo discs will be on the market. How they will compare in quality of sound to the best stereo tapes, no one knows. This department will, naturally, begin to carry reviews of stereo discs as soon as they become available.

Along with the change of title comes an enlargement of coverage. A single reviewer can no longer cope comfortably with the full weight of the stereo avalanche. Accordingly, beginning with this issue, Mr. Darrrell's reviews will be supplemented by those of other HIGH FIDELITY reviewers who have "gone stereo." In addition, the expanded department will contain a monthly "Stereo Forum" and an occasional report on new stereo equipment.

ROLAND CELATTY

Note: All stereo tapes reviewed are 7.5 ips and—unless specifically noted otherwise—are on 7-in. reels. The timing indications are for the complete length of the musical program, including pauses between movements or selections, and are rounded off to the nearest minute. If a date in parentheses is appended to the review, it refers to the issue of HIGH FIDELITY in which the corresponding disc review appeared.

- • BACH: *Preludes and Fugues in A minor, S. 544, in E minor, S. 533, Chorale (Schubler) No. 1, S. 645 ("Wachet and"), Sonata No. 4, in E minor, S. 536*

Carl Weinrich, organ.
STEREOTAPE OVER 1825, 20 min. \$11.95.

This second stereo release in the Steinway-Westminster Bach organ-works series includes two works (S. 533 and S. 543) heard earlier on LPs (the *Preludes and Fugue* collection was 1847 and 1848 respectively), plus two others not yet available in disc edition. As far as the performances themselves are concerned, they are not calculated to change any Bachian listener's preconceived notions of Weinrich: those who consider him methodical will find him so, while those who

like myself, which his precision will delight even in his freedom from phrasing conventions and in his ability to sustain the unrolled flow and daring momentum of Bach's long-extended, intricately-voiced contrapuntal workmanship.

In any case it is the superb sound quality of the recording which is most exciting. The superb differentiation of infinitesimally varied tonal colorings, the clarity of pedal passages (achieved without any "mudding" of the upper voices), and the dramatic pulse of energy in nearly every note (the tape is sparkling and satisfying home-listening experience. (REV 1847 and 1848, *Bach Discography*, Oct. 1957.)

R. D. DARRRELL

- • BEETHOVEN: *Concerto for Piano and Orchestra, No. 2, in B flat, Op. 19*

Robert Goldsagel, piano; Frankfurt Opera Orchestra, Carl Blumhagen, cond.
CONCERT HALL ON 2L 20 min. \$11.95.

As every literate pianist who has been blessed by one of Beethoven's "Grand" piano concertos actually has written a couple of years before the "First," yet the rubric in numbering is lustily justified, for the B flat work certainly is more "serious" and ambitious than the more immediately captivating, youthfully exuberant concerto in C. For this

reason alone the present Goldsagel-Blumhagen performance is likely to be but startling on first hearing than the same artist's naturally given and wisely modulated No. 1 (reviewed here May 1957, now retranscribed as LX 23). Again Goldsagel plays with vigor yet always elegant strength, and Blumhagen accompanies with broad, well-controlled energy. There is little *bravura* here, to be sure, but there does not seem, if any, to be the decidedly introspective *ritardando*. And, as before, the strong open receding and overblown accents, with the piano located well left of center, do fall three-quarters back to the *ritardando*, extremely pure, clear piano tone and the dark *argando* of the Frankfurt orchestra. R.D.D.

- • BRAHMS: *Concerto for Violin and Orchestra, in D, Op. 77*

Krista Altschul, violin; Philadelphia Symphony Orchestra of London, Arthur Schnabel, cond.
STEREOTAPE OVER 8002, 27 min. \$17.95.

Although Miss Altschul plays well and Dr. Schnabel conducts every bit as well as in their Teichoway concerto (heard in words last June) and although the re-

Continued on next page

ending in an even transparent and well-balanced conclusion, the present work (with the possible exception of its *Allergo* piano finale) seems to me much less well adapted to the gypsy levity of Miss Horowitz's style. Timing unexceptional with the Heifetz-Horowitz stereo taping (not traced here July 1958) or (dramatizing, for although Heifetz never strikes one as at all hurried, his performance over-all runs over three and a half minutes faster. It is of course quite legitimate to play the work considerably more slowly, as Olszewski and Hochberg do in the Concert Hall stereo tape (recorded June 1957, now reissued as 20), but then the greater pace should be matched by greater breadth and Copland's subtlety, as it is there. However, once the charge of "no-Brahmsian" has been leveled at the present version, there remains nothing but praise for the otherwise artistic performance itself, and the highest praise of all for its Garden recording. (Also available on LP as Westminster even 1800.) R.D.D.

• • GRIEG: *Concerto for Piano and Orchestra, in A Minor, Op. 16*

Artur Schnabel, piano, RCA Victor Symphony Orchestra, Alfred Wallenstein, cond.
RCA Victor, cat. 67, 20 min. 612.95

If the prospect of Mr. Schnabel and eight or more feet of Steinway making a wide appearance in your living room creates apprehension, this tape played on high-quality equipment should immediately destroy any such qualms. The presence is outstanding, with the piano as large as life and the orchestra only slightly less so. The performance is the distinguished one Schnabel has recorded before and played to concert. I stick with increasing confidence, for years, Wallenstein and the Victor orchestra, probably NBC Symphony men, provide a first-class accompaniment.

ROBERT CHARLES MASON

• • HAYDN: *Quartet for Strings No. 11, in F, Op. 2, No. 5—See Schubert: Quartet for Strings No. 10, in E flat, Op. 125, No. 1.*

• • IBERT: *Disengagement*

Russian Pops Orchestra, Arthur Fiedler, cond.
RCA Victor, cat. 34, 14 min. 66.95

• • IBERT: *Karols*

Russian Symphony Orchestra, Charles Munch, cond.
RCA Victor, cat. 87, 15 min. 68.95

Could humor be not unresponsive to what we are wont to call "serious" music, but instead humor is conspicuously rare, and a combination of the two types very unusual indeed. The present example first shocked and delighted American disappales nearly twenty years ago when Fiedler brought the well-named *Disengagement* to this. And now, two

decades later, his crack-club reading, sharpened and brought to maximum by electrifying stereo audio, is more delightfully shocking than ever. This is real circus stuff, complete with the usual equivalents of circus' grunts but the superb blend of stereo locality and reverberant Symphony Hall acoustics reveals a hilarious unexpected quality and glowing warmth in both Ibert's subtle scoring and the Russians' gradually victorious performance. (Originally released on LP in cat 2854, together with *Le Bourgeois fantasme* and *The Incredible Flute*, May 1957.)

The same engineering and orchestral mastery also are lavished on Ibert's more conventionally serious tragedy of *Madame Sans-Gêne* (see page 10), *Les cales*. And if here the composer includes the hyperbolic devices of Debussy and others, the orchestration works no less believably (and even more delightfully) nuanced a total palette. I wish that Munch's spasmodic reading were as relaxed and expansive in its spastic passages as it is frenetic in the local ones. Yet this is what is a recorded performance which approaches as nearly as this one the dynamic and timbre range of concert-hall experience. (Originally released on LP in cat 2111, coupled with Debussy's *Le Mer.*) R.D.D.

• • LISZT: *Mephiste Waltz*

Vienna State Opera Orchestra, Hermann Scherchen, cond.
Sovraphon cat. 7087, 13 min. 66.95

Apart from noting that Scherchen's performance is considerably broader, if not less vital, than Reiner's (RCA Victor, cat. 25, recorded here three months ago), I hesitate to make a decisive choice between them, both conductors give the music a rather than diabolical elements to the music and while the recorded sound qualities are distinctively different, the slightly greater humanity and piety of Scherchen's handling can be claimed to be superior to the more sharply focused Reiner work. If pushed I might give the narrowest of edges to Scherchen—mainly because I find his version a whole more atmospheric in the yearning slow passages and a shade more exciting in the agitated ones, despite the fact that over-all his reading runs about two minutes longer. R.D.D.

• • OFFENBACH: *"Rendez-Vous" (Nocturne)*

Vienna State Opera Orchestra, Josef Dvorak, cond.
Lyricorham 720 BN, 20 min. 611.95

• • OFFENBACH: *Les Contes d'Hoffmann: Introduction, Minuet, and Bourgeois Ophelia and other Overtures*

Russian Pops Orchestra, Arthur Fiedler, cond.
RCA Victor, cat. 68, 18 min. 66.95

Even here we (temporarily) propounded against specific passages are likely to

be drawn on two counts by Dvorak's *Rendez-Vous* with Offenbach: first, by the association with which it brings together no less than thirty-two crucial crucial talents (from no less than fifteen stage works (including many used in *Gala Performances*, but also many others, such as *Les Contes d'Hoffmann*, *M. et Mme. Drole*, *Paul et Virginie*, etc., even to be unfamiliar to most Americans); second, by the fact that almost everything in it (always discounting the inevitable Bourgeois) boasts the finest Orchestration ever and is played with obvious skill and brilliant fluency. The orchestra itself is not particularly distinguished by whose hand operates, but it sounds considerably better than it probably is, thanks to ample reverberation and exceedingly brilliant, high-level, dramatically developed stereo recording.

Fiedler's own play with score and solo beauty in his choice, more orchestral program (originally based in the large LP collection, Offenbach in America, cat 1950), and the recording here also is strong and reverberant, if at a less extreme modulation level. The two virtuosos and varied ensembles itself command one's attention less insistently, but few eyes or ears are likely ever to have heard it performed with comparable locality and force. (Dec. 1958.) R.D.D.

• • RAVEL: *Balade*

Vienna State Opera Orchestra, Hermann Scherchen, cond.
Sovraphon cat. 7088, 14 min. 66.95

I have long assumed that the galvanic effect of Ravel's *tour de force* became progressively dulled with repeated hearings, yet the initial heat of the present tape immediately reawakened my attention: instead of the expected crisp abstract presentation of the basic outlines (in fact, there is a lighter, looser, almost less-than quality here which, on re-hearing the introduction by Irving Kolko, I have traced from the employment of *troubadour*-*baguette*, belonging to the original orchestration, rather than the usually substituted *corn d'ivoire*). Presumably, then, the present odd choice is what Ravel really wanted. At any rate, it gives extraordinary individuality to Scherchen's performance—as individuality further accentuated by the serious intensity which animates his reading throughout. R.D.D.

• • SCHUBERT: *Quartet for Strings No. 10, in E flat, Op. 125, No. 1: Allegro: Quartet for Strings No. 11, in F, Op. 2, No. 5*

Five Arts Quartet.
Columbia 22-54, 32 min. 611.95

The Haydn, so early but by no means juvenile piece, and the Schubert, a mature and strongly built work, have provided excellent food for dark ears.

On this tape one senses the characteristic pattern of the quartet, although all four

Continued on page 92

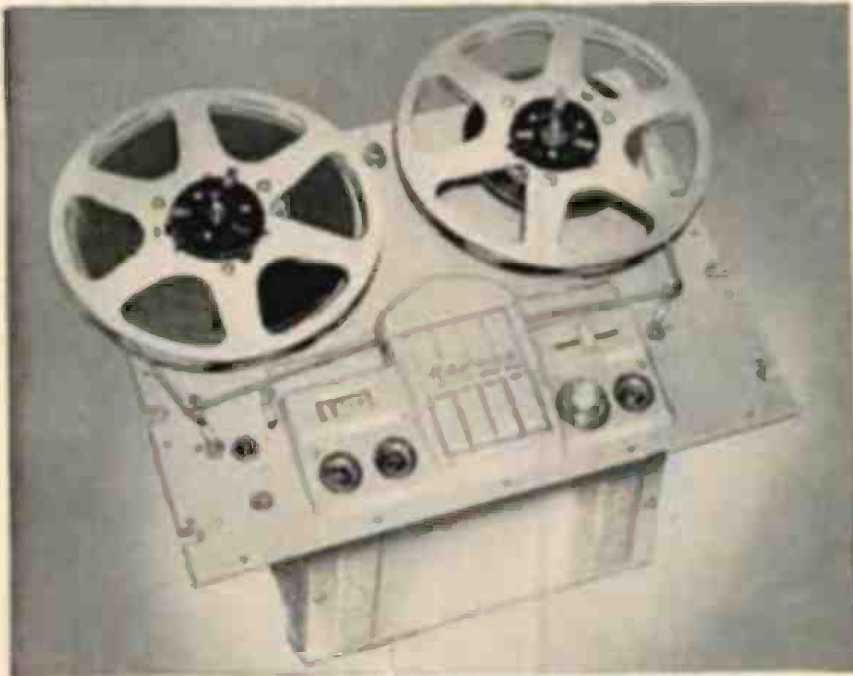
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Certainly the Schubert registers forcefully its amazing minute-creches with a grotesquely accented rhythm in cut-overline, the slow movement lacks finely delineated depths of feeling, and the finale overflows with one of those high speed thrills typical of the composer. Throughout what one hears is the sound of a first-rate quartet, which is what it should be. R.C.M.

• • STRAUSS, RICHARD: *Der Eifer der Edelmänner*, Op. 46, Suite

Chicago Symphony Orchestra, Fritz Reiner, cond.
RCA Victor cat. 43, 30 min. \$12.95.

Reiner's reading of this suite apparently has been widely popular, long in a Columbia version with the Pittsburgh Symphony, more recently in the present recording (originally included in an LP Strauss anthology, LM 6407), but for me both the music and this interpretation would profit by more gentility and fewer mannerisms. Even in string, to-bernered staves, which does reveal better than ever before a multitude of important scoring details, the occasional touches of wicker hammers were accentuated rather than lightened. Probably other listeners will find much more here to enjoy than I do, but if as they also are likely to be more seriously disturbed by the inexplicable omission of two pieces—the Minuet of Lully and the Courante—called for in the score of the complete suite. (Nov. 1968.) R.D.D.

• • TCHAIKOVSKY: *Francesca da Rimini*, Op. 32

Boston Symphony Orchestra, Charles Munch, cond.
RCA Victor cat. 51, 23 min. \$12.95.

Munch's characteristic broadness and volume strike me as far better temperamentally suited to this dramatic Donizetti love piece than they were in the *Romeo and Juliet* fantasy (reviewed here in the stereo version March 1967) with which it was coupled on the LM 2043 LP. And since the Bostonian performance is another masterpiece of finely controlled, hardly colored sonority, captured in string and brass stereo recording, the present taping must rank near if not at the very top of this conductor's extensive repertory. (April 1967.) R.D.D.

• • VERDI: *Aida*, Dance of the Priests, Act 1; Grand March and Ballet Music, Act 11

Venice State Opera Orchestra, Armando Alberti, cond.
SINGTAPE SWS 7011, 13 min. \$6.95.

These are well-paced, thoroughly memorable performances, not equal to Toscanini's—needed to say—last perfectly

enjoyable. The crowd helps a bit. The calls here in the Act 11 Ballade is especially warm and vibrant, and the trumpets, as they do in the opera house, position their famous melody well apart from the rest of the orchestra. Unfortunately, the trumpets were do not sound like the brilliant, metallic "Aida trumpets" prescribed by Verdi.

The tape is confusingly labeled. It is billed merely as "Aida: Triumphant March and Ballet Music." Actually it opens with the Act 11 March, goes on to the succeeding ballet sequence, and then—putting its opera in reverse, so to speak—finishes up with the "Dance of the Priests" from the Temple Scene in Act 1. ROLAND COLATT

• • WAGNER: *Tannhäuser Overture; Venusberg Music*

Boston Symphony Orchestra, Charles Munch, cond.
RCA Victor cat. 53, 21 min. \$9.95.

Definitely a Götter kind of Wagnerian, brightly brassy, chic. There is some historical justice in this, for the Venusberg Music was written expressly for Paris. Moreover, the French touch is by no means ineffective. But listeners who expect the Wurlburg and discover instead the Opéra may find it at first a bit disappointing.

The Overture dates from 1845, the Venusberg Music from 1861. No transition in the whole literature of music is more exciting than the few bars that link this jump of almost 16 years. From the earnest, Weber-inspired, rather plodding overture of 1845 one is suddenly transported to the voluptuous (orchestration of 1861, from the fledgling composer to the genius who had just finished *Tristan*). In stereo the effect is tremendous. No single channel recording gets out the strength of the Bachman with the clarity and impact of this one. R.G.

REEL MUSIC NOTES

CAPRA: *Kismet* in HI-FI, plus stereo, was the juke jumping over onto vinyl (and the LP (in 784) of the same performance), or any previous *Kismet* recordings for that matter. Even listeners who find the *Intermission* and *End of the Show* surprisingly serious may discover sprightly exhilaration and even some atmospheric lyricism in *Artistry*, *Jump* and *Interlude*, which ought more attractively the lullaby and clarity of the present stereo recording. (• • no 10, 24 min., \$12.95.)

CONRAD: Phil Silver's collaboration with *Sounding Brass* seems to be that of involvement again only, for this program of Nelson Riddle compositions is played by a big band led by My Sharkey. Possibly some of the pieces have been used in the Silver TV program, for which they are originally written in that they all derive their character materials from traditional Army big band style. Rather too parsimoniously busy (except for the balladlike *Two Arms and Come As You*

Are) for straight dance music and hardly hot enough for true jazz, they nevertheless make surprisingly diverting listening, thanks largely to Riddle's imagination. Frank Constanak's and Warren Barber's ingenious scoring, and the suitably clean stereo recording (• • ju 9, 23 min., \$12.95, also available on LP as ca. 1011). See Buddy Cole's *Phon*, *Podols* and *Fidelity* is likely to have even three-organ divisions by its scores of unheard and vicious fireworks, a lack of over-embellishment which even stereo cannot compensate for, and uncharacteristically varied registrations (• • ju 2, 30 min., \$12.95).

MONTY: Despite the title of *Monty for HI-FI Days*, Pete Rugolo's big-band jazz program is not disguised by recording tricks: the making is not too about the previous group is properly cleaned, although wistfully crisp and clear, and the well-balanced stereo blend captures the big energies with sufficient realism. Some of the performers, however, are over-the-top and over-the-top in *Constantly* anyway. I find that the banjo, catchily playing in *Fantasy Meeting You and Later Tonight*, and the vibrant guitar hits throughout (• • ju 2, 23 min., \$12.95, also available on LP in *Easy* on Jan. 1967).

RCA VICTOR: There are no surprises in *Walter Gull's World's Best-Loved Waltzes*, *Tchaikovsky's Sleeping Beauty*, *Lohr's Gold and Silver*, and *Straw's Phaedra* are conventional enough "cut" pop performances, if a bit better-handled than the best of their kind; and the conductor's own arrangement of *Debussy's Vierge* has its typical Gullish scoring (selective and equally typical over-embellishment). Some of the bestness, though, is probably as much the responsibility of the rather over-the-top recording as it is of the playing itself (• • cat 52, 20 min., \$9.95, also available on LP in LM 2072). But the *Arno Brothers' Sweet Sorcerer* really is a surprise, at least to one who ordinarily doubts such quartets. For these pop characters are not only more pleasant voices but also more with imagination, infectious excitement, particularly in the title song and *I'm Beginning to See the Light*. Moreover, they don't hog the spotlight, but let Bill Flanagan's high-spirited little orchestra be heard alone for considerable stretches. (• • cat 73, 24 min., \$10.95, also available on LP in LM 1967.) R.D.D.

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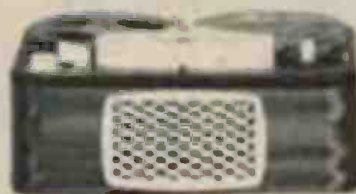
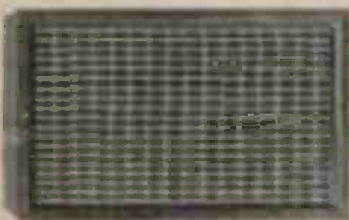
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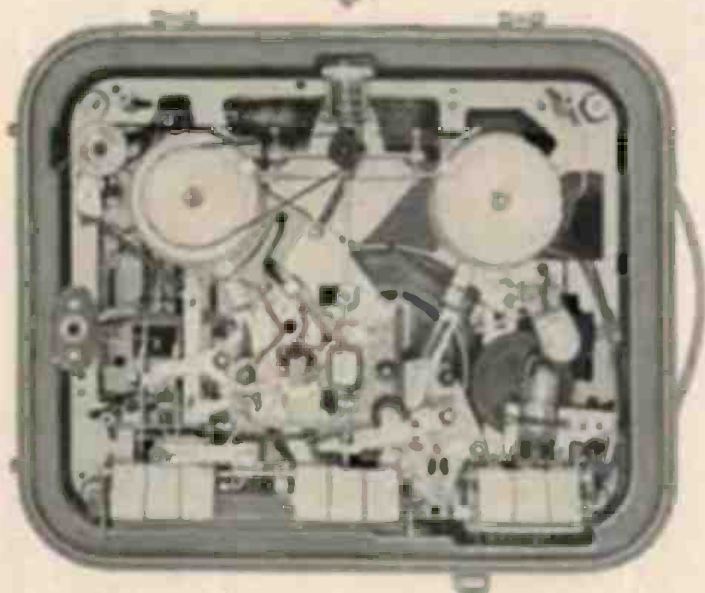
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I'm wondering whether I have to anticipate a similar problem in stereo-phonie reproduction.

C. A. Wendell
Brooklyn, N. Y.

Emphatically (and thankfully) not. Standardized recording and reproducing characteristics for the 15-inch tape speed were adopted some years ago. The same playback characteristic has recently been adopted as the unofficial standard for 7.5-inch tapes, so all American commercially recorded tapes, both single channel and stereo, should be played back with NARTB (originally called Ampex) equalization. The equalization circuits in nearly all domestic tape playback-only equipment and practically all current American tape recorders are designed to meet this standard. Proper equalization now is a problem only for owners of certain older types of tape recorders or for owners of some British or European tape equipments and/or recorded tapes. In many such cases, however, it is quite practicable to have the older circuits reamped—by the original manufacturer or a competent technician—to bring the equalization facilities into conformity with the NARTB standard.

Wow (of a Special Type)

Sam:

Out of fourteen stereo tapes tested so far, two developed terrific "wow" which, I understand, is due to tape stretch. What has been done to cope with this problem?

James W. Clark
Detroit, Mich.

Although it sounds plausible, your diagnosis of your case trouble is almost certainly wrong. There is extremely little stretch in acetate-base tapes, which, as far as we can learn, are used exclusively in commercial releases of both single-channel and stereo tapes. (Mylar-based tapes are somewhat more susceptible to stretch although they have much greater breaking strength and are less affected by adverse humidity and temperature conditions.) Assuming that your drive motor is operating properly (which is probably the case, since the majority of your stereo tapes can be reproduced without wow), we think the trouble undoubtedly is caused by either somewhat "sticky" tape guides and heads or tapes, or by a combination of both. The remedy for the former is thorough cleaning of guides, heads, and capstan; for the latter, the additional use of a silicone-type lubricant on the guides and heads alone (definitely not on the capstan or drive shaft).

The cleaning should be done regu-

lery, after any every five hours or so at tape-deck use, with a cotton swab dipped in isopropyl alcohol, or one of the standard commercial tape-head cleaning preparations. At least one type of silicone lubricant is also available from tape-equipment dealers, and it has been found helpful by many users, not only in preventing the wear that results from undue "drag" or "sticking" of some tapes, but also in eliminating the unpleasant "squeal" occasional tapes produce when they pass over the guides and heads.

Crosstalk

Sir:

What is "crosstalk," and is it a serious problem in stereo?

Donald P. Barnhart
Kingston, N. Y.

Originally this term referred to interference in telephone lines, resulting from pickup of one line of conversation in another. In stereophonic reproduction, when one playback head channel picks up a small part of the signal on the adjoining-channel tape track, this unwanted signal also is called crosstalk. It is rarely any problem for stereo listeners, since the signals on adjoining tracks are of the same performance, and are eventually mixed in the air and listener's ears anyway. (The more crosstalk there is, however, the less separation there will be between channels and consequently the less marked a stereo effect—hence the care head designers and manufacturers take to minimize crosstalk as far as possible.)

Crosstalk is more of a listener's problem when he uses a tape deck equipped with stacked (in-line) heads to play back 2-track stereo-channel tapes. For in this case the crosstalk, or signal picked up by one half of the dual head from the adjoining channel, is not only a different performance (or different section of the same musical work), but is recorded in the reverse direction. It may be quite noticeable and annoying during quiet passages which do not cover up the unwanted "leakage" from a loud passage on the other track. To avoid such crosstalk trouble, some tape decks, particularly those intended to be used frequently for single-channel tape reproduction, are equipped with an additional, displaced or "staggered" half-track playback head as well as the stacked pair. This permits not only the reproduction of "staggered"-head stereo recordings but also the crosstalk-free reproduction of single-channel tapes.

Continued on next page



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Send me a check in \$6.00 for \$6.00 for 1 year's membership. Send party tape, catalog, and details for exchange and rental of tapes.

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ON THE COUNTER

Since we are starting in this brand new section devoted to stereo, it seemed logical to us that that's where announcements of new items of stereo equipment belonged. Hence the at-first-glance-confusing fact that you find two CTC columns. Anyway, here we are and here we expect to stay.

EMC is offering a stereophonic Tapes Player for \$189.00 (no record facilities). Handles stacked stereo and dual or full-track monaural 7 1/2 ips tapes. The player has one speaker channel, and TV, radio, or what-have-you may be used as the other. Frequency response is 40 to 12,000 cps, ± 2 db, and 30 to 15,000 cps, ± 5 db; signal to noise, at least 50 db in either channel; wow and flutter, less than 0.25%; noise, at least 50 db below 33-dB distorted signal. Tape-lock mechanism, silent electronics, is \$89.95.

Phonotypes has been the first to take the plunge as far as stereo Tapes Prices (not counting samplers) are concerned. The new Stereo-Cassette reels run about ten minutes each and list at \$4.95.

The KT-500, a new Tunes Kit from Lafayette, features standard or stereo reception of AM and/or FM. Separate cathode-follower outputs and volume controls are provided. FM section includes Armstrong circuitry, grounded-grid triode low-noise front end with triode mixer, automatic frequency control with defeat switch, and double-tuned limiters with Foster-Seely discriminator, sensitivity is 2 μ v for 30 db quieting with full limiting at 1 μ v. AM includes 10-ke whistle filter, built-in ferrite loop antenna, and three stages of automatic volume control, sensitivity is 5 μ v. All parts plus instructions manual sell for \$74.50.

Also available from Lafayette is the Tancor Model V stereo Tape Recorder. The unit records at 7 1/2 ips and takes up to 7-in. reels, has two three low-impedance shielded heads for full-track erase, stacked-inline record, and stacked-inline playback. A recommended circuit for a recording preamp is included in the instruction booklet. The recorder comes in a blond or mahogany cabinet and sells for \$495.

The Knight KN-700 stereo Parametrix from Allied Radio provides control facilities for playback of any stereo or monaural sources (except stereo discs). In addition to independent gain controls for each channel, there is a master volume control which simultaneously regulates both channels. Stereo may also be reversed. Two stereo and four monaural inputs, cathode-follower outputs, and two auxiliary AC outlets are provided as well. Frequency response is ± 1 db from 30 to 20,000 cps. Order number is R2 SX 606; price, \$79.50.

Completely new engineering design is said to have raised FM sensitivity of the Model 300 Tunes to 2 μ v for 30 db of quieting. The FM and AM sections of this tuner are completely separate, so it may be used for stereo reception. Provision is made for FM multiplex reception.

Everyone's an Expert Tape Editor with the



It's Quick! It's Easy! It's Accurate!

Here's everything you need in one package for professional splicing of magnetic recorder tapes PLUS complete, easy-to-follow instructions by Jopl Tall, tape editor of CBS! The EditAll tape splicing block has been used for years by tape editors—now it can be yours in this complete low-cost Splicing Kit.

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9. AUD-O-FILE	AF-50 (leaf)	21.75
10. Changer Cover	CC-1, 2	1.00
11. Turntable Cover	CC-3	2.50
12. Disclosure	FD, H (2pg)	1.00
13. Jockey Clamp for Records	JCT-1	1.00
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Tenors—first to achieve under and overcut sensitivity for 70 db FM quieting; increases station range to over 100 miles. Other important features include the new "Weather Boy" tuning eye, A/C switch, fly-wheel tuning, bass control and cathode follower control. Model S-2000 FM-AM Tuning \$129.95 net. Model S-2000 FM only tuner \$79.95 net.

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In the Top Ten "Amen to Sound" with the Sherwood 70db FM quieting... © Leo Burnett Co. Inc. 1967
For complete specifications, Write Desk 0-1





Tested in the Home

Equipment reports appearing in this section are prepared by members of High Fidelity's staff, on the basis of actual use in conjunction with a home music system, and the resulting evaluations of equipment are expressed as the opinions of the reviewer only. Reports are usually restricted to items of general interest, and no attempt is made to report on items that are obviously not designed for high-fidelity applications. Each report is sent to the manufacturer before publication; he is free to correct the specifications paragraph, to add a comment at the end of the report, or to request that it be deferred (pending changes in his product), or not be published. He may not, however, change the report. Failure of a new product to appear in TITL may mean either that it has not been submitted for review, or that it was submitted and was found to be unsatisfactory. These reports may not be quoted or reproduced, in part or in whole, for any purpose whatsoever, without written permission from the publisher.

Vitavox DU-120 Coaxial Speaker

SPECIFICATIONS (furnished by manufacturer): 7½-in. three-radiator speaker with cone tweeter. Frequency range: 30 to 15,000 cps, nominal. Power rating: 15 watts (British standard). Impedance: 16 ohms. Cone resonator: 40/45 cps. Magnet weight: 3½ lb. on woofer; 2½ oz. on tweeter; both Ticonal G metal. Flux density: 14,000 Gauss. Total effective flux woofer, 1.4×10^6 Maxwells; tweeter, 1.5×10^6 Maxwells. Crossover frequency: 2,000 cps. Recommended enclosure: infinite baffle, 6 cubic ft. minimum volume. Dimensions: 12½ in. diameter by 7 deep. Price: \$69.50. DISTRIBUTOR: Ercama Corp., 551 Park Ave., New York 17, N. Y.

Vitavox is a British company best known for its superb public-address equipment. The DU-120 is, to my knowledge, the only component that they build expressly for home music reproduction, and it gives the distinct impression that Vitavox knows its sonic way around.

The speaker has a heavy magnet, a low cone resonance, and efficiency that is lower than most speakers but is by no means the lowest. The woofer cone has a mechanical crossover, which rolls off its response above 2,000 cycles. Thus, no electrical woofer crossover network is needed, so there is no series resistance introduced by a choke in the speaker circuit. Mounted in an 8-cubic-foot totally enclosed baffle, the DU-120's audible response on sine-wave tones was found to be very smooth from 1,000 down to about 500 cycles. Then there was a slight, broad dip from there to 350 cycles, back to normal again, and essentially flat from there to 50, where there was a slight, broad rise. Then the response started to taper off, was about as strong at 40 as at 1,000, was still shaking windows at 35, and was distinctly felt at 30. Even at 25 cycles I could feel the pressure come in when I switched the signal source on and off. No trace of doubling could be heard anywhere in the bass range.

Above 1,000 cycles, there was a very gradual rise in output to 10,000 cycles. Between 1,000 and 10,000, two humps of moderate size were detected. Above 10,000 cycles, response continued smoothly to around 13,000, and then started to taper off with increasing

rapidity. It was still going strong at 15,000, which is where my ears begin to fail me.

On musical material the DU-120 exhibited a very high degree of definition and transparency. It could separate individual instruments well, and its bass definition and range were excellent.

The DU-120's high-frequency dispersion was particularly very good, and its over-all balance and homogeneity



The DU-120 coaxial uses a cone tweeter.

of sound were remarkable. Balance was a little on the bright side, but this was by no means an exaggeratedly brilliant speaker.

Two minor peaks in the upper range were audible in some types of program material, as a slight hardening of string and brass tones, and a tendency to emphasize the noises and distortion on bad recordings.—J.G.H.

MANUFACTURER'S COMMENT: We quite agree that the DU-120

Continued on next page

TESTED IN THE HOME

Continued from preceding page

exhibits a high degree of definition and transparency on coated material. This is not accidental . . . It was designed into the system. We do not consider the small sacrifice of efficiency made to increase the quality as important, since most amplifiers have sufficient power capability to furnish that needed for the DU-120.

We cannot agree with your theory related to the emphasis of leads in bad recordings. The Victor or any other good-quality operator should faithfully reproduce what is fed into it, bad records being compensated for in the electronic circuitry or, better still, should not be played at all.

Wufo Dekamix Changer and Solorette Manual Player

DESCRIPTION Furnished by manufacturer: Bohemia D-100—a four-speed semi-automatic changer. Speeds: 16 $\frac{1}{2}$, 33 $\frac{1}{3}$, 45, 78 rpm. Turntable magnetically cast aluminum with rubber mat. Drive motor heavy-duty four-pole induction. Capacity: ten 12-in. or twelve 10-in. discs, intermixed. Will accept 10-in. and 12-in. discs with 7-in. discs as long as the latter are placed on top of stack. Change mechanism spindle drop. Arm: lightweight milled plastic, universal plug-in cartridge shells available separately. Controls: stop button, start button, speed selector (16, 33, 45, 78). Dimensions: 15 in. long by 12 $\frac{1}{2}$ wide by 5 $\frac{1}{2}$ above motor board, 7 $\frac{1}{2}$ in. required beneath motor board. Supplied with AC and phono cables and plugs, and mounting hardware. Price: \$39.95. Solorette 2—a four-speed manual player. Speeds: 16 $\frac{1}{2}$, 33 $\frac{1}{3}$, 45, 78 rpm. Drive motor two-pole induction. Arm: lightweight milled plastic, universal plug-in shells available separately. Controls: speed selector (16, 33, 45, 78); safety cut-down button; on-off switch actuated by pickup arm. Dimensions: 11 1/16 in. long by 9 1/16 wide; 2 1/16 in. required beneath motor board. Supplied with AC and phono cables and plugs, and mounting hardware. Price: \$39.95. **DISTRIBUTOR:** Erco Corp., 551 Park Ave., New York 17, N. Y.

These phono players are manufactured by a West German Firm and are imported to the United States through Erco Corporation to New York. Both players are light in weight and feature simplified design and construction.

The Dekamix (Dekamix to Deutschlanders) changer is a four-speed unit with a nominal 10-record capacity and full intermixing facilities for 10- and 12-inch records. It will also function properly with a few 7-inch records



The Dekamix four-speed changer.

on top of the stack of 10s and 12s, but it is not designed to intermix all three sizes.

The Dekamix drive motor works in conjunction with a rotating turret which carries the speed reduction drive wheels. As the turret is rotated (by turning the speed selector knob), the appropriate drive wheel moves into position between the motor shaft and the large rubber-tired idler wheel, which in turn contacts the inside rim of the turntable. The 0 speed control

setting disengages the drive wheels from the motor shaft, thus restricting the contact pressure to the idler and adjacent speed-reduction wheels.

The unit is simplicity itself to operate. You select your records, stack them on the shelled spindle, and then lay a disc-shaped weight on top of them, to hold them level and insure positive dropping of each disc. Pressing the START button trips the changer and starts the turntable running. At the end of the last side, the velocity trip mechanism is actuated, the Dekamix pickup arm returns to its rest post, and the mechanism drifts off. It can be stopped in mid-play by lifting the arm off the record and moving it toward the center of the record, or by lifting the arm onto its post and pressing the STOP button. If there are no more records on the spindle, pressing the START button during a side will trip the mechanism and send it through its stop cycle.

The Solorette is a nonchanging manual player, with direct idler drive from a stepped drive shaft on a two-pole motor. This one has a control cable arrangement



Wufo's Solorette 2 manual player.

which is cleverly contrived to disengage the idler automatically as soon as the unit is turned off. Another nice device on the Solorette is what an ad man might call its "groove cue control." The groove cue safety button is a control bar located in front of the arm rest. When the bar is depressed, it brings a notched track to contact with a slider underneath the arm pivot. As the arm is moved in toward the edge of the record, it drops into notches at precisely the right spots to hit the lead-in grooves of 12-, 10-, and 7-inch records.

Both our test units proved to have very good speed regulation, and some broad-band rumble content that was deemed low enough for all but critical listening applications. Because of its unshielded two-pole motor, however, the Solorette should not be used with a hypersensitive magnetic pickup.

The changer mechanism worked positively and dependably, and since its pickup arm is counterbalanced by means of rear-of-pivot weights, stylus force was not found to vary as much from the bottom to the top record as is usually the case when spring counterbalancing is used.

The instructions supplied with our sample Dekamix were for an earlier model; those for the Solorette were written to German.

As received for testing, the Dekamix and Solorette were mounted in neat, compact carrying cases, which would come in very handy were the units to be used with portable high-fidelity systems.—J.C.H.

MANUFACTURER'S COMMENT: Approximate English operating instructions.

Continued on page 102



Your very own music

There is something about the music you make yourself that is more intimately thrilling than the greatest performances of the virtuoso giants. On a Conn Organ, this thrill is yours at the touch of a few notes. The simplest of music, expressed in the inherent tonal beauties of the Conn, is rich or bright...stimulating or relaxing.

The Conn Minuet here pictured is a completely self-

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Please send booklet "How to choose the organ for your home."

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TESTED IN THE HOME

Continued from page 100

parts are furnished with all deliveries of both the Debutant and Saboteur.

A 45-gram spindle is available for the Debutant. Also entered from the report was mention of the Debutant's facility for manual playing of records, and its automatic pickup riding wheel.

Laboratory tests on the Debutant have confirmed a measurement of below 0.25% rms speed variation at 33 1/3 rpm, and have shown the spindle to be low enough to permit the inclusion of the Debutant in the most critically demanding high-fidelity installations. The simplicity and precision design of the mechanism insure its long and dependable service.

Future production models of the Debutant will be equipped with an automatic adjustment for stylus end-force position, ensuring accurate set-down in the disc groove groove. There will also be a control spring to assist the counterweight system in providing the required tracking force.

We do not consider the Saboteur to be suitable for use by the audio purist, but it does have features that are highly functional and appealing to more moderate requirements.

Chapman SSE/FM Tuner

SPECIFICATIONS (furnished by manufacturer) a well-powered AM broadcast, short-wave, and FM broadcast tuner. Tuning ranges: FM, 88 to 108 Mc; AM, 55 to 160 Mc in one band and 1.2 to 34 Mc in three bands. Controls: selectivity, 7 Hz and 10 Hz wide band selection; tuning; rear-of-dial control level control; tuning eye. Dimensions: 12 in. wide by 9 1/2 in. deep by 7 1/2 in. high. Price: \$149.95. DISTRIBUTOR: Forena Corp., 541 Park Ave., New York 17, N. Y.

For those who want good AM and FM broadcast reception plus the fun of world-wide listening via short-waves, the Chapman SSE FM deserves very thorough examination. It's likely to be the answer, particularly since it provides all these facilities at relatively modest cost.

There are five scales on the dial: AM broadcast, FM broadcast, and three which cover the entire short-wave spectrum from 1.2 to 34 Mc. Also on the dial face is a tuning eye, operative on all bands, and of good sensitivity.

The tuner has three control knobs on it. The selectivity and AC on-off knob is at the left. The selectivity can be set to 7 or 10 Hz for AM and SW listening; it is wide open for FM. The third position of this knob is



The Chapman all-wave AM and FM tuner.

AC-off. The center knob selects the desired wave band, and the right-hand knob is tuning. This knob works very smoothly and can be spun down the scale. Sensitivity on AM and FM broadcast bands is fine, but seems to be particularly "hot" on the shortwave bands. You can really pull in the world. Fidelity is first throughout.

Frequency stability is exceptional. One of our tests

was to operate the tuner for several hours, and finish up tuned in to WWV on 15 Mc. After standing overnight in a chilly room, the tuner was turned on again, without touching the dial. As the sound came on, there was WWV, not a hair off. And an hour later, it was still on time.

On the back of the chassis are two output connections. One is at low voltage, high impedance; the other is at higher voltage, but is a 600-ohm cathode-follower. For connection to standard American phonograph-amplifier units, the 600-ohm output should be used. The output from the high impedance side is rated at 0.1 volt. This is rather low for American preamps, most of which are designed for operation from about 0.5 to 1 volt output. The low impedance output is 2 volts.

There is a level control, affecting both outputs, on the back of the chassis (no front panel volume control). This is to be set once and for all for proper output level in the program.

Also on the back of the chassis are the antenna inputs: one for AM and two for FM antennas, which may be either 300-ohm balanced or 75-75-ohm unbalanced (such as a straight dipole).

Incidentally: FM interstation noise is minimized by use of a ratio detector. The broadcast segments on the shortwave bands take up but little space; tune carefully. Also, in my test set-up, the AC plug affected the bass level. There was some hum with it plugged in one way, but none when the plug was reversed.

Price considered, this is definitely a good buy for those who want the works: FM, AM and SW—C.F.

MANUFACTURER'S COMMENT: The design specifications for this tuner called for maximum FM and AM performance, loss of drift and racking noise between stations on FM. These objectives have been accomplished, in the production of a tuner which not only gives maximum performance on FM and standard AM, but which also allows the user to "tune the world" via short wave radio.

Thorens TD-124 Transcription Turntable

SPECIFICATIONS (furnished by manufacturer) a long-lived 12-in. turntable with variable speed control, built-in illuminated tachometer, and instant start-stop feature. Speeds: FM, 45, 33 1/3, 16 2/3 rpm. Variable control range: $\pm 2\%$ of nominal speed. Drive motor: lightweight, low-inertia induction motor. Stroboscopic speed control, illuminated by neon pilot light, visible in recessed mirror. Dimensions: 19 1/2 in. wide by 12 1/2 in. deep, 2 1/2 in. required bench top of motor board. Price: \$99.95. **MANUFACTURER:** Thorens Co., New Rochelle, Long Island, N. Y.

This Swiss-made turntable is a couple of the kind of workmanship that has earned for Swiss watch movements their world-wide reputation for precision and quality.

To begin with, this is, to my taste at least, one of the most visually pleasing pieces of high-fidelity equipment I have encountered—not surprising in these days, when it has become fashionable to leave one's gear fully exposed. Yet it is at the same time impressively businesslike in appearance. The turntable itself consists of two sections, an inner, heavyweight cast-iron turntable of about 118 inches diameter, and an outer (distal) aluminum turntable which fits snugly over it. The inner turntable is the driven one. Arranged at intervals around its upper surface are several flat discs of reinforced plastic, on which the outer turntable rests. The plastic discs act as clutch pads, insuring a smoothly coupling between the inner and outer turntables.

The idea of this clutch drive is to enable the turn-

Continued on page 104

Indisputably the Finest



*This speaker protected by U. S. Patent #2,641,329;
2,690,231; 2,751,996; other patents pending.*

University's
NEW 315-C
3-WAY 15" DIFFAXIAL

Response: 25 cps to Inaudibility; Total magnet wt.: 6½ lbs. Alnico 5;
Power capacity: 50 watts. Integrated program;
Impedance: 8-16 ohms; Depth: 12"; User net: \$156.00.



LISTEN... *University sounds better*

TESTED IN THE HOME

Continued from page 102

table to be started and stopped without shutting off the drive motor. This is accomplished by means of a semi-circular lifting rim, located under the edge of the outer turntable. When actuated by a lever at the left of the turntable, this rim hoists the outer turntable a fraction of an inch upward, until it is clear of the drive clutches. This brings the outer turntable to a sudden stop, but leaves the flywheel table running; when the outer table is released again, it takes off almost instantly and is up to full speed in less than half a revolution.

This instant start-stop feature will appeal to radio broadcasters (who normally must cue a disc by holding it by hand, with the turntable spinning under it), but its primary value to the home user will be simply its long-term reduction of wear on the drive system.

The induction drive motor is loosely suspended from three soft-rubber mounts. The motor's shaft terminates in a large crowned drum, which drives a flat rubber



The TD-124 induction turntable.

belt running around the adjacent idler drive pulley. The idler pulley has the familiar stepped shaft for speed selection, and this drives directly an unusually large soft-rubber-tired idler wheel that contacts the inside rim of the cast-iron turntable. The belt drive isolates the motor from the rest of the system, to reduce vibration transmission. The large drive pulleys and idler are intended to minimize deformation of the drive belt and idler wheel rim, and the "reciprocative-type" eddy-current brake is claimed to give better speed regulation and lower vibration than conventional types.

At the right-hand edge of the Thorens turntable is what in the illustration looks like a detachable wooden shelf. This is precisely what it is; it holds the pickup arm and its resting post, and is available in several different natural wood or plain-color finishes to match the cabinet or base on which the unit is installed. If the standard shelf should be too narrow to accommodate a long pickup arm, an alternative wide shelf is available, probably at a slight additional cost. Other convenience features include a built-in circular spirit level, and integral leveling screws located under the turntable base plate.

Ingenious design is, however, only part of this unit's attractiveness; its construction is so exemplary of precision craftsmanship that it is difficult to think of these turntables being mass-produced. The parts fit together as if hand-honed; the drive motor's pulley shows evidence of having been drilled out around the perimeter for precise balancing; the turntable shaft (which rests

on a single ball bearing in a deep machined brass well) is polished to a mirror finish, and even the pressed metal levers and cams under the motor chassis look as if someone had taken a smoothing file to their edges.

The specification sheet on the TD-124 failed to mention wow and flutter specifications, but this was a simple oversight, because I was unable to detect any form of speed variation on any kind of program material, which is about all one can ask. Rumble was also exceedingly low—not quite so low as the quietest (and costliest) turntables I have tested, but well below the limit of audibility under ordinary conditions.

Our test unit exhibited a tendency to slow down by about 2% of its nominal speed when a pickup tracking at more than 5 grams was placed in the outer grooves of a 12-inch record. Speed had returned to normal by the time the pickup reached the inner grooves. This could have been the result of misadjustment of the driver idler, although it was observed that slowing the turntable by hand did not cause drive slippage, but simply slowed down the motor.

The instant start-stop clutch lever was found to be very effective, and fun to play with. It can, however, make a lightweight pickup hop out of the groove, and although this isn't likely to harm anything, the noise it makes can be startling.

I noticed one other thing about the unit submitted for testing: the retractable 45-rpm spindle insert built into the turntable center would pop up after several repetitive starts and stops. A small notch filed into the edge of its retaining tongue slot—a task involving perhaps five minutes of time—would remedy this very easily.

All in all, a beautiful product and a top-grade performer. This is a unit that anyone should be proud to display and to use.—J.C.H.

MANUFACTURER'S COMMENT: We prefer not to state full performance specifications for our equipment, because we feel that comparisons of published specifications cannot be meaningful until all manufacturers agree to adopt identical test procedures and rating systems.

We have, however, compiled comparative test data between the TD-124 and six competitive transcription turntables, two of which sell for less than \$100, and the remaining four of which cost the same as or up to \$30 more than the TD-124. Our tests, which were conducted under identical conditions for each unit, showed that the three quietest competing turntables had 3 db more rumble than the TD-124, and that the others ranged all the way up to 11 db more rumble. As far as speed regularity is concerned, we found that the TD-124's device competitor had 1.6 times as much speed variation, and that other unit showed up to 2.9 times as much speed variation as the TD-124. We feel that this tells the story about as well as could any listing of specifications.

The difficulty encountered with the 45-rpm spindle was noted during recent life tests on this turntable, and was corrected in subsequent production models.

GE Transist-Tube Preamplifier

SPECIFICATIONS: Furnished by manufacturer: a self-powered three-stage preamplifier for magnetic pickups or low-impedance microphones, incorporating a transistorized first stage. Inputs: total of three, for microphone or any one of several magnetic phono cartridges. Controls: function selector switch (Phono, Mic), gain selector switch (25, Low output level) adjust. Outputs: one, of high impedance, to amplifier input. Output: 1 volt nominal, @ 1,000 cps, with 10 ohm signal into input @ 1. MA distortion: 1.5% @ 1 v. out. Phono compensation: RIAA. Transistor and tube: 2N168, 12AX7. Rectifier: selenium, 10 ma, 100 v. Dimensions: 5 in. long by 3 1/4 wide by 2 1/2 high. Price: \$21.95. MANUFACTURER: General Electric High Fidelity Section, Radio Bldg., Old Liverpool Rd., Liverpool, N.Y.

Transistors are gaining popularity in many audio applications because of their freedom from hum leakage.

Continued on page 100

BEST BUY

The 99—more features than ever before—only \$109.95.

Features like these make the 23 watt 99D complete amplifier a *real* Best Buy...

NEW! Front panel speaker selector switch. Choose between two speakers, or play both.

NEW! Front panel tape recorder monitor switch so you can check your tapes as you record them.

- Pickup selector switch lets you choose between either record changer or turntable
- Tape playback channel lets you play pre-recorded tapes direct from tape heads without external pre-amp
- Separate rumble and scratch filters make even old and worn records sound good!
- Separate bass, treble and loudness controls
- All aluminum chassis and direct current on pre-amplifier tube heater assures inaudible hum levels.



Show Model 99 and H. H. Scott 22 and 99D complete Amplifier



Persons who use the Integration Case express their desire to have H. H. Scott components for their own home.



Back and top view of the 99 showing availability of all external connections. The spacious layout of all parts on this aluminum chassis assures conservative operating temperatures and long life of electronic parts.

"...The 99 will drive an AR Zetone speaker system at appreciably loud levels without distortion or heat, even with an ESL cartridge when required, and that is one of the most exciting listening tests one can apply to an amplifier."
—Audio League Report, Feb. 1957 (Vol. 2, No. 4)



Perfect Companion — H. H. Scott's FM tuner (Model 911) is a perfect match for the 99. At \$129.95 it's a best-buy deal.

Additional Technical Information:

Power (using 23 watts) gains the controls for simplified operation; frequency response (20 Hz to 20K); harmonic distortion less than 0.5%; bass and treble shift below full output; dimensions in inches are 11 1/2" x 11" x 11 1/2". Choice of finishes: cream, black and 174.95. Price slightly higher over of \$109.95.

Patented and American Country Radio Products, Boston.



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H. H. Scott, 111 Powdermill Road, Heyward, Mass. Export Dept. Telefunken International Corp., 14 West 60th Street, New York City

RUSH me my free copy of your completely new catalog HF-1 including your new hi fi guide.

NAME.....
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TESTED IN THE HOME

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and microphones and their very low heat dissipation, but the relatively high cost of some types is still a deterrent to transistor utilization except where they have a clear advantage over tubes. The characteristics of transistors make them particularly useful in preamplifier input stages. GE has applied this reasoning to the development of the Transist-Tube, which uses a transistor in the first stage only, and follows this with two vacuum-tube stages.

The Transist-Tube is intended for use with either a low-impedance (250-ohm) microphone or with any popular phono cartridge (including, naturally, the GE). It can be used to provide a correct phono channel for



The AC-powered Transist-Tube preamp.

a comprehensive control unit, or it can function alone in lieu of a control unit in a budget-priced system, or in old console sets that have been converted for magnetic pickup operation.

Unlike most transistorized devices, this one is not battery powered, but requires instead a source of 115-volt 60-cycle current. This is an advantage for those who dislike the idea of replacing batteries periodically.

The low impedance into the transistor stage is used to produce the requisite RIAA high-frequency roll-off from most cartridges used with it, although certain low-impedance cartridges require the installation of a small capacitor inside the chassis. Bass equalization is controllable by the function switch, which gives a choice of flat response (for microphone operation) or bass boost for record reproduction.

The output from the preamplifier is at high impedance, so in order to maintain good high-frequency response, the output cable is made quite short. It should not be lengthened by the user.

As might be expected, the Transist-Tube's microphone noise was found to be totally negligible, and its thermal bias level was very low. Hum level in our sample preamp was totally below the level of audibility when using a cartridge with as low as 10 mv output. Other tests, in conjunction with a GE pickup, indicated low-frequency equalization turning over at around 300 cycles, and rolled off at 10 db which varied from -33 to -14.5 db, depending upon the output level (control setting . . . a negligible variation). With the output control wide open and the function switch on *TAPE*, I found the preamp's upper range response to be flat to about 10,000 cycles.

The IM distortion at low levels was higher than is usual for a preamplifier. As is true of other transistorized units we've tested, however, the Transist-Tube's

signal was much cleaner than its high IM distortion specification would have indicated. It includes a full, moderately emphatic bass, and a startlingly crisp and transparent middle and high-range sound. Its over-all sound might best be described as razor-sharp and hard, without the unpleasant cutting edge that is often characteristic of such music qualities. A fine little preamp, ideally suited for its purpose.—J.C.H.

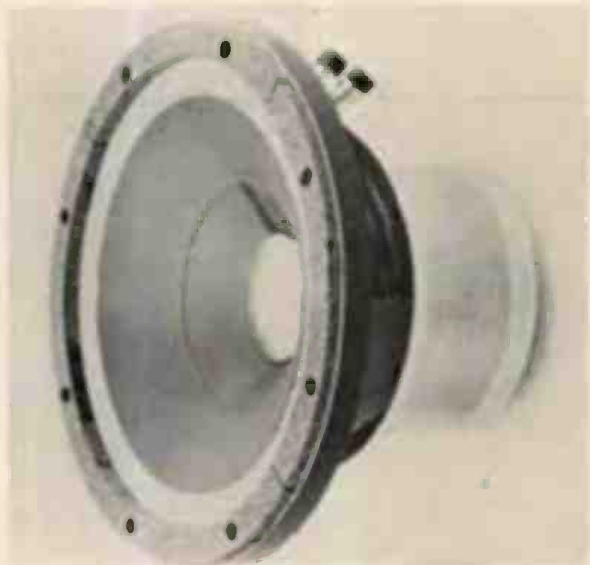
Stephens 80FR Speaker

SPECIFICATIONS (provided by manufacturer on black vinyl-cage speaker. Frequency range: 40 to 12,000 cps. Impedance: 16 ohms. Power rating: 50 watts program. Dimensions: 8 1/2 in. diameter by 4 1/2 in. deep. Price: \$31.50. MANUFACTURER: Stephens Industries, Inc., 8520 Warner Dr., Colton, Calif.)

Better wear an apron when you first listen to this speaker! The music—cool and crisp, even icy—will pop right out in your lap. For a single-cone speaker, the projection is unusual. Since it is also unusually clean, the result is a sparkling transparency.

Response is quite smooth throughout its range. Mounted in the small enclosure supplied by Stephens, the useful range is from about 70 to 10,000 cps. There is still output at 60 cps, but it is below warm sufficiently for it to be noticeable on program music. The same is true at the other end of the spectrum, at and beyond 11,000 cycles.

The writer has seen this speaker demonstrated in an infinite baffle and has seen the tightness of the cone operation. The manufacturer refers to "iron-cure" construction; certainly the edge suspension is exceptionally free. The result is fine transient response, with percus-



The 80FR full-range 8-inch speaker.

don spending entirely tight. Voices are very live, yet not waxy; brass really sings. We'd like to try first in one of these speakers for the low end, with two stereoid for the mids and highs.

Recommended enclosure type is least reflect; the small enclosure in which the unit was tested was of this type.—C.F.

MANUFACTURER'S COMMENT: The engineering staff of Stephens Industries has continued development of the enclosure, and the production housing has been changed from a hemispherical reflect to a hemispherical, diffused-pore reflect. In this enclosure, the output of the

Continued on page 100

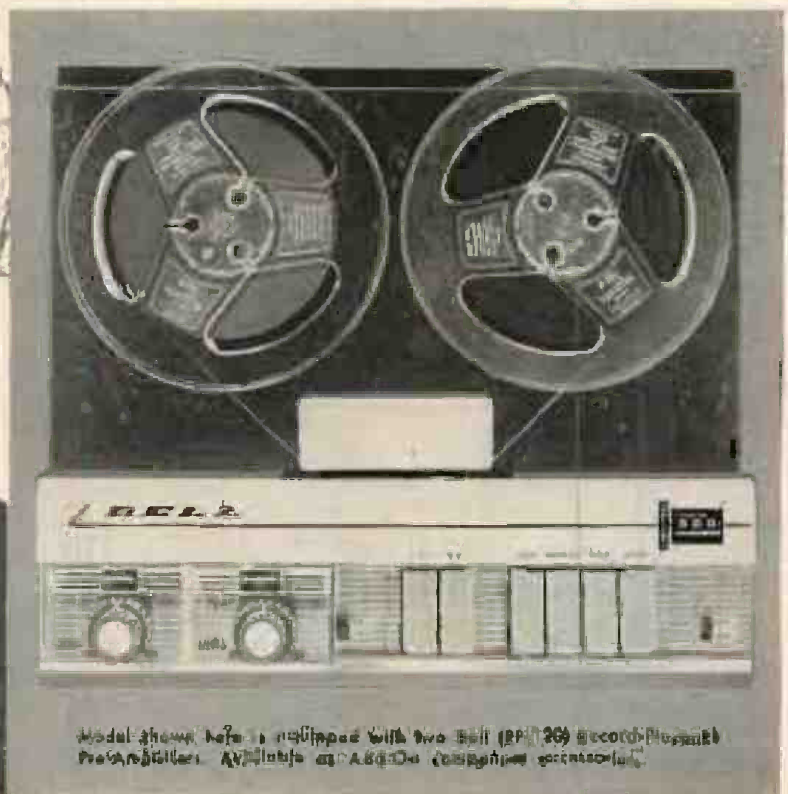
This is the way to Playback

and Record STEREO with

the **Bell** TAPE TRANSPORT

(add it to your present high fidelity system)

TEAR HERE AND KEEP THIS PAGE



Model shown here is equipped with two Bell (RP-100) Record-Playback Pre-Amplifiers. Available as a separate component.

A new high fidelity component for you . . .
with professional features for outstanding
performance. Choose from 4 basic models . . . to
record *and* playback on tape . . . in monaural
and stereo . . . with inline *and* offset heads.
The Bell Tape Transport does everything!

Bell Sound Systems, Inc.
Columbus, Ohio

A division of
THOMPSON PRODUCTS, INC.

IN CANADA: THOMPSON PRODUCTS LTD., TORONTO

TURN THE
PAGE AND SEE!

Design Your Tape-Playing System the Way You Want It . . . with the Bell Tape Transport.

Bell has it! A new Tape Transport that provides you with the unlimited flexibility to plan your tape playing system—just the way you want it.

As a new component for your high fidelity system, this Bell Tape Transport can be custom designed to playback Stereophonic In-Line and Offset tapes.

The Bell Tape Transport is easy to add to your present high fidelity system. It goes anywhere . . . mounts and plays in any position. Can be easily connected direct from tape heads to your existing

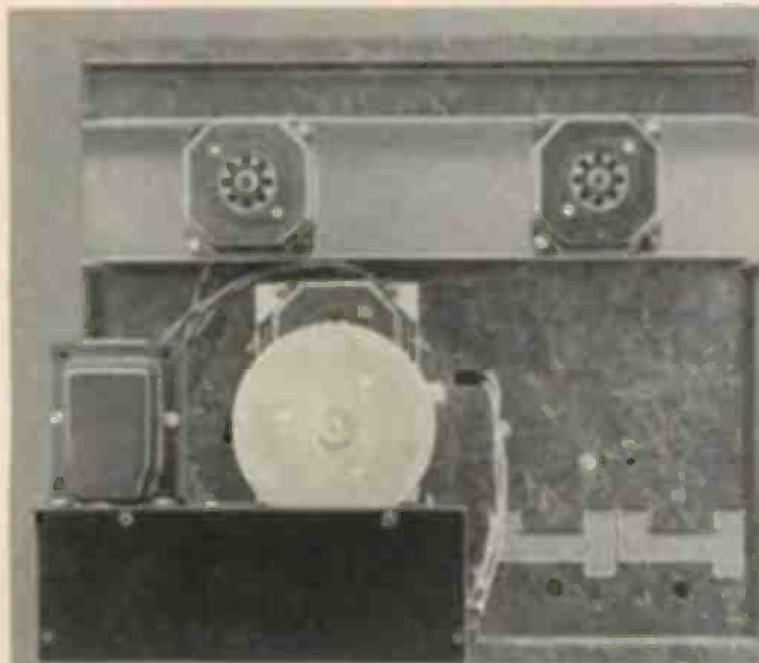
amplifiers with tape head equalization.

Add-On Pre-Amplifiers

For the most critical listening—and professional recording quality—you'll want to include Bell's special Add-On Electronic Accessories as part of your system.

For less than \$110, you can start to build up your tape playing system with a Bell Tape Transport. See and study its performance in your Bell dealer's showroom today.

Bell Sound Systems, Inc. (Division of Thompson Products, Inc.) 555 Marion Rd., Columbus, Ohio



NO BELTS . . . NO PULLEYS . . . NO LEVERS . . . NO TROUBLE!
 Shows here in cutaway of Bell Tape Transport with tape head—only a job custom. Keep outside in loose corner of deck for Pre-Amplifier outside.

A model for you . . .

There are 4 basic models of the Bell Tape Transport, each distinguished by different head arrangements to perform exactly to your requirements.

- 1-200—Monaural Erase/Record Playback
- 1-201—Monaural and Stereo In-Line Offset Playback
- 1-202—Monaural Erase/Record Playback, Stereo In-Line Offset Playback
- 1-203—Monaural Erase/Record Playback, Stereo In-Line Offset Erase/Record Playback
- 1-204—Incorporating the Tape Transport Model 1-202 with Bell Pre-Amplifier (P-100) and Record-Playback Pre-Amplifier (RP-120) in Portable Carrying Case (Model 200 CQ).

Add-On Pre-Amplifiers, Carrying Case and Slim-Line Microphone are available as extra accessories.

New Add-On Pre-Amplifiers

Perfectly matched for best frequency response with your Bell Tape Transport.

Two all-new Bell Pre-Amplifiers are now available for you to Add-On to your Bell Tape Transport. Your selection of the Bell Record Playback Pre-Amplifier or the Playback-Only Pre-Amplifier depends, of course, on the head arrangement of your Bell Tape Transport.

Shown here: Bell RP-120 Record-Playback Pre-Amplifier. Also available: Bell P-100 Pre-Amplifier for Playback only.



Make Your Stereo System Complete With the Bell 2 channel Amplifier

Now you can have a complete Stereophonic Sound System with this one

Bell 2-channel amplifier. 12 watts output from each channel. Recommended for tape as Pre-Amplifiers are required for playback with your Bell Tape Transport.



Get the Inside Story!

Send for illustrated 2-page folder on the Bell Tape Transport. Includes detailed specifications and suggestions for ways you can enjoy the Bell Tape Transport with your high fidelity system.

BELL SOUND SYSTEMS, INC., 555 MARION ROAD, COLUMBUS, OHIO

TESTED IN THE HOME

Continued from page 108

20dB is 1.5 db, including all peaks and valleys, from 45 to 10,000 cps. We had hoped that ITT would notice the ability of this speaker to carry its rated power of 20 watts without brooking a remarkable accomplishment for an 8-inch loudspeaker.

Allied Knight-Kit FM Tuner

SPECIFICATIONS furnished by manufacturer as factory gear is 10 feet. Tuning range: 88 to 108 mc. Sensitivity: 4 μ v for 20 db quieting across tuning range. All reduction factors 10:1. Image rejection: 40 db with 10 μ v input signal. Frequency response: 2.5 db db, 20 to 20,000 cps. Harmonic distortion: 0.6% with 1,000 μ v signal, 20% modulated, from 20 to 20,000 cps. Noise: 45 db below 1 watt output signal. Output voltage: 1 v for 100 μ v input, modulated 20%, 7 v or for 1,000 μ v input, modulated 20%. Inputs: 200-ohm antenna. Controls: tuning function switch (AC-OFF, PA, FM/APC). Outputs: two, in parallel, from 1,000-ohm cathode follower source. Dimensions: 13 in. wide by 4 in. high by 8 in. deep, over all. Price: \$28.95, with case. **MANUFACTURER:** Allied Radio Corp., 100 N. Western Ave., Chicago 26, Ill.

Audio amplifiers are sufficiently uncritical of wiring and component orientation that their construction from kits need never be too much of a challenge to anyone who is capable of making an electrically sound soldered connection. FM tuners, on the contrary, handle such high frequencies that parts placement can be extremely critical . . . sometimes so much so that a capacitor pigtail lead cut an inch too long can throw the whole thing out of kilter.

Despite this, there have been several FM tuner kits so carefully worked out that the average home constructor, following the instructions to the letter, could assemble them with a high degree of assurance that they would meet specifications. There was, however, still need for care in lead orientation and placement of capacitors and resistors, and if the builder happened to be a little lax about these things, the finished product's performance could fall short of its original design specifications.

In the Knight-Kit FM tuner, all the critical wiring has already been done on a printed circuit board. All the builder must do is attach the small components to the board on the chassis frame, and then tie them all together. Consequently, the Knight-Kit FM tuner is about as easy to build as a simple RF preamplifier, and will work at close to peak performance without the need for instrument alignment.

The tuner circuit uses an untuned constant RF amplifier input stage, coupled to a mixer stage through a single tuned coil. Then comes the combined oscillator and APC control tube, whose latter function can be cut in or out by the tuner's front-panel function selector switch.

There are two IF amplifier stages, and then a ratio detector which feeds a direct-coupled audio amplifier and cathode-follower output. Both output connections are parallel, so one can be used to feed a tape recorder while the other goes directly to the main amplifier system.

The kit took me only about eight hours to build, which for an FM tuner is quite an accomplishment on Knight's part. No snags were encountered; all the parts fitted together cleanly and easily, and the whole operation was facilitated by detailed and clearly written step-by-step instructions. There were a few points left unaided that might have been emphasized, so I'll mention them here.

First, read each step all the way through before following it out; some important statements are left to the last sentence.

Second, most of the directions state clearly whether a connection should or should not be soldered, but in some cases this isn't mentioned. When it is not, don't solder; the soldering directive will come later on.

Third, there are two small-component leads which, when passed through the circuit board, should not be trimmed off. However, when all the components are mounted and soldered, and the time comes to snap their leads off, it is an easy matter to cut the important two along with the rest. It might be simpler to leave these two components off the board until the others have been attached, soldered, and clipped short, and then to add the last two items.

Finally, when installing the tuning knob assembly and the function switch, these will be fastened more firmly if their lockwashers are placed behind the pointer panel instead of under the mounting nuts in front of the panel as directed.

When our unit was completed, I tried the simple by-car alignment procedure described in the manual, and then checked the tuner's performance. Sensitivity was found to be high enough for moderate-strength signal areas, selectivity was good but a trifle indistinct (traces of two-quiet tuning were observed), and noise cleanliness varied from excellent to good, depending upon the incoming signal strength. It was probably meeting its



The Knight-Kit tuner in its metal cabinet.

specifications, and I would have deemed this a good tuner at the price, but the price would have entered into my favorable reaction.

After meter alignment, however, there was a marked improvement in nearly all departments. Sensitivity was obviously quite a bit better, probably equalling or exceeding the rated 4 μ v for 20 db quieting, and selectivity and suppression of adjacent-channel interference were very good.

Distortion was very low and stability was also unusually good. There was very little drift during the first ten minutes of warmup, and none thereafter; the APC was able to compensate for what little frequency drift there was.

This is not intended as an extreme fringe-area FM receiver, but for any better location it is an excellent performer in all respects.—J.C.H.

MANUFACTURER'S COMMENT: The Allied Knight-Kit FM Tuner is now supplied with precisely aligned IF transformers that require no instrument alignment for quality performance. After the IF transformers are removed from the transformer manufacturer's tube pins from a standard pre-alignment, they are placed in a jig which exactly duplicates the distributed capacitance and load inductance of the FM tuner circuit, and are returned "on the nose." This eliminates the need for any alignment on the part of the builder, except for a simple tuning adjustment by means of the oscillator trimmer located on top of the tuning capacitor.

A Hi-Fi Primer

by John H. Newitt

NOW THAT we have covered the basics of sound systems, so to speak, we can turn our attention to some of the components themselves, in order to orient ourselves as to what they can or can't do, and how best to use them. It doesn't really matter which one we start with, so I have picked the loudspeaker. For one thing, all the basic information about mechanical compliance and mass discussed herein applies also to the subjects of enclosures and phonograph cartridges. Since we are to deal with those later, we can get our elementary physics out of the way once and for all.

THE LOUSPEAKER—as it is customary to point out—is a transducer. That is to say, it changes one form of energy into another. In this instance, the electrical output from an amplifier is changed into sound waves. Since sound is a mechanical disturbance of air particles, we must produce mechanical motion to generate it. Our loudspeaker can do this; it is designed to derive mechanical motion from electrical impulses, and its construction is such that this motion is applied against large quantities of air particles.

As may be seen from Fig. 1, a common cone loudspeaker has two main parts. There are the motor, which generates the desired motion, and the diaphragm, which distributes the motion over a large enough area to set up a sizable audible disturbance. At the apex of the cone-shaped diaphragm in Fig. 1, a cylindrical attachment contains an electrical wire winding called the voice coil which is mechanically affected—vibrated—by the interaction of incoming electrical impulses with a magnetic field. The voice coil structure and the diaphragm to which it is rigidly attached are both elastically suspended from the loudspeaker frame, and they are free to move in one dimension (in and out of the motor box). It is easy, now, to picture how a single pulse of electricity, delivered from the amplifier, sets the loudspeaker into action. As the pulse passes through the speaker it either pushes or pulls at the movable voice coil, and this in turn acts on the diaphragm.

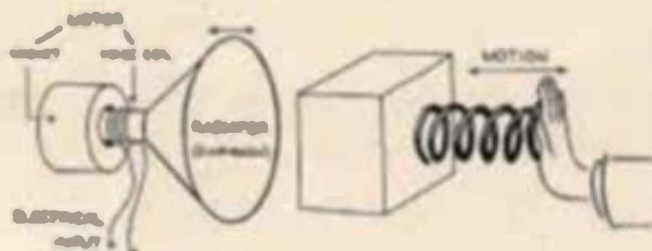


Figure 1

Figure 2

When the diaphragm moves outward it pushes (compresses) a quantity of air ahead of itself, and when it moves back into the motor box it leaves a vacancy (decompressed area). When a series of electrical impulses is fed into the motor box a series of diaphragm pulses and a corresponding series of sound waves is produced. We may now recall that the ear has certain limitations as to just how few and how many sound impulses it can detect in a second of time. Our mechanical device likewise has some physical limitations upon how fast it can respond to electrical impulses. The aim, of course, is to have the mechanical loudspeaker device respond evenly across the tonal or frequency range to which the ear is responsive. How well this is accomplished is one measure of the fidelity of the unit.

In order to understand some of the limitations of a loudspeaker, it is well to know the meaning of the terms *massive* and *compliant* reaction. These are nothing more than high-sounding technical terms for simple things that we already know from everyday life. *Mass*, for our purposes, can be considered to be synonymous with weight, while *compliance* is the springiness of a material. Let's see how these factors affect the loudspeaker structure. We all know that it is more difficult to wave a heavy object than a light one in the air. This effect is one example of *inertia*, which is dependent upon the mass of an object. The heavy object has more inertia and thus "reacts" more strongly to the force which is applied to it. Now, however, that the more slowly we move our heavy object, the easier it is. Its reactance is being held to a low value. Try it, with something heavy, and you will experience this force first hand. Now, if we think of our attempted movements as frequency (number of reversals of movement per second), we realize that the massive reactance increases as we try to increase the frequency of motion—an important basic physical law that applies to all objects. In the case of the loudspeaker diaphragm, suppose we want to move it rapidly, at a high frequency, to produce the upper tonal range. We would then want it made from the lightest possible material, to keep its massive reactance low. Thus we use paper diaphragms in our conventional loudspeakers.

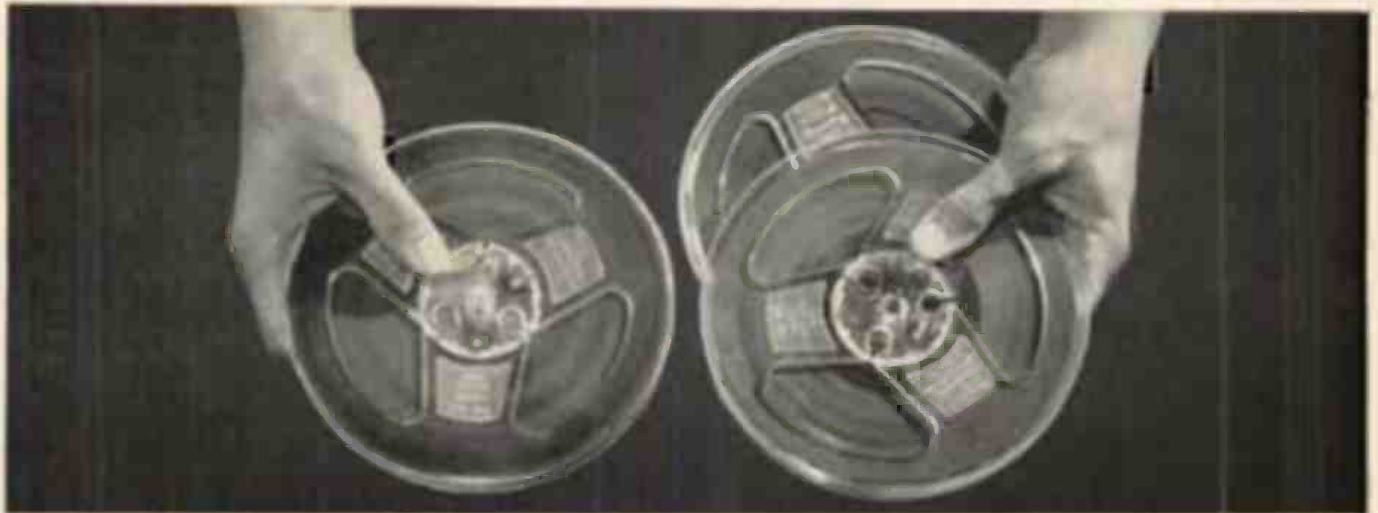
Now for complications. We normally want a large diaphragm, of course, so we can move a large quantity of air. But we must remember too that the bigger the diaphragm, the greater its weight. If we try to reduce its weight by making it thinner, it will eventually become too weak and frail to push the air without distorting. Such is the dilemma of the designer. The quality of

*Inertia is the tendency for a body at rest to remain at rest or a body in motion to continue in motion unless acted upon by some external force. The less massive it is, the easier it is to start an object which is at rest into motion than it does to keep it in motion. Likewise it takes a lot of energy to suddenly slow down or reverse the direction of an object in motion.

Twice as strong!



Plays twice as long!



New 200 "SCOTCH" Tensilized Double Play Tape has everything!

At last! A long, long playing tape you don't have to pomper! New 200 "SCOTCH" Brand Tensilized Double Play Tape records as much as two reels of standard tape. What's more, its $\frac{1}{2}$ mil polyester backing has been tensilized by an exclusive process so this new tape is twice as strong as any conventional extended play tape and won't stretch! Get a reel of new 200 "SCOTCH" Brand Tensilized Double Play Tape from your dealer now. You'll find it's well worth the slight extra cost.

Before You Buy It, Try It! Test 200 Tape's strength for yourself! Ask your nearby dealer for the free "Scotch" Brand strength test kit.



MINNESOTA MINING AND MANUFACTURING COMPANY

... WHERE RESEARCH IS THE KEY TO TOMORROW



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JANUARY 1958

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any loudspeaker depends largely on the judicious proportioning of these opposing factors. To generalize, a large loudspeaker cannot respond ideally to the upper frequency range of music because of its relatively heavy diaphragm. There have been devised various special measures to overcome this limitation. A second, smaller, supplementary speaker unit, with a lighter diaphragm is one solution commonly used. A large speaker (called a woofer) reproduces low frequencies and a small one (called a tweeter) handles the highs. Then there are so-called full-range speakers, driven by single voice-coils but with the cone specially treated so that its outer and inner areas actually act in separate woofer and tweeter capacities.

Where does compliance come in? We realize that we cannot make an actual loudspeaker as simple as that in Fig. 1. We must elastically restrain both the apex and the outer edge of the diaphragm somehow, since we want the voice-coil structure to come back to (neutral) position after its work is done. The elastic restraining supports in this case must completely restrict side to side motion but must be very compliant to back and forth movement. A suspension that is too stiff in the back and forth direction will restrict volume and give rise to distortion. To visualize the effect of compliant action, refer to Fig. 2, which shows an ordinary coil spring (a compliance device) fastened to a stationary block at its far end. We are now going to push on the free end. We do not immediately notice the springy resistance to our push. Only as the pressure is transferred from one coil to another down the line to the stationary end does the counter-reactance start to build up. Further, note that so long as the coils are free to move away from our force they do not build up counter-reactance. It is when the last coil becomes compressed and finds that it cannot move anywhere that the reaction back toward the source of compression starts to build up. Suppose, then, that we simply give the spring a fast push—a pulse of energy. If this is a short enough pulse, our hand is being drawn away from the spring before the spring has had a chance to build up its counter-reaction. From this also we can deduce another basic physical law: as we increase the frequency of pulsation, the reactance from our compliance becomes less and less, until at some high frequency it virtually vanishes; there is no reactance at all. A small amount of frictional resistance will remain; this is present no matter how fast or slowly we pulse the coil.

So we see that the massive and compliant forces which vary with speed (frequency) act oppositely to each other. Massive reactance has little effect at low frequencies but its effect increases with frequency and becomes the limiting factor to the high-frequency response of loudspeakers. Compliant reactance, on the other hand, disappears at high frequencies but makes its

presence known at low frequencies and is the controlling factor at that end of the range. Somewhere, intermediate in the frequency range, these two opposing forces must obviously be equal in magnitude and will then act to cancel each other. Such a condition is what we commonly refer to as resonance, and has some interesting ramifications. At resonance there is a continual transfer of energy (circulation) between the mass and the compliance of the system. Since the two effects then cancel, only the frictional action is left to absorb (or dissipate) the circulating energy. Systems which have very little friction (such as a bell or a tuning fork) may continue to oscillate (transfer energy between the mass and the compliance) for a very long time after an initial pulse is supplied, before coming to rest. To visualize how the mass and compliant forces counteract one another and produce the circulating energy condition called resonance, refer to Fig. 3. Here may be seen a weight resting on a coil spring. Let us apply a single pulse of energy to this system and see what takes place. It doesn't matter much whether we initially push the weight up or down to start the system going, so let's assume we push it downward. This will compress the spring, which in turn will tend to return the weight to its former position. Once the weight is in motion, however, it tends to stay in motion, because of inertia. The weight, therefore, will continue on upward past its normal resting place; the coil spring will be overextended and will lose its force. The weight, now having the greater force, gradually takes control and starts to move downward. Again it will move beyond its normal resting place, and the whole process will repeat itself. Each time, in essence, the weight gives some of its force to the spring by compressing it; then the spring returns it by moving the weight. This oscillating action would continue indefinitely were it not for the heating friction in the spring itself and the rubbing friction of the moving elements against the surrounding air particles. Frictional losses dissipate some of the original energy during each cycle of operation, and finally bring the system to rest.

The weight and compliance in any system determine the frequency at which oscillation will take place. This rate or frequency of oscillation is called the resonant frequency. A stiff spring and a light weight produce a high resonant frequency; a soft spring and a large weight yield a low one. Stiffening the spring in a given system will raise its resonant frequency, softening the spring will lower it. Increasing the weight will lower the resonant frequency and decreasing the weight will raise it. Changing either, thus, will tune the system to a new resonant frequency. The two factors which determine resonance always will strike a balance somewhere (either inside or outside the operating range of our device), no matter what their proportion. We can thus trade mass for compliance at any resonant point; this principle is

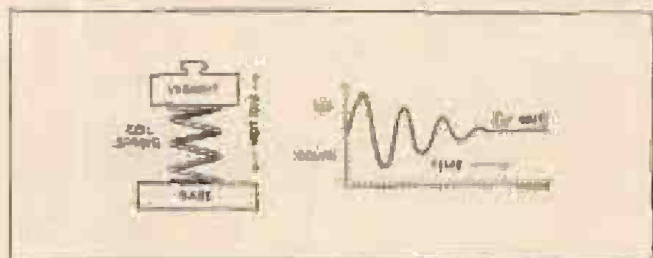


Figure 2

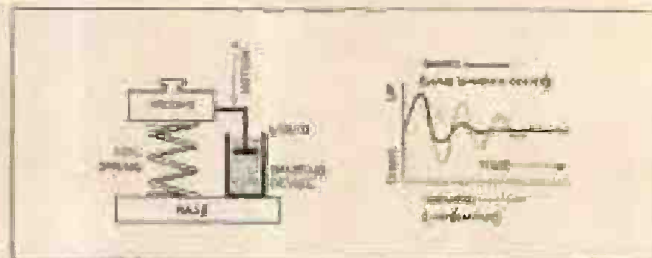
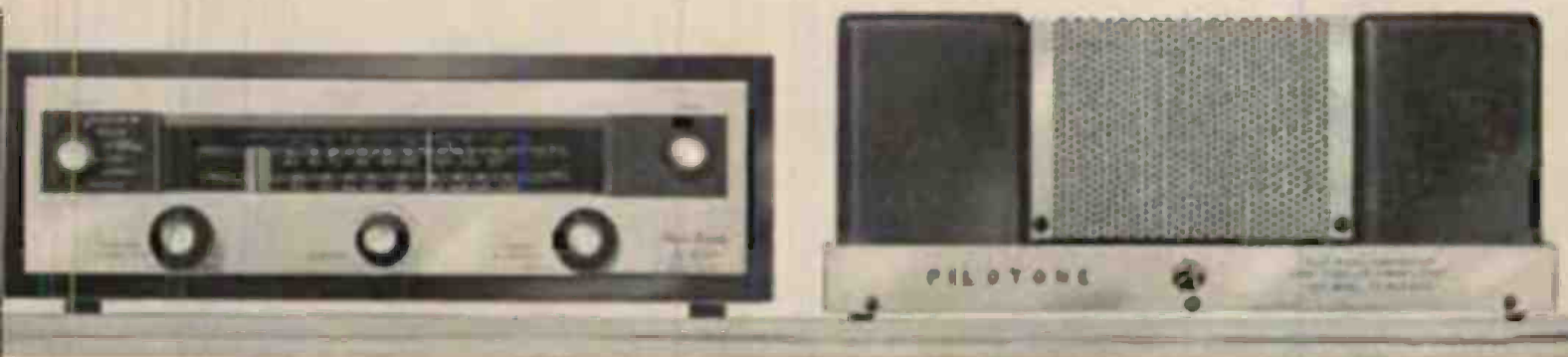


Figure 3

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The FA-550 and AA-410A have been fully field-tested, individually and together. They have proved so successful in custom installations, they are now used as standard component equipment in the Ensemble 1055, Pilot's top Component-Console System, priced at \$625, in subcategory.

If you have been looking for the ideal tuner-amplifier pair around which to plan your component system, audition the FA-550 and AA-410A at your Pilot dealer. If you prefer a pre-built component system, hear these same components perform in the Ensemble 1055.



FA-550, a super-sensitive FM-AM Tuner with tuned RF and dual limiter-discriminator circuit. Has Beacon tuning and AFC, phono and tape preamp, and audio control section with DC on tube heaters, bass and treble controls, cathode follower outputs - plus other advanced features. Enclosure finished in brushed brass and burgundy. \$199.50 complete.

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employed to reduce the cabinet size of some acoustic loudspeaker enclosures.

We mentioned above that the oscillating system would eventually come to rest due to frictional losses. Sound dies away, automobiles and other machinery come to rest after the power is cut off. The frictional effect that brings the oscillating system to rest is called damping, a term to remember, heavy damping will bring an oscillating system to rest quickly, whereas light damping will do so slowly. Fig. 4 illustrates a damping device. Here we have the weight and spring again, but we now have attached an arm and a disc to the weight so that the disc will move up and down in a liquid bath as the weight is set into motion. It is apparent that if the liquid is thick or the spacing between the walls of the damping cavity and the damping disc is small, the friction will effectively reduce the number of times that the weight can move up and down (for a given pulse) before coming to rest. If you think about it you will realize that the system depicted in Fig. 4 is exactly analogous to the suspension systems of both our loudspeaker and our automobile. The body structure (weight) of the automobile is isolated from the road by springs, and parallel hydraulic shock absorbers act as damping devices. Lacking the latter, our car would oscillate up and down every time for each bump it encountered—a rocky ride!

Damping affects a loudspeaker in much the same way, consisting as it does of a weighty diaphragm and voice coil structure suspended by springs from a frame. For faithful sound reproduction, we want a single pulse of electrical energy to create a single mechanical pulsation on the loudspeaker diaphragm, not an undamped series of oscillations. A loudspeaker that is poorly damped at and around its resonant point will, of course, deliver such a series of sound waves for a single pulse of energy. This we call "lingerer" or "ringing" and it goes without saying that the sound output under such conditions is hardly a faithful reproduction of the incoming electrical waveform.* We must, therefore, either avoid operation around the resonant point of the speaker or we must be sure it is sufficiently damped by one means or another to reproduce the incoming waveform properly. Note at this juncture that the acoustic enclosure in which the speaker operates can be made to exert a damping effect on the loudspeaker diaphragm. Many enclosure designs take advantage of this.

Damping can also be brought about electrically through the amplifier of the system. This consists of the production of electrical "drag" in the voice coil itself. Since the voice coil is connected to the amplifier it will react to any damping that exists in the amplifier. Amplifier damping is of course electrical rather than mechanical in origin, but its effect is mechanical when it is transferred to the voice coil.

Finally, some damping is usually provided in the mechanical design of the speaker itself and thus three possible sources of damping are at the disposal of the designer. Good practice usually dictates that a proportional share of damping be obtained from each of these sources.

Fig. 5 shows the cross-section view of a modern electro-dynamic loudspeaker. Here, it will be seen that the cone or diaphragm is fastened at its outer edge to the basket-type frame of the loudspeaker. Notice that some sort of an outer edge compliance is provided to all speakers (annular corrugations around the periphery of the cone in this case); some speakers use a ring of soft leather in place of the annular corrugations, others use point-suspension by means rubber blocks. The voice coil structure must also be supported. This is accomplished by another annular diaphragm that is located on the speaker body right behind the cone apex. This restricts the voice coil so that it can only move in and out of the small air-gap slot, and without rubbing. As a general thing, speakers are designed so that as much as possible of the compliance is furnished by these supports. Ideally, the body of the cone should move in and out as a unit, firm as a solid patch.

Summary:

1. The reactance effect of mass (weight) becomes greater as the frequency of motion is increased.
2. The reactance effect of compliance (spring suspension) becomes less as the frequency of motion is increased.
3. The effect of friction is independent of frequency; frictional force produces a mechanical "drag" which is called damping when applied to an oscillating system. Friction acts to absorb and dissipate the potential energy of a system, and will eventually bring it to rest if no additional energy is applied to it.
4. The resonant frequency of a mechanical system is its natural period of oscillation, i.e., the frequency at which the system will oscillate when a single pulse of energy is supplied.
5. A mechanical device having both compliance and mass will have some natural resonant frequency. The resonant frequency in any given case is determined by the amount of mass and compliance present.
6. At resonance the compliant and resistive reactances are equal and opposite and therefore cancel leaving only friction to control how soon the system will come to rest after an initiating pulse of energy has been supplied. Friction is very often purposely added to a mechanical device to eliminate or control its tendency toward mechanical oscillation at and around its resonant point.

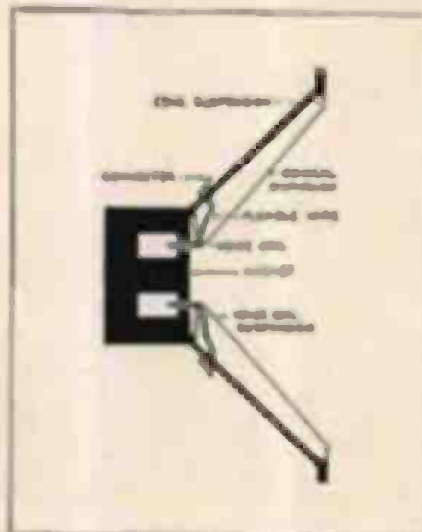


Figure 5

*A ball in an unyielding container is a simple example of an undamped system. The ball is in motion (oscillates) and motion ceases for a considerable period of time after it is finally stopped. A ball in a thin and compliant container has three air "shock absorbers" which tend to stop the motion rather than support it as separate entities. A ball has a resonant frequency (pitch) and can be stopped for the very same mechanical reasons. Think of ringing a bell with a hammer or plunger. It has mass and the damping the center will be readily apparent.

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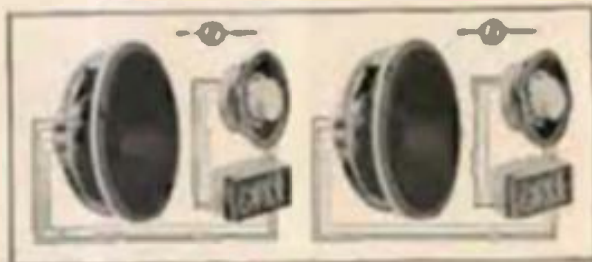
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AUDIO FORUM

Hysteresis Motors

Sen:
I have observed that most of the highest-quality phono turntables are equipped with hysteresis-synchronous motors, yet their specifications for speed regulation and rumble do not appear to be any better than those of some turntables using induction motors.

Is this just snob appeal of some kind, or is there actually a good reason for using a hysteresis-synchronous motor in a phono turntable?

Alan Gray
Kansas City, Mo.

The speed of an induction motor depends mainly upon the voltage being fed to it, so when the supply voltage in a house drops during periods of heavy load, an induction turntable will tend to run slower than normal.

When a synchronous motor has reached its normal operating speed, it will "lock" in step with the alternations of the AC supply feeding it, so as long as the supply frequency remains constant, a hysteresis motor will run at a constant speed. It is thus largely independent of variations in line voltage, so even though its instantaneous speed variation (flutter) may be no more or less than that of an induction motor, its long-term speed will remain constant as long as the power company's generators run at the proper speed (which they usually do).

Hysteresis-synchronous motors also have the advantage of being almost completely free of the AC magnetic radiation which can induce hum into conceivable pickup cartridges.

Headphone Connections

Sen:
How may I go about connecting a pair of high-impedance headphones across the output terminals of a power amplifier?

I have been advised to use a matching transformer, but I do not know which of the many types listed in catalogues would suit my needs.

Lloyd D. Edwards
Providence, R. I.

A pair of high-impedance headphones may be connected to the output from a power amplifier by removing the loudspeaker connections, replacing them with a 10-watt resistor of the same resistance as the impedance of the speaker system, and connecting the headphones across this resistor.

If desired, a single-pole double-throw switch may be installed at the amplifier output to change the connections from speaker to headphones.

Recorded Sounds

Sen:
Can you explain to me how it is possible for a record groove to carry two or more tones of different frequency?

I understand that a single-frequency tone causes the groove to swing from side to side a certain number of times per second, but I cannot conceive of how it can swing back and forth at two different frequencies simultaneously. Please clarify.

John Clarke
New York, N. Y.

Assume that two tones of 100 cycles and 1,000 cycles are to be recorded in the same groove.

The 100-cycle tone by itself will cause the groove to swing back and forth 100 times per second, while the 1,000-cycle tone will cause ten times the number of swings per second. In other words, during the time taken for the groove to make one back-and-forth swing for the 100-cycle tone, it will make 10 swings for the 1,000-cycle tone.

To record both sounds in a single groove, the cutting stylus simply lays 10 high-frequency undulations along the path of a single low-frequency undulation. Thus, when the stylus traces the groove, it is vibrating at 1,000 times per second all during its traversal of a single cycle of the 100-cycle tone.

The groove's over-all path is determined by the lowest recorded frequency. Additional higher-frequency tones simply add to the complexity of the groove path within its general course.

Record Storage

Sen:
A few years ago, when I learned I was going into the army, I was faced with the problem of storing records and protecting them from warpage, dust, and mildew. Here's the way I tackled it, and it worked so well I can recommend it to anyone with a similar problem.

Materials needed include a roll of aluminum foil, some jelly gloves, sealing wax, a double boiler, and an ordinary kitchen stove.

Carefully note the composition, composer, conductor, orchestra, and recording characteristic on a note pad. Proceed to melt the record in the double boiler, and while this is melting, cut a few one-inch squares of aluminum foil and drop them into the clean jelly glass. When the record has melted completely, pour it through the stove into a jelly glass (to strain out the labels). Allow it to cool, and top with a copious amount of melted sealing wax. Transfer the information to a gummed label and affix to the glass. Store in a cool dry place. (If you're wondering about the foil squares, they tend to prevent static charges from building up during the storage period.)

I am proud to say that not one of my prized records was damaged by dust, mildew, or static charges.

Robert G. Bellis
Carlisle, Pa.

P. S.: My nine Toscanini Beethoven Symphonies fit nicely into a gallon mayonnaise jar, which I picked up from the delicatessen down the street.

Not only has Mr. Bellis solved the dust and mildew problem, he has also come up with the ultimate means for eliminating record and stylus wear. We would hesitate, however, to endorse Mr. Bellis's suggestions because of the extreme difficulty of cataloging the records thus stored, and the awkwardness of storing the records thus catalogued.

Also, what about the jackets?

Continued on page 119

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AUDIO FORUM

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Stylus Force

Stylus

In reading various advertisements about various phono pickup cartridges, I have noticed that most manufacturers specify a range of recommended stylus force rather than a specific value of force.

Why is this? I thought that every pickup cartridge had a single optimum value of stylus force, and that a value above or below that would increase record and stylus wear.

James L. Workman
Philadelphia, Pa.

There definitely is an optimum tracking force for every pickup, but this is determined in each case by the characteristics of the pickup arm as well as by the characteristics of the cartridge itself.

If the arm is very free-moving, properly balanced about its pivot, and almost perfectly free of resonances of all types, the optimum tracking force will depend on the compliance of the cartridge's stylus assembly and the effective moving mass at the stylus tip. If the pickup arm is less satisfactory in these respects, higher values of stylus force will have to be used to prevent the stylus from riding up the groove walls or possibly jumping out of the groove.

Another factor involved is the volume of sound recorded on a disc. The more loudly a disc is recorded, the more stylus force will be needed to maintain good stylus-groove contact, all other things being equal. With most pickup cartridges, the optimum stylus force will be that which gives the least distortion on most recordings.

Generally speaking, a fine transcription arm will permit most cartridges to be tracked on most records at the lowest value of force specified by the cartridge manufacturer. Record changers and inexpensive transcription players will generally require the highest value of force that is specified. If in doubt about any cartridge, track it at as low a force as possible, accompanied with airtic cleanliness from most LP discs. If this happens to call for a force of over 8 grams, some component in the reproducing system is probably defective or badly substandard.

Magnetized Playback Head

Stylus

I have encountered a perplexing problem with my home-built tape re-

corde. I have a Viking tape deck which I have rigged up with an erase head and two record/playback heads. One of the latter two is used for recording, and the other is used for playback through a separate amplifier, so that I can monitor from the tape while recording.

My problem is head magnetization, but the thing that puzzles me is that it is the playback head that becomes magnetized, instead of the record head.

I get excessive hiss from every tape I play. I have tried demagnetizing the heads, and this helps for about two or three minutes, at which time the hiss gradually comes up again. Obviously, I have some DC current running through the playback head, but this head goes directly to the grid of the preamplifier tube, so I do not see how there could possibly be any voltage applied to it.

Disconnecting both of the other heads makes no difference, so I know the trouble must be originating in the playback head.

It has me baffled. Can you help?

R. van Dyck
Houston, Texas

The only possibility we can see is that your playback preamplifier tube is noisy, and is consequently drawing enough grid current to induce some residual DC magnetization into your playback head.

Try replacing the tube, or insert a 0.1 mfd 500-volt capacitor between the tube grid and the incoming head lead. Then place a 500,000-ohm resistor between the grid and ground, to serve as a grid resistor for the preamplifier.

Tape Speed Fluctuations

Stylus

I have a perplexing problem concerning my tape recorder, and I hope you can help me.

At times, when playing back a previously recorded tape (recorded either from records or from the radio) it sounds almost as if it was being played at the wrong speed. And there is a very noticeable flutter and wow present. Yet, at other times, the same tape will sound exactly right.

At first, I thought it was the recorder itself, and I took it back to the dealer from whom I purchased it. He was unable to find anything wrong with it. He did suggest however that, since my recorder does not use a synchronous motor, the speed variation could be caused by fluctuations in the house AC supply. I told

Continued on next page

7 WAYS TO MAKE LOVE TO YOUR RECORDS



GIVE THEM DIAMONDS!

Genuine Columbia Diamond tip needles give records longer life, making them sound better. Contains 40 needles by Columbia engineers. Precision made for all phonographs.



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Columbia brings you the most beautiful record carrying case in America—perfect for party-going, work-taking, traveling and storage. Available in three sizes to hold either 7", 10", or 12" records. Each case holds up to 40 records with index. Available in blue and white, charcoal and grey, black and grey, grey and red, or brown and red.



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Columbia records by automatic 45 rpm record player on multi-speed phonograph. No turners required. Just slip it on the turntable and the records are ready to play.



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Columbia's soft-velvet brush cleans records as they play. Improves sound, prevents scratches. Guaranteed not to scratch delicate record surfaces. Practically weightless. Fits all turn arms.



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Columbia electrostatic spray cleans your records, lubricates grooves, prevents against record and needle wear, laminates scratching, cracks. Contains silicium. Single application lasts several months.



HELP THEM STAY YOUNG-LOOKING ALWAYS!

Columbia electrostatic dirt traps records almost like new. Eliminates static in records. Removes dust, dirt, grease, helps keep records from becoming scratched. Contains silicium.



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AUDIO FORUM

Continued from preceding page

him that our television set plus a number of other lights and appliances were on the same line, and he said that these could very possibly account for the changes in lamp voltage.

To check this, I took the recorder to the home of one of my cousins, who has a recorder of his own, as well as a complete high-fidelity setup. First we played a tape which I had previously recorded on my recorder, and it sounded perfect. Then we recorded a number of selections from the radio, and the quality was again perfect.

Unfortunately, I have not been able to install a separate line for my own use, and I would actually like to know if this is absolutely necessary, or if there might not be another reason for the variations in the quality of the tapes I have recorded. It has come to the point where I am never sure as to the *cause* of any tapes I wish to record.

Any suggestions or ideas you might have on the subject would be greatly appreciated.

Not Taverner
New Hyde Park, N. Y.

It is possible that line voltage variations could account for the speed fluctuation in your recorder, but it is certain that were this the case you would observe fluctuations in the brilliance of the electric lamps in your home. If these are seen to fluctuate with varying loads, you had better consult an electrical contractor, and even, as your home wiring may be overloaded to the point where it constitutes a fire hazard.

If you do not notice variations in your home's illumination, then the transport mechanism in your recorder is probably in need of attention.

Check for dried surfaces contaminated with oil or dirt, and clean the capstan, pinch wheel, and guide surfaces with lampglass alcohol. Then consult the recorder's service manual, check for correct takeup and loading tensions, and make sure that the proper clearances exist between clutch and drive surfaces in various operating modes.

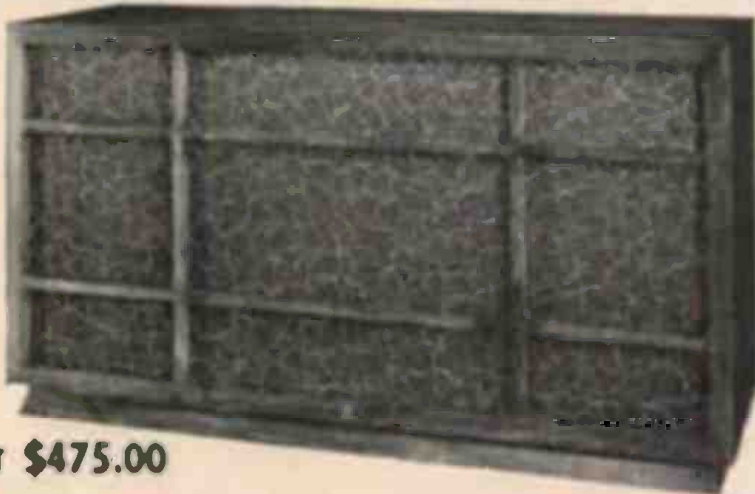
If none of these suggestions cure your troubles, return your recorder to the manufacturer for a complete checkup.



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MEN WHO SHAPE

Continued from page 40

"modern" music making—was advised when it became obvious that a market did not exist for each and every Bach cantata. Party seemed to fill the need. There were at least a hundred small companies doing more or less what we were doing. Seymour, who is in charge of artists and repertoire, said. "I think we survived because we were discriminating in our choice of repertoire; we found the right artists and the right working conditions." They worked hard, too, prepared practical editions of the cantatas largely from manuscript, went to the music manuals of the period for the traditional manner of performance, supplied the figured bass and ornamentation implied in the manuscripts. "It is impossible to be completely authentic—among wood-wind instruments, for instance, only the recorders and the oboe da caccia survive from Bach's time—but we came as close as we could, always trying to achieve to the intent of the composer."

Seymour is a specialist in the baroque period of music, and believes the trick to successful recording of period music "is to tread a careful path between pedantic authenticity on the one hand, and bad taste on the other."

Maynard Solomon concentrates on the sales and promotional ends of the business (although recently he came up with a fine repertoire idea: Erich Kunz in an album of German university songs) while Seymour handles the musical end, which includes, for him, setting the balance during recording sessions. "Our principle of operation," he said, "is to seek a plausible illusion of the concert hall performance. This means scaling the dynamic range down to living-room proportions." He is presently enthralled about the possibilities in three-track stereo recordings, and while Vanguard gained its reputation through its official, even eclectic repertoire, has now the pleasant job of recording the nine Beethoven symphonies, with Sir Adrian Boult and the London Philharmonic.

"We gain entrance into music shops in this country with standard repertoire," he said, "and our overseas markets demand it. The problem of too many variants hardly exists outside this country." Vanguard now has a popular division, too, and one of its albums, *The Wozzeck at Carnegie*

Continued on next page

CB-33



THORENS CB-33 \$48.00 NET

Hi-Fi budget strictly limited? Hi-Fi taste out of this world?

The Thorens Model CB-33F Manual Player gives you a complete 12" turntable and arm, adjusted for optimum tracking, on an integral mounting plate. These are the same basic precision components you get in the more expensive Thorens changer and automatic record players. Same motor, same turntable, same arm. Comes complete with two plug-in shells, shielded cable and 45 rpm adapter.

The famous three-speed Thorens direct-drive motor, precision made in Switzerland—no belts or tires to wear—insures constant speed at 33 1/3, 45, or 78 rpm, gives noise-free and rumble-free reproduction even with speakers of highest quality.

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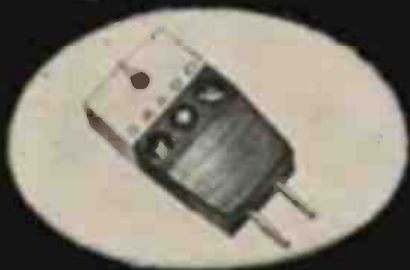
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MEN WHO SHAPE

Continued from preceding page

Hall, is one of the best-selling LPs in the United States. This heady success will not deter Vanguard from continuing its avire of English madrigal recordings. "There has been a simply incredible development of musical taste in this country during the LP era," Solomon said. "Madrigals are commercially feasible."

THE BEST-SELLING classical LP for the past year and a half has been Mercury's version of Tchaikovsky's 1812 Overture. Fourteen versions of his popular composition exist on records, but there is good reason for Mercury's being the overwhelming first choice of the musical populace. Antal Dorati and the Minneapolis Symphony are accompanied in their rendition by the University of Minnesota Brass Band, the bells of the Hartness Memorial Tower at Yale University, and a West Point brass quintet. This last disconcerting effect has never had its precedent in the concert hall, but it was the intent of the original composer of the piece in 1880 to have actual gunfire. Behind this interesting repertoire idea was Wilma Casart, Mercury's vice-president and the company's director of artists and repertoire.

None of Miss Casart's colleague-competitors will dispute the statement that she is by far the prettiest and most director in the business. Tall, dark-haired, and indomitably devoted to good sound reproduction, she came to the company seven years ago fresh from postgraduate work in music at North Texas State College. That was in 1950, she was just in time for Mercury's inauguration of the Olympian Living Presence series. "We made an excellent impression with our first release—*Pictures of an Exhibition*, with Kubelik conducting the Chicago Symphony Orchestra. We rescued the reputation of the Chicago Symphony, on records at least, and it became a big-selling orchestra. Bob Fine broke down the misconception that it was impossible to record in Orchestra Hall. He used a single Telefunken mike, placing it directly over the conductor's head, with no doctored levels.

"We believe," she continued, "in giving the public an authentic reproduction of a musical work. What each conductor gets in the way of sound is left on the tape." Mercury's technique, which is in the hands of the aforementioned Bob Fine, a talented engineer (and Miss Casart's husband), is apparently satisfactory to a

large group of listeners, to judge by the sales of recordings made by the Chicago, Minneapolis, and Detroit symphony orchestras. Other listeners have been known to grumble at the necessity to jump from their seats and attend their amplifier controls. But Miss Coast is not averse to each listener's being his own engineer and balance setter.

Mercury's classical catalogue is devoted to an ideal of sound and a small but select roster of artists. Among the projects it takes most pride in is the series of recordings of American music made at the Eastman School of Music under Howard Hanson's direction, the concert band recordings directed by Frederick Fennell, and the harp records made by Carlos Salzedo.

Wilma Coast is also proud of the fact that not one entry in the catalogue dates from the pre-high-fidelity era. Note, too, that Mercury was the first to issue three-channel stereo recordings. For those who might complain that certain passages in Mercury records need some volume control, she firmly states: "We are not in the business of making classical mood music, after all." Her prescription for listening to the canon in the 1812 Overture: "Full volume!"

SNARK SPOOR

Continued from page 45

on a hundred skills, know the answer to that one.

Well, there we are. The authorities I have cited were not chosen carefully to prove a thesis; they were chosen precisely because they are authorities, and really knowledgeable ones at that. They know their business at least as well as any comparable authorities in other branches of engineering, and their opinions are entitled to the utmost respect, the hi-fi business being what it is. But, as I have tried to show, it is a devious business, with science and not sense determining the accounts. Until all of us in the business—designers, manufacturers, reviewers, and (most important) customers—realize that all we are after is the best possible reproduction of our favorite music, and not a prestige medal in the frequency-response and power-output stakes, a lot of money is going to be spent on the shadow, with the substance being left on the shelf. We should not ignore the end of *The Hunting of the Snark* when, after much frustrating and perilous hunting, it was discovered that "the Snark was a Boojum, you see."

JANUARY 1958

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If listening to good music is one of the principal interests in your home, the Newcomb Compact 200 is designed specifically for you. The 200 combines brilliant performance with proven-in-use dependability, freedom from gimmicks, and most harmonious-sounding. Virtually free from distortion and hum, the Newcomb 200 has an optimum, measured FM sensitivity of 2 microvolts for 30 db of quieting. Utmost stability is assured by snap-in automatic frequency control and temperature controlled oscillators. The Compact 200 has a multiplexed lead, up to 10 volts from a cathode follower output permitting remote placement up to 200 feet from amplifier, and unsurpassed conventional tuning eye. All of this beautifully balanced engineering is housed in a gold-trimmed cabinet measuring just 12 1/2" x 4 1/4" x 3 1/2". Listen carefully and inspect the Newcomb Compact 200 closely before you decide on the tuner you plan to live with. Enlightened consumers choose Newcomb 3 times out of 10. The 200 is not available to every dealer. Write for the name of the Selected Newcomb Specialist nearest you.

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Records in Review

1957

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Edited by *Joan Griffiths*, Assistant Editor, *High Fidelity Magazine*

Here, because the owner of a single volume, is the expert guidance needed by everyone who would make intelligent purchases of LPs and tapes.

This book, the only one of its kind, contains over 900 reviews of classical and semi-classical music, and the spoken word, that have appeared in *High Fidelity Magazine* from July 1956 through June 1957. The reviews cover the merits of the performances, the quality of the recording, and comparative evaluations with releases of previous years. They are written by some of this country's most distinguished critics.

The reviews are organized for easy reference — alphabetically by composer and, when the number of releases for any given composer becomes, are divided further into classifications such as orchestral, chamber music, etc. An index of composers is included. The book is printed in clear type on fine quality paper, attractively bound and jacketed.

RECORDS IN REVIEW is published by the *Wyeth Press*, an affiliate of *High Fidelity Magazine*.

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BOSTON SYMPHONY

Continued from page 51

register. Dr. Meck, with his usual sarcasm and dry sense of humor, got a real kick out of it and the orchestra got a good laugh!

On the sessions went, the rest of Tuesday, all day Wednesday, the same on Thursday, and again on Friday. When the Tchaikovsky Suite was satisfactorily engraved, it was decided to go ahead and record the shorter pieces that Librarian Rogers had brought along. No tour that the orchestra had ever undertaken was more strenuous than this, but by the end of the last session, on Friday afternoon, everyone shared the exhilaration of having participated in a great event. Even Dr. Meck, who had at first resented having to leave his comfortable Maine home a week early, was pleased with the results.

How pleased can best be judged from an anecdote told in the November 1956 issue of *The Phonograph Monthly Review*, one of the earliest periodicals in the United States devoted exclusively to news, information, and reviews of records. Dr. Meck, Victor Herbert, and some of the recording men were a little late arriving at one of the final sessions. As they approached the door of the studio, they heard coming from inside the sounds of the Tchaikovsky Suite. "What are they rehearsing the Tchaikovsky again for?" someone exclaimed. "That's all finished and recorded; they should be rehearsing the *Lohengrin Prelude*." When the door opened, it was discovered that what they had been hearing was a playback of the record which had been made the day before!

It was late Friday afternoon, October 4, when the exhausted musicians filed slowly out of the Victor laboratory and onto the buses waiting to take them back to Philadelphia. They spent the early evening in the City of Brotherly Love, but they were all too tired for anything but boarding the train back to Boston. At 10:45 p.m. they were on their way home. In contrast to the trip out, this time there were no card games, no groups keeping each other awake all night. They remained in their own cars and slept as though they had been drugged.

A week later the orchestra's season officially began with the traditional Friday afternoon concert in Symphony Hall. By the time December arrived, the events of the first week of October seemed like a dream. But the arrival of the December bulletin

HIGH FIDELITY MAGAZINE

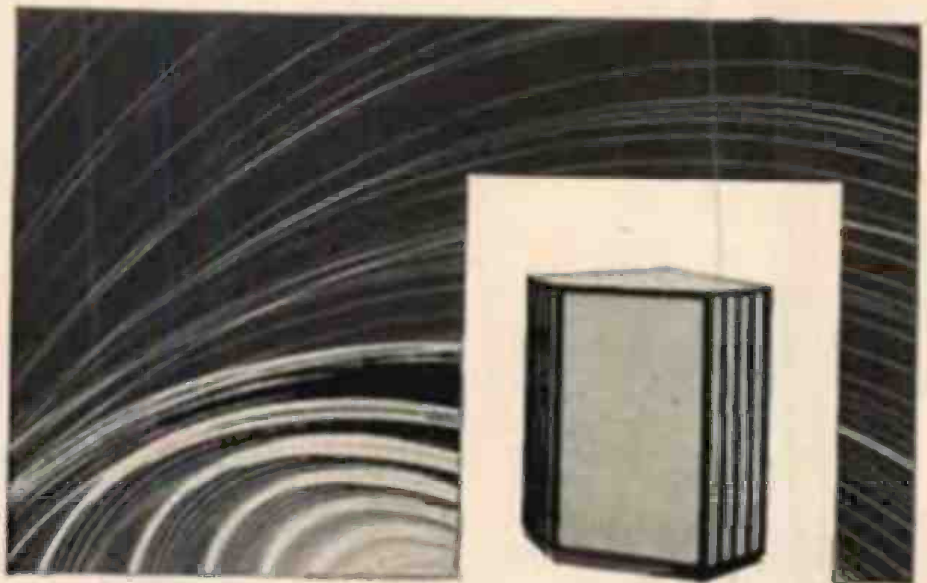
of the Victor Talking Machine Company served to bring them virtually back to memory.

A triumph—first records by the Boston Symphony Orchestra, ran the proud announcement on the center-page spread. Three discs constituted that first release of December 1917—exactly forty years ago last month. The finale of the Tchaikovsky Fourth Symphony occupied two single-faced twelve-inch discs (74333/4), each selling for \$1.50; the Prelude to the Third Act of *Lohengrin* (64744) was on a single-faced ten-inch disc which sold for \$1.00.

From the response of both critics and public it is clear that no orchestral recordings produced anywhere until that time compared in impact with these first Boston Symphony Orchestra recordings. When he heard the finished discs, Victor Herbert exclaimed: "At last it is possible to present the performances of a symphony orchestra! Now, everything is possible!" R. D. Durrell, a critic whose writing calveins these very pages each month, wrote: "The tone of the wood winds is so exquisite that one can only marvel. Precision, phrasing, and tone are equaled only by the balance and clarity. It is hard to avoid superlatives when describing these records. . . . There was never anything like them before, there can never be anything quite like them again." And the announcement in the Victor bulletin concludes with these words: "After years of research and experimentation, we feel that this, our latest achievement, is worthy of our best traditions, for it makes available a whole province of music which so far has remained untouched, and offers the music lover the first of a series of symphony orchestra records which far surpass any orchestral records obtainable anywhere in the world." If this sounds strangely like current pronouncements from this or that record company about its most recent developments in ultra-fidelity or stereophony, it proves only that the advertising copy writer of 1957 bears a remarkable likeness to his 1917 counterpart.

1947 was the year designated in these pages recently as "the Year One of the present high-fidelity enthusiasm." In a larger sense, however, this date can be moved back three decades, to 1917, and the heroic attempts of the engineers in Camden to reproduce the cynical crash with which the finale of Tchaikovsky's Fourth Symphony begins. The ultimate in high-fidelity reproduction will probably remain forever unattainable,

Continued on next page



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BOSTON SYMPHONY

Continued from preceding page

but whatever victories have been won in this continuing battle in the past forty years were nullified by that cynical crash in 1917.

One final footnote remains to be added. It was the intent of the Victor Talking Machine Company to launch the heaviest advertising campaign in its history in the promotion of the Boston Symphony Orchestra recordings. Included in the plans was a double-page spread in the Saturday Evening Post. A few weeks after the discs were released, however, there began a whispering campaign against Dr. Meck and his alleged pro-German sympathies. America had joined the Allies in April 1917, and in the era of incendiary emotions which followed anybody with German ties was suspect; Meck, the most prominent German conductor of the time and a favorite of the Kaiser's, was especially vulnerable. He was jailed in March 1918, and then departed. This unpleasantness brought with it a cancellation by the Victor Talking Machine Company of all its plans for the promotion of the records and for a time they even stopped pressing the discs. During the next ten years the Boston Symphony Orchestra remained conspicuously absent from the recording studios.

It was not until November 13, 1928, in Serge Koussevitzky's 6th season as Music Director, that it again came around. A decade of silence is a long period in phonographic history, but the contribution of those first hundred recordings was made that grimy trek to Columbia eventually could be measured by quantity alone.

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FIFTY THOUSAND SIDES

Continued from page 38

With flag hot styles to achieve clean cutting of high frequencies near the center of the disc, and Variable Groove to permit extra playing time on the three-plus inches of groove space, Columbia by 1950 was equipped to incise more than half an hour of music on each side of an LP, with a tonal accuracy never before achieved on records.

AS MANY companies have found to their sorrow, not every device feasible in the laboratory can be profitably manufactured for public consumption. Though Goldmark's most serious engineering problems were licked by the spring of 1947, musical and production barriers were still to be hurdled before Columbia would have anything to sell. LPs had to be spliced together from short-play masters and "safety" transcriptions in such a way that the customer heard no record breaks, and the factory had to turn out high-quality discs in large quantity. Neither, it soon appeared, was likely to be an easy job.

Goldmark, a musician himself and a great nephew of the Viennese composer Karl Goldmark, had thought

through the musical problem, and his laboratory had designed a machine to splice short takes together, seamlessly, into an LP. The machine—"a real Rube Goldberg contraption," says one of Goldmark's colleagues irreverently—arrived at Columbia Records from CBS labs in the fall of 1947, together with an engineer to run it. Columbia Records' own engineers Bill Savory and Paul Gordon, together with a young musician named Howard Scott, were assigned to work with him and make sure the splices were musically accurate. Scott, then just beginning what might (but should not) be called his long labor in the vineyard, had the machine explained to him, then sat down with a score to watch it in action.

The first assignment given the new contraption was the splicing of takes of the Brahms Fourth Symphony. Scott played the four-minute bits to be spliced, taped each of them exactly, and set the Goldmark timer to do the work. The first four-minute side played through on one turntable, and the second four-minute side began spinning on the other. Automatically, the pickup arm set down on the second side to make the splice. Scott was full of admiration for the mechanical ingenuity. Then he

Continued on next page

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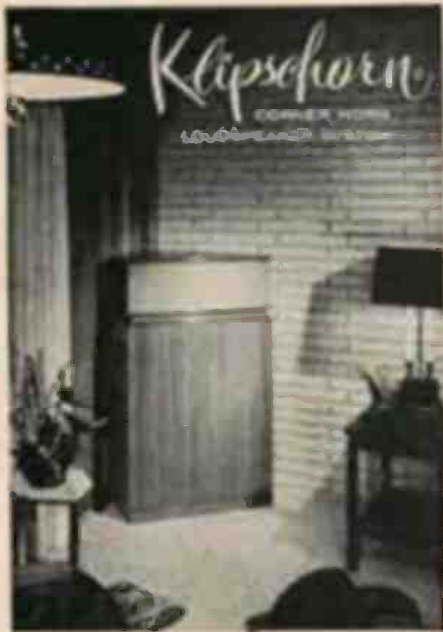


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FIFTY THOUSAND SIDES

Continued from preceding page

heard the sonic results the machine had missed a bar.

They set it up again and tried again. This time the stylus set down in just the right place, and then skipped a groove. Yet again Scott and the engineers set the dials and spun the discs, and yet again the machine failed in its final duty. For two long, increasingly desperate weeks Scott and the engineers from the CBS labs worked on the first movement of the Brahms Fourth Symphony, and at the end of the two weeks they were precisely where they had started—except that the acetate master from which the dubbing was to be made had worn down considerably.

At this point Scott took his problem to Bachman, who guided him to a room where for some years engineers and musicians had been splicing 78-rpm records together from the 33-rpm master acetates. Scott's job was more difficult, because the recorded takes on the master acetates had not been calculated for splicing, as takes on tape are today. Much of Scott's task then involved taping together separate 78-rpm records, often at mutually awkward moments. Moreover, Scott had a problem nobody had ever anticipated: to keep the surface noise at a steady level, so listeners would not be conscious of the differing levels of the original discs.

Together, Bachman and Scott worked out a curing system for the engineers. Twelve sections were marked on the circumference of the turntable and numbered, to guide the engineers in setting down the stylus. Then Scott would listen to the ends and beginnings of the sections to be spliced, and make appropriate notations on the score. When the time came to set the second turntable in motion, he would call "Cue point!" When the time came to set down the stylus he would call "GO!" and snap his fingers. ("Even today," Scott says, "I'll be at a concert where they're playing something I spliced, and uncharacteristically I'll snap my fingers when they play the cue notes.") Manual controls faded in the new record, and faded out the old one, to guarantee smooth splices and steady surface noise without any noticeable snarl. Columbia's engineers believe that Scott's splicing in this tricky medium was as good as anything achieved today in the industry were splicingable medium of tape; nobody has ever located, by listening, one of Scott's splices.

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"Now that I think back on it," says Vincent Liebler, shaking his white-haired head. "I'm frightened—the miracles that were performed!"

Meanwhile, at Columbia's factory in Bridgeport, Connecticut, the production engineers were wrestling with masses of vinylite and the lamphack to color it (because vinylite comes from its makers a dirty-white color considered undesirable) and plasticizers to bind the lamphack—kneading great rolls of the stuff like bread dough. (Earlier Columbia had bought a Ranbury mixer three stories high, of the kind used by tire companies to mix rubber.) Other engineers were testing matrix materials to see what made the best stampers for pressing vinylite discs. (They decided on nickel, which was used for a year, then shifted to special iron plates similar to those used by the Treasury's Bureau of Engraving to print money; among the reasons why counterfeiters get caught is the fact that they use copper plates.) Still other engineers were experimenting with different pressures and different temperatures (all hot) in the pressing machines.

All this work was proceeding under the supervision of James Hunter, vice-president in charge of manufacturing and engineering, and his new works manager, Elmer Eldridge, an amiable young businessman whom Columbia had hired as personnel director when he came out of the Navy. "I didn't know how to make the other kind of record," he says. "Let alone the LP. What had happened was, they were disappointed in their plant manager, and they told me on five minutes' notice that they were giving me the job."

The LP brought new headaches to the factory at every stage in the process. Groove holes had to be punched in the matrices within tolerances on the order of ten-thousandths of an inch, to guard against off-center wobble. The timing cycle on the press had to be recalculated. The manufacture of laminated composition 78-rpm records tilted great clouds of dust in the plant and, as Eldridge puts it, "vinylite is a very clean material. Dust on a vinylite record is something you just don't want." Groover heat was needed during the pressing process, and the pumps which supplied it frequently broke down. Vinylite records were sensitive to heat after they were pressed, too, and the storage warehouse was overheated, like a hotel lobby. The first four or five thousand discs approved by the quality-control department ("I don't remember exactly how many," Eldridge says, "but I remember how sick we were") had been packed in the usual corrugated

boxes which were good enough for 78s. They all warped.

Throughout the first six months of 1948, records poured from the presses. "We'd press a hundred records and get one or two good ones," Eldridge says. "Then, ten days later, we'd press a hundred and get maybe ten or twelve good ones." At the beginning, every record off the press was inspected, measured, examined through a microscope, played. Then the inspectors began checking carefully only on the first disc from each batch of sixty. Bachman himself came out from New York to work with the inspectors and train them; sometimes Goldmark would arrive, unheralded, to run a quality control check of his own.

Everybody connected with producing the early LPs had one particularly hairy work that was his personal anathema of the whole lot. To Bachman, of course, it was the Zevco, with its twenty-nine cutters for a single side. To Scott, it was the Metropolitan Opera recording of Puccini's *La Bohème*. To Liebler, it was Shakespeare's *Othello*—"challenging, with those quiet places where you could hear all the ship echoes and pre-echoes." To the factory, for reasons still mysterious, it was the very last item on the production run, an 4008, a Budapest Quartet recording of Beethoven's Opus 128. Pressing a successful Opus 128 turned out to be so difficult that the people working on the record thought up a ditty about their situation, and sang it in a dirge-like manner as they went about their daily round: "Eun ell four ought ought die! Has the factory in a terrible fix? We can't seem to get! A good copy, yet! We've got to if we're not to get kicks."

FINALLY, there were decisions to be made about the equipment on which to play the new records, and the publicity to accompany their introduction.

Goldmark and his staff had gone at the LP problem with what Goldmark describes as "the system approach"—working simultaneously on the record itself and the reproducing mechanism. By 1947 they had designed a special turntable, a piezoelectric pickup which would compensate for the bass de-emphasis and treble pre-emphasis on the record, a special sapphire stylus, and a tone arm with a tracking pressure of only six grams. Since at that time Columbia had no phonograph-manufacturing facilities, the company went to Polk, a major manufacturer with

Continued on next page

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FIFTY THOUSAND SIDES

Continued from preceding page

strong merchandising activities, and offered the results of Goldmark's research, free of charge aside from a nominal license fee to be paid on the pickup cartridge, which CBS had patented. Philco happily seized the opportunity, and began manufacturing a record player which Buchanan calls "The Clam," a turntable, pickup and tone-arm combination in a hakebo case with a lid that did, in fact, close like a clamshell. The new player was to be offered for \$19.95, ready to be plugged into existing radios, televisions sets, or phonographs; later, during the great LP-45 "war" of 1949-1951, the price came down to \$9.95, with a couple of records thrown in.

With the player-manufacture problem on its way to being settled, a top-level meeting was held between Board Chairman William Paley of CBS and David Sarnoff of RCA. At the conference Goldmark demonstrated the "LP," and Paley offered to share all Columbia's manufacturing expertise with RCA Victor, waiving all possible patent and royalty rights, and asking only a sixty-day head start in its commercial introduction. Sarnoff may not have been completely unimpressed, but he decided that RCA would confine itself to its own current project, the 45-spin disc. Columbia confidently went ahead with independent plans for the lasting.

All that was lacking was a name for the "new record." Goldmark's experimental pressings had carried the label "Fine Groove," soon refined to "Microgroove," but these words struck the marketing experts as too subtle for public consumption, and executives of CBS and Columbia Records were urged to brain their imaginations for a name. People who were among employees at the time remember excited meetings in the halls, of which our executive would show another a small piece of paper with some printing on it, and ask for an opinion. A series of high-level conferences was held to consider different suggestions, without result.

On his way to one of these sessions one day, Goldmark fell to brook a principal officer of the company, and began to chat with him about "the dilemma we're having in finding a name for the LP."

"LP" asked the leading executive quizzically. "What's that?"

"Why, the conformation for the new record," Goldmark rejoined with some mystery. "We've been using it at the lab since we started work."

"Well!" said the principal officer.

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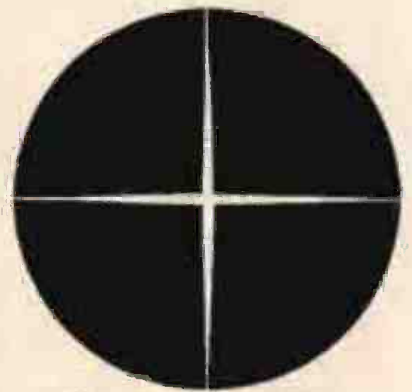
PANGS OF PROGRESS

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be almost inconceivable today. Some stage artist and repertoire director would have heard her in Oslo in her nineteenth year, detected the promise of her voice, and signed her quickly to an exclusive contract. I am certain that Flagstad in her twenties was capable of making some respectable records. But if she had been put through the LP mill, would she be the mature artist she is today? There is, I recognize, another side to this question. The years in which Flagstad was left unrecorded were also the years during which no one bothered to record Toscanini's *Meistersinger* at Salzburg, or Rachmaninoff playing late Beethoven, or *Der Rosenkavalier* under the composer's direction. We can't have it both ways, and most of us would—I am sure—much prefer a large net that scoops up underdeveloped fish along with the mature ones to a small net that lets the big ones get away. Still, the fate of the little fish is none the less distressing.

In a way, we shouldn't blame a musician—young or old—too severely if he agrees to consign an imperfectly matured interpretation to records. He knows that in the Age of LP the latest version is almost invariably the one that sells best. Is there already in the catalogue a superlative Toscanini recording of the music a young conductor is asked to perform? No matter. His new version, especially if it is brightly packaged, will be more prominently displayed in record shops. Until that is a newer one comes along. Why should he insist on letting music stumper until it reaches its full flavor? Let the Schwabels wait forty years before consenting to record Beethoven. Today's young musician intends to cash in while the boom is on.

By now my friend Goldring Lieberman, one of the chief instigators of LP and now president of Columbia Records, may be tempted to exclaim: "This is one hell of a way to celebrate a tenth anniversary!" But he should know by now that critics are sour types, always looking on the unpleasant side of things and spoiling the fun. Besides, is it not patent that, with all my complaints, I love the LP record dearly? And do we not often find fault, most with what we cherish best?



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