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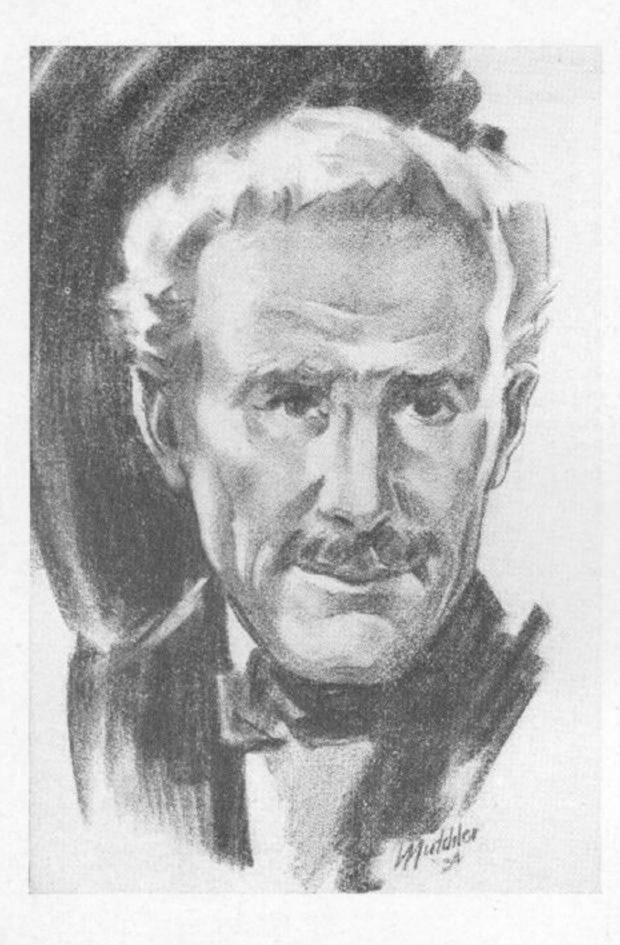


NEWS OF LATEST DEVELOPMENTS IN THE SCOTT RESEARCH LABORATORIES

Vol. 10

NOVEMBER, 1937

No. 6





Since installing your latest instrument in my suite here at the Hotel Astor, I would like you to know I have had many hours of pleasure from it. Never would I have believed that it was possible to sttain such a mervelous reproduction and to you assuredly

belongs the credit of having produced a miracle of perfection. What satisfies me really very much is the quality of the tone which is mellow, clear, beautiful and not confused as in other receivers which I have had before yours.

Wishing you the success which you

deserve, I am

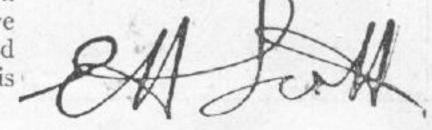
Yours very truly,

## Arturo Toscanini Begins Symphonic Broadcasts Christmas Night

GREATEST LIVING CONDUCTOR DESCRIBES REPRODUCTION OF HIS SCOTT RECEIVER "A MIRACLE OF PERFECTION"

On Christmas night Maestro Arturo Toscanini, generally recognized as the greatest living conductor, will begin the most thrilling series of symphonic broadcasts ever put on the air, when he will direct the NBC symphony orchestra comprised of 93 of the finest instrumentalists and soloists, many of whom come from such famous musical organizations as the Philadelphia, Cleveland, Chicago, Cincinnati, Detroit, Minneapolis, Paris, Madrid, Brussels, and Budapest symphony orchestras. We feel that our years of research in developing the finest in radio reproducing instruments has not been in vain when it can enthuse such a great artist as Arturo Toscanini to say, "Never would I have believed that it is possible to attain such a miracle of perfection." This tribute to his Scott receiver will always be one of our most treasured possessions. I can build for your home the same fine instrument chosen by Toscanini,

at a cost which even a short time ago would have been incredible for a hand made instrument of this type.



# "Philharmonic" 30-TUBE

#### Receiver

(Latest Scott Custom-Built Set)

By Laurence M. Cockaday and S. Gordon Taylor

PRELIMINARY to a description of some of the features which make the new Scott "Philharmonic" receiver so definitely outstanding, it will be of interest to many readers to know something of the inside story of Scott receivers, as observed by a Radio News staff member when he visited the Scott Laboratories in Chicago during a recent midwestern trip.

Our visit to the home of the Scott receivers started with a leisurely walk through the entire premises, then the ground was again gone over in more detail, starting from the "inner laboratory" where research and development work is carried on constantly. This particular laboratory, incidently, is about as "hard-to-get-into" as the vaults of the Bank of England, the reason being that, incidental to the development of receivers, much original work is done here which first sees the light of day when patent applications are filed in Washington.

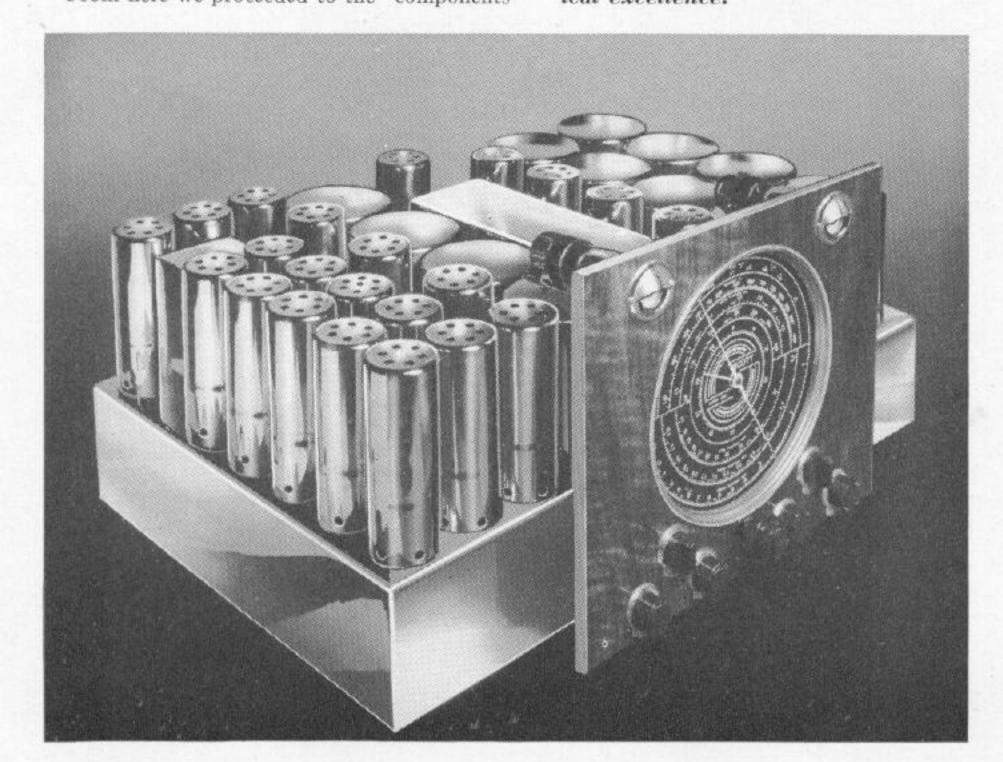
From here we proceeded to the "components

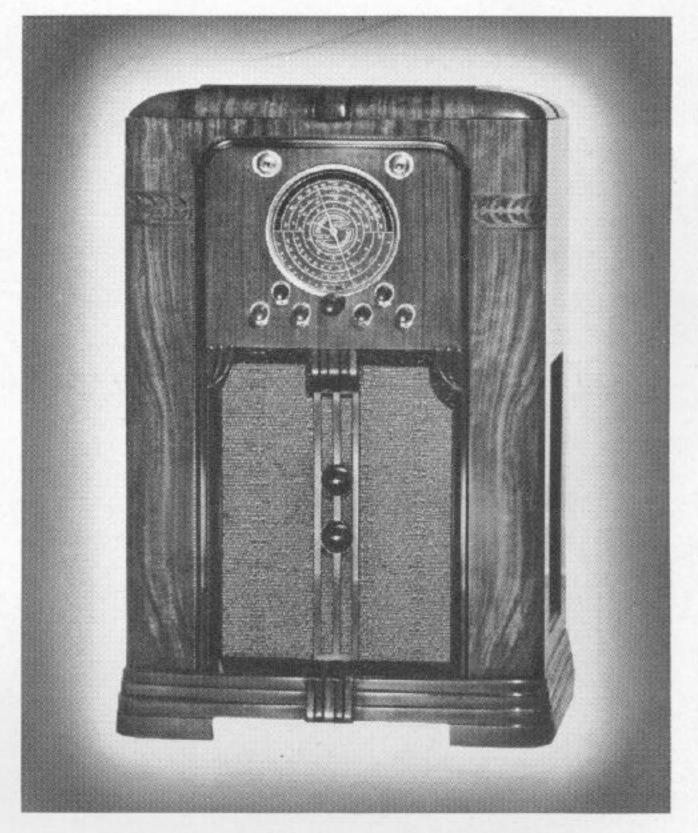
testing laboratory" where every part going into the receivers is tested in an unusually thorough manner. There each individual one—not just a sample from each lot—is put through a series of critical tests. Mica condensers, for instance, are tested for leakage at three times the maximum voltage to which they will be subjected in the re-

ceiver, using test equipment capable of measuring leakage currents as minute as .001 microampere (a billionth part of 1 ampere). Then they are tested for capacity, in some cases tolerance of only 1 micro-microfarad being



Chromium plated throughout, this unit is one to please the most critical eye. But more important, of course, is its electrical and mechanical excellence.





THE NEW 3.75 TO 2000-METER RECEIVER

Thirty tubes are employed in a circuit which includes
dual a.v.c., volume expansion, continuously variable
selectivity, true high fidelity and numerous other
features.

allowed. Finally they are tested for power factor with a tolerance of ½ of 1 percent.

#### **Exacting Tests**

Space does not permit a description of all of the test made on all parts but the foregoing description of a typical test will convey some idea of the thoroughness with which guesswork is avoided.

The assembly and wiring of each receiver is definitely a hand operation. There are no "production lines" or anything smacking of the mass production of the usual radio factory. Everything is, of course, standardized for the sake of general efficiency and uniformity, just as is the case in the manufacture of the finest Swiss watches, for instance. But individual responsibility of the expert workers is definitely fixed, and pride or workmanship is apparent at every turn. There is none of the hustle and bustle—the forced production—of the conventional shop.

When the chassis assembly and wiring has been completed it starts through a formidable series of tests. Here are the engineers who are highly specialized in their various functions of testing, aligning, adjusting audio filters, etc. The tubes are inserted in their sockets and these same tubes, used throughout the tests, are the ones that go to the owner in that receiver. After all this checking, double checking and adjustment, the receiver is apparently finished—but it is by no means ready for shipment to its owner. There is still the final "rack" test.

This "rack" test consists of placing the finished chassis and its own power supply unit in normal operation for a period of twelve hours, an hour "on," an hour "off," etc. This alternate heating and cooling represents the final effort to bring out any defect or weakness which may exist, either in tubes or other components. After this 12-hour period the receiver is removed from the rack and again goes back for test. If any of its characteristics have changed, the cause is determined and corrected and then the

receiver goes through the entire series of tests again, including the 12-hour rack tests.

It is then—and then only—that the receiver is ready for its owner. It is as perfect as science can make it, with every possible precaution taken to insure continued perfect operation after it has been installed in the owner's home.

During a six-week "on the air" test of this new Scott receiver its performance was critically checked from every angle—sensitivity, selectivity, tone quality, flexibility of control, calibration, automatic volume control action, etc. In some of these important features it far exceeded the most demanding requirements, and in all of them it performed with a degree of excellence which should satisfy the most critical listener-in, whether he be a lover of fine music, a DX fan, a short-wave enthusiast or a combination of all three.

The naturalness of reproduction is possibly the most immediately impressive feature of the "Philharmonic." Not only do the individual instruments in an orchestra or band sound natural, but the orchestra as a whole really sounds like an orchestra—with, due to the volume expander, the wide variations in volume evident when one listens directly in the concert hall or theatre, but which are conspicuous for their absence in the usual radio reproduction.

The treble and bass response were likewise readily regulated to suit the program and surroundings. If one doesn't relish the continuous bass "tom-tom" effect of swing music, for instance, he need only retard the bass control knob to partially suppress the offending instrument. On the other hand if it is desired to emphasize the majesty of the treadle-notes of the organ, the bass control provides a means for doing so. The "Hi Fidelity" or treble control provides similarly wide flexibility in adjusting the response in the upper registers. This was found useful in compensating for acoustic defects in the ordinary room; also in reducing external noise when tuning in distant stations.

The Scott loudspeaker, in keeping with other portions of the receiver which contribute to its high-fidelity reproduction, is fully capable of effectively reproducing a considerably wider musical range than that transmitted by even the finest regular broadcast stations. A striking feature is the purity of tone in all ranges. The low rumbling notes of the organ, for instance, are reproduced with the same breath-taking, buffeting sensation experienced when one is present in an auditorium. At the other extreme the piercing notes in the highest organ register are heard with equal naturalness. There is no "paper rasp" on the low notes; no "escaping steam" effect on the high notes. As a result, the listener is not continuously reminded that he is listening to electrical reproduction. With lights dimmed it requires no effort at all to imagine oneself actually present in the auditorium where a fine program originates.

The matter of sensitivity could be dismissed with the statement that the *usable* sensitivity exceeded all requirements for both broadcast and short-wave reception. The accompanying curves, Figure 1, show the Scott measurements of sensitivity for the five most popular ranges to be well below one microvolt, at a signal-to-noise ratio of 1 to 1. In view of the fact that very few locations have local noise lower than

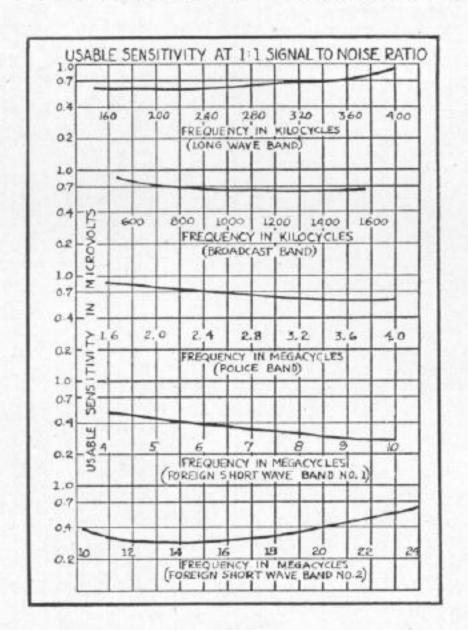


Fig. 1

5 microvolts it is at once obvious why the receiver provides greater sensitivity than can be used. This was clearly demonstrated in the tests and many signals were heard well that were spoiled by noise when an attempt was made to tune them in on another receiver.

When the "Selectivity-Hi Fidelity" control was set for maximum selectivity it was found possible to tune in station 10 kc. either side of every local, at times when the locals were

SHORT WAVE	TUNING CHART	(19 METERS)
SEC. DIAL	KILDCYCLES	LOCATION
78+		
4- DJR	15,340	GERMANY
77 4- WEXAD	15,330	SCHENECTADY
76- *~ GSP	15,310	ENGLAND
75 + DJQ	IS 280 IS 270	GERMANY NEW YORK
74	13.270	Herr ross
73 *- TPA2	15,243	FRANCE
→ OLSRA	15.230	CZECHO-SLOVAKIA
72 PCI	15, 220	HOLLAND
+-wa××		PITTSBURGH
71 + DJ8	15, 200	GERMANY
70-4-G50	15,180	ENGLAND
69-		
68 4-65F	18,140	ENGLAND
67-		
66 RKI	15,090	RUSSIA

Fig. 2

confining themselves to 100 percent modulation. Tuning in WLW, Cincinnati, with absolutely no interference from the local WOR was no trick at all for this receiver; but to tune in WWL, New Orleans, with no QRM from WABC, is an achievement when it can be done quite regularly as proved to be the case in these tests. When in this maximum selectivity position the higher frequencies are greatly attenuated, thus reducing noise to a degree highly favorable for DX signals. In general, short-wave reception was found to be more consistent with this receiver than is usual. German, English, Czechoslovakian, Russian, Australian, Italian, Dutch, French and South American stations were received, frequently with stability and clarity actually equivalent to "local" broadcast stations. More than once it was necessary to wait for a Russian station, for instance, broadcasting a program in English, to sign before a visitor would be convinced that such excellent reception could be obtained from such a distance.

Tuning, even at frequencies as high as 25 megacycles, was as easy as tuning most receivers in the broadcast range. The "second" hand in the center of the large dial proved definitely advantageous in logging stations. This hand moves over a complete circle divided into 100 parts. The way stations spread out is shown in Figure 2 which covers a part of the 19-meter band. Even here each division of the second scale represents only about 20 kilocycles. It is a noteworthy fact that these stations were logged at the dial settings shown the day the receiver was set up—and throughout the 6-week test period.

The automatic gain control system provided such complete control that in tuning through the entire broadcast band, for instance, distant stations were distinguishable from locals only by the fact that noise accompanied the very distant ones, due to the automatic increase in sensitivity as weak stations were tuned in. It is only when tuning for DX signals that any noise need be encountered. In regular home operation the manual gain control is normally retarded (with no station tuned in) to a point where no noise is heard, and left that way. Then as the receiver is tuned nothing is heard except broadcast signals that are above the local noise level.

Another feature of the receiver lies in its use in the reproduction of phonograph records. As in radio reproduction, its musical range far exceeds that of recorded programs. The Scott pick-up unit which is especially designed to provide wide frequency response and minimum wear on the records, likewise does an excellent job.

The needle scratch suppressor marks a very definite advance in reproduction from records as it minimizes the one objection that has always existed in phonograph reproduction—namely, surface noise, or scratch. In the Radio News tests the effectiveness of this new system was carefully checked and is enthusiastically approved. It removes the constant reminder when one is listening to a phonograph record, that it is a mechanical reproduction and for that reason adds tremendously to the enjoyment of recordings.

This, then, is the story of the study and tests of the Scott "Philharmonic." Designed primarily for the enthusiast who demands radio reception par excellence, it accomplishes this aim in a manner which even a few months ago would have been considered incredible.

# Something someth

# Scott Custom-Built Radio

### ALWAYS ONE TO FOUR YEARS AHEAD IN ADVANCED DESIGN AND PRECISION ENGINEERING

#### A Laboratory Built Instrument

COTT receivers are custom built to order by highly skilled laboratory technicians-in what is generally recognized as one of the most completely equipped radio laboratories in the world. A Scott custom built radio receiver is the PRECISION instrument of radio. It is the hand made product of the micrometer and oscilligraph, calibrated and tested by the most infinitely accurate measuring devices known to science, and an inflexible determination that every Scott receiver, before it leaves the Laboratory shall always be as perfect an instrument as skilled human hands can make it, that will give pleasure and satisfaction and be a proud possession for many years to its owner.

#### Years Ahead Design Easily Proved

Those technically familiar with radio receiver design will find not only every worth while present day development already incorporated in a Scott, but will also find features not at present incorporated in any other receiver, but which will undoubtedly be found in the receivers of the future.

For example, the FIRST receiver to successfully incorporate more than one tuned stage in a superheterodyne amplifier was a Scott, which pointed the way to the super-selective superheterodyne as we know it today.

The FIRST receiver to successfully incorporate the Screen Grid tube was a Scott—which created new standards for Sensitivity in a radio receiver, making it possible to bring in distant foreign stations clearly with good loud speaker volume.

The FIRST Scott Allwave receiver was introduced in 1928, but it was not until 1932—four years later—before the ALLWAVE receiver was introduced by the production type radio manufacturers.

The FIRST real High Fidelity receiver capable of reproducing the entire audible range of the human ear from 30 to 16,000 cycles was a Scott, and although introduced over three years ago, it is still, I believe, the only instrument capable of this high degree of Fidelity.

#### What You May Expect From This Custom Built Receiver

- Clear, loud speaker reception from stations located thousands of miles away in practically every part of the world.
- (2) Tonal reproduction of an entirely

new degree of perfection. When a symphony orchestra plays you will seem to be present in the Auditorium with every instrument standing out clear and distinct, and all of the rich overtones that give life and vividness (which are usually missing entirely on the ordinary radio) reproduced with a startling degree of realism. When you hear a voice—male or female—so natural is the reproduction it defies detection from the original voice.

- (3) Easy, almost automatic operation on both broadcast and short waves.
- (4) Trouble-free operation for many years—every Scott receiver is guaranteed against defects (except tubes which are guaranteed by the manufacturer) for Five Years.

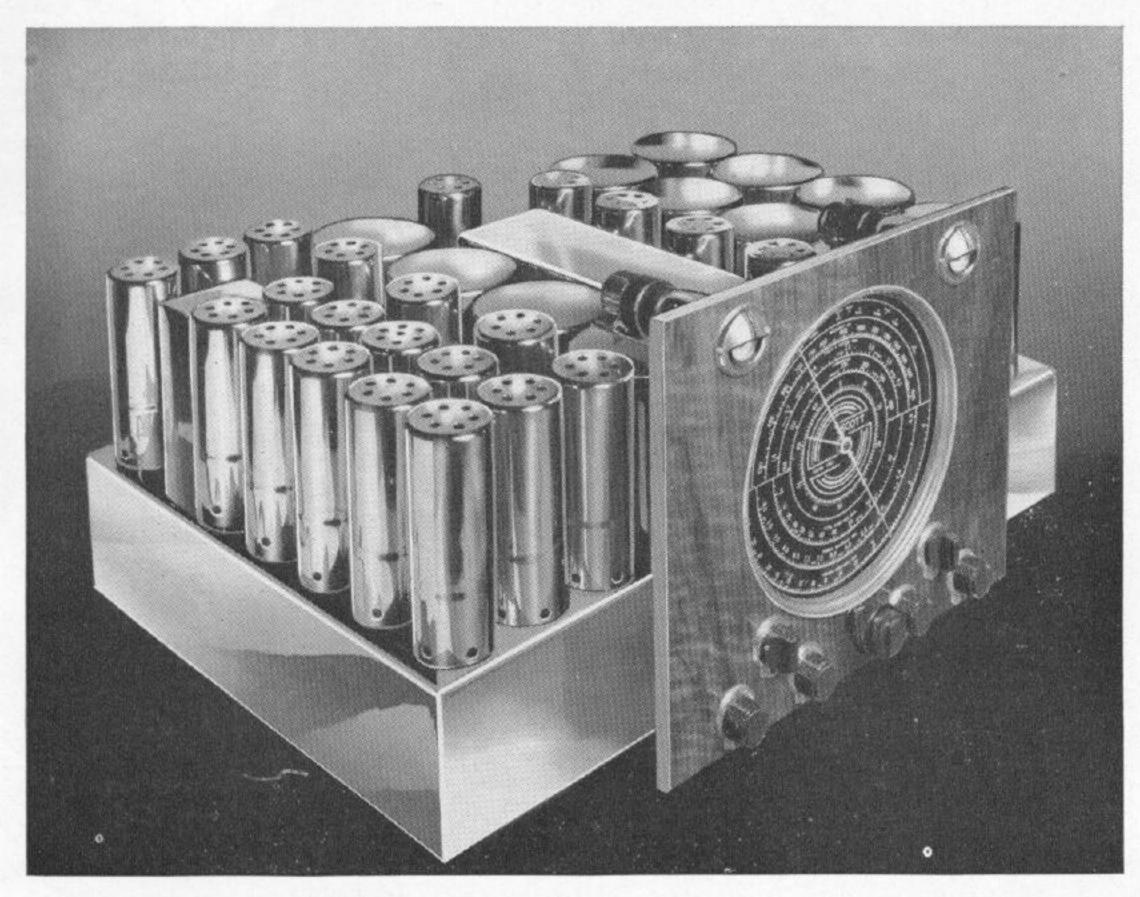
#### Scott Custom Built Receivers Are Not Expensive

The modest price for which a Scott will be custom built for you is as surprising as the performance of the receiver itself, for by selling direct from the Laboratory to you (they are not sold through dealers) you save the dealer's profit, and pay no more than is asked for many ordinary radio receivers produced by high speed mass production methods.



Page Four







Chassis of the Precision-Built Scott Philharmonic

## THE 30 Jube SCOTT Philharmonic

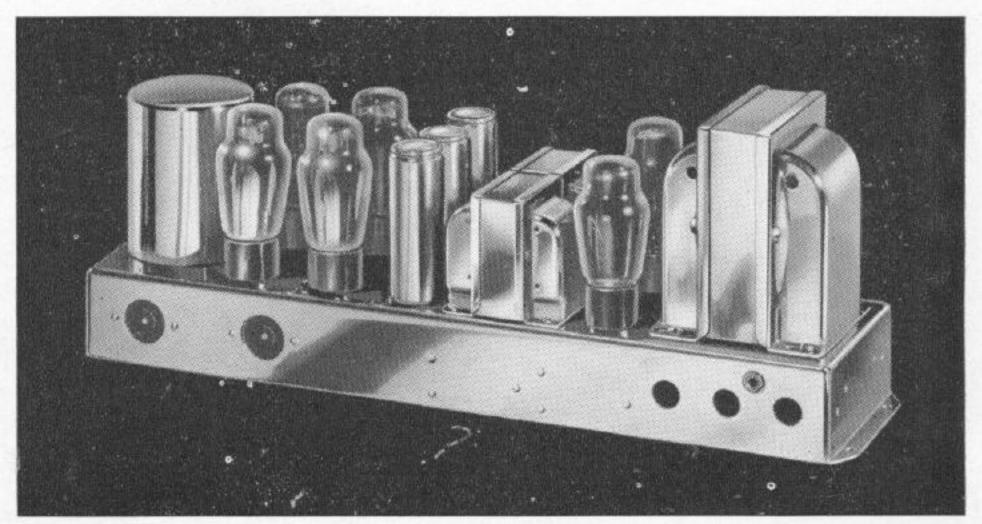
The new 30 TUBE SCOTT PHILHARMONIC is the finest instrument known to radio engineering, with performance standards which I believe are not even remotely approached by any other receiving equipment in the world today, not even excepting the extremely costly laboratory instruments used for commercial communication work and re-broadcasting. Incorporated in the design of this new SCOTT are many new and exclusive developments of our Research Laboratories and found only in SCOTT receivers. All the specialized knowledge gained in nearly 14 years of continual research and building of HAND MADE super-powerful superheterodyne receivers for scientists, musicians, and critical laymen listeners in all parts of the world, has been incorporated into this Custom Built, precision instrument.

The 30 Tube SCOTT PHILHARMONIC is designed primarily for those who want the finest DeLuxe receiving equipment that money can buy, and in the limited space below it is possible to only touch upon a very few of the many sensational developments incorporated in this amazing instrument.

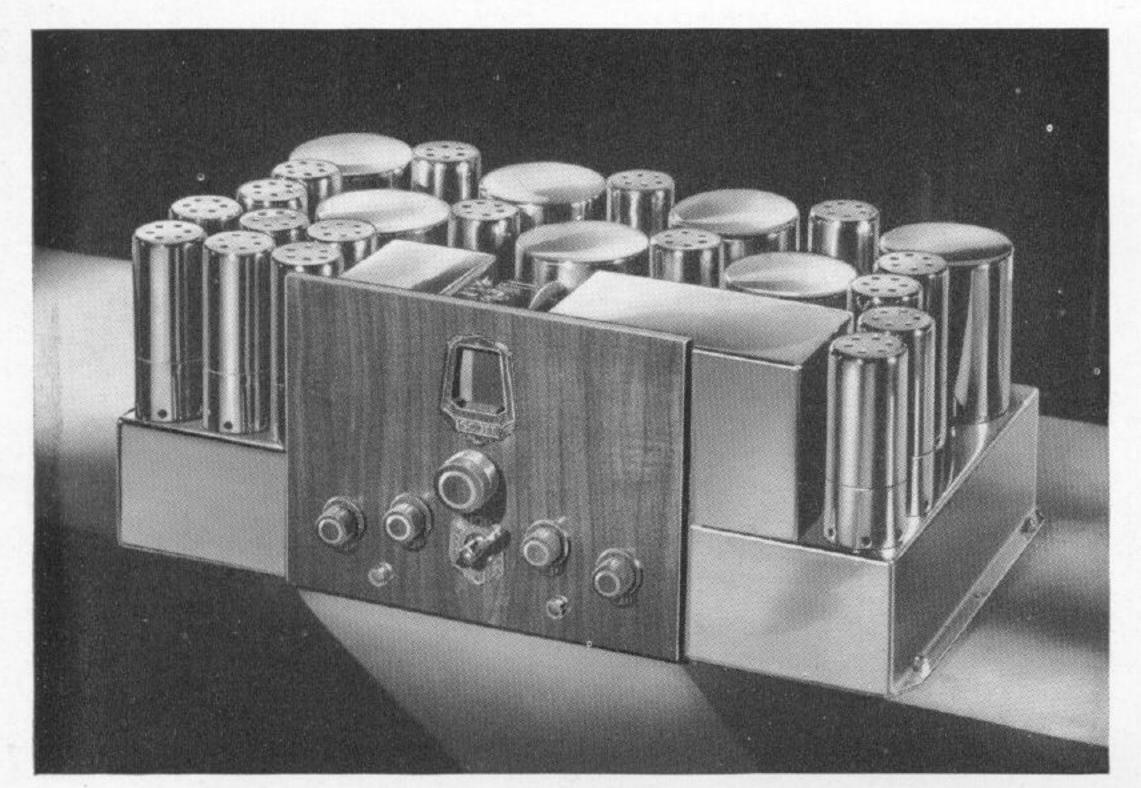
 Wavelength range 150 to 80,000 Kc. (3.75) to 2,000 meters) • Overall Fidelity 30 to 16,000 cycles-covering the entire audible range of the human ear, roughly three times the tonal range of ordinary high-priced receivers . Two Continuously Variable controls for separate amplification of bass and treble tones . Continuously Variable Selectivity from 2 to 16 kilocycles, approximately 5 times the selectivity of many production-line radios • Two Automatic Gain Control Systems replacing the single Automatic Volume Control ordinarily used for the control of fading signals . Undistorted Class A Power Output 40 watts • Built-In Distortionless Volume Range Expansion which restores the dramatic depth lacking in orchestral music when heard over the average radio or electric phonograph • From 3 to 10

times as Sensitive as many mass-produced radios of same price . Three controls for improving quality of poorly transmitted broadcasts . Non-Directional Sound Diffusion System which, on musical broadcasts, gives effect of spread-out orchestra • Four Static-Reducing Systems (operative on both electrical and atmospheric static) • Plays phonograph records without needle scratch-yet does not impair fidelity at normal listening volumes Owner can match SCOTT PHILHAR-MONIC to acoustical properties of own living room or to individual hearing capacity • Instantly adjustable to difficult receiving locations . Two Tuned RF stages on 5 tuning bands • Four Stages of IF Amplification Silent Tuning Between Stations
 Tone Balanced Volume Control which keeps relationship between middle, bass, and high tones

in same proportion to each other at low volume • Headphone Connections • New Laboratory-Type Tuning Dial incorporating all the precision, legibility, and dependability found in expensive scientific meters • Band-Spread auxiliary Tuning Scale for DX logging • Two Tuning Speeds . Continuously Variable Sensitivity • All tone adjustments available when playing records . Precision Calibrated. Drifting or "creeping" of signals guaranteed to be less than two-tenths of 1% (equal to the standards of General Radio measuring equipmentthe finest known to radio science) • Impregnated and Sealed against climatic variations and to insure all delicate electrical characteristics remaining constant . Oversize Ultra-Fidelity Symphonic Loudspeaker • Guaranteed 5 Years.



The Power Amplifier for Scott Philharmonic



# 23 Jube Scott

The

Chassis of the Precision-Built 23 Tube Scott

The 23 TUBE SCOTT is the ideal receiver for the radio enthusiast who is interested primarily in world-wide reception combined with the finest tone. This fine custom instrument is built from the highest quality of parts to a precision standard, and every part is completely shielded, thus providing perfect stability in operation and freedom from oscillation. One of the secrets of its remarkable long-distance performance lies in the Intermediate Frequency Amplifier which represents the ultimate in extremely high gain combined with absolute quietness of operation.

This is the receiver used on so many U. S. battleships, by the U. S. Bureau of Standards, and by DX champions who have established records for the reception on far distant stations.

Below are a few of the many features incorporated in this hand-made receiving equipment, and investigation will show that most of them will not be found in any other radio being built today:

• Wavelength range 540 to 23,000 Kc. (13 to

555 meters) • Frequency range 30 to 16,000 cycles, covering the entire audible range of the human ear o Two separate Automatic Gain Control Systems to hold distant stations at an even volume level . Four Stages of IF amplification providing a higher gain . Radio Frequency Amplifier on each wave band • Beat Frequency Oscillator for quickly locating the extremely hard-to-find foreign stations . Continuously Variable Selectivity from 2 to 16 Kc., which means that you have at your command ample selectivity to separate any broadcasting stations using frequencies within 10 Kc. of each other regardless of power or location . Continuously Variable Sensitivity permits instant adjustment to difficult receiving locations and provides Silent Tuning Between Stations Built-In SCOTT Supershield Antenna Coupling System for reduction of electrical interference so prevalent on short waves when tuned by other receivers • Heavy Duty Triple Acoustical System • Professional-Type Dial (no parallax) with micrometer DX logging scale for accurately recording exact settings of

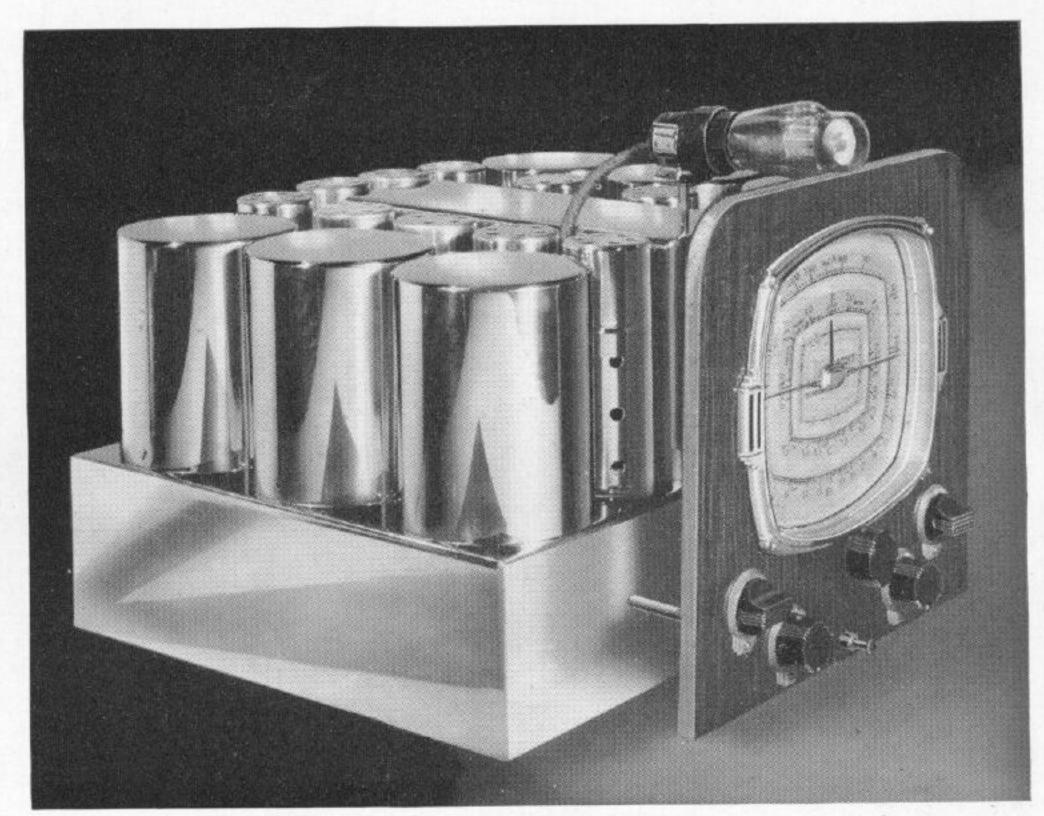
distant stations • Built-In Filter to eliminate noises ordinarily picked up from electrical house-line • Variable Bass Control • New Noise Suppression System for reducing both electrical and atmospheric static • Stabilized Oscillator with Voltage Regulation • Amplified Visual Tuning • Laboratory-Type Rotary Coil Changing Switch (Scott patent) • Precision Calibrated with the most expensive laboratory equipment known to science • Impregnated and Sealed against climatic variations • Two-Speed tuning control for convenience in longdistance tuning • 30 watt Undistorted Power Output • Heavy Duty Ultra-Fidelity Loudspeaker • Headphone jack for private tuning at late hours • All tone adjustments available when playing phonograph recordings . Three Stages of Audio Amplification (last two stages push-pull) • Distortionless Converter • Guaranteed 5 Years against defects-20 times as long as the usual 90-day guarantee adopted as standard by the Radio Manufacturers Association.



The Power Amplifier for the 23 Tube Scott

Page Six





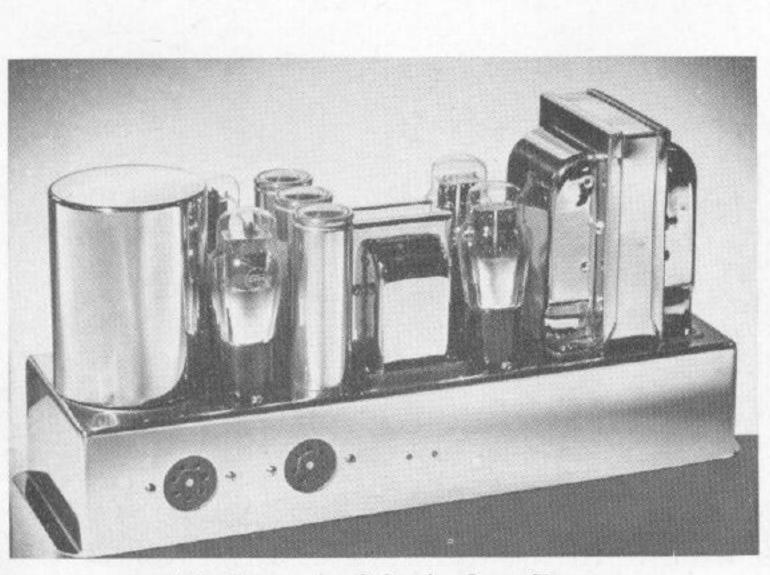
Chassis of the Precision-Built Scott Sixteen

## The NEW SCOTT Sixteen

The SCOTT SIXTEEN is a super-efficient receiver of 16 tubes and is designed for those who do not desire the greater power of the 23 TUBE SCOTT or the extended wavelength range, Program Volume Range Expansion, or Phonograph Needle-Scratch Suppression features incorporated in the 30 TUBE SCOTT PHILHARMONIC. It is built with the same precision as a fine watch exactly the same as the larger models, and we believe there is no other receiver in the world, excepting only the SCOTT 23 and the 30 TUBE SCOTT PHIL-HARMONIC, that provides the same thrilling High Fidelity reproduction, or is capable of bringing in distant stations with the clearness and volume-on either the broadcast band or short waves—as the SCOTT SIXTEEN. It is the ideal receiver for the small home or apartment.

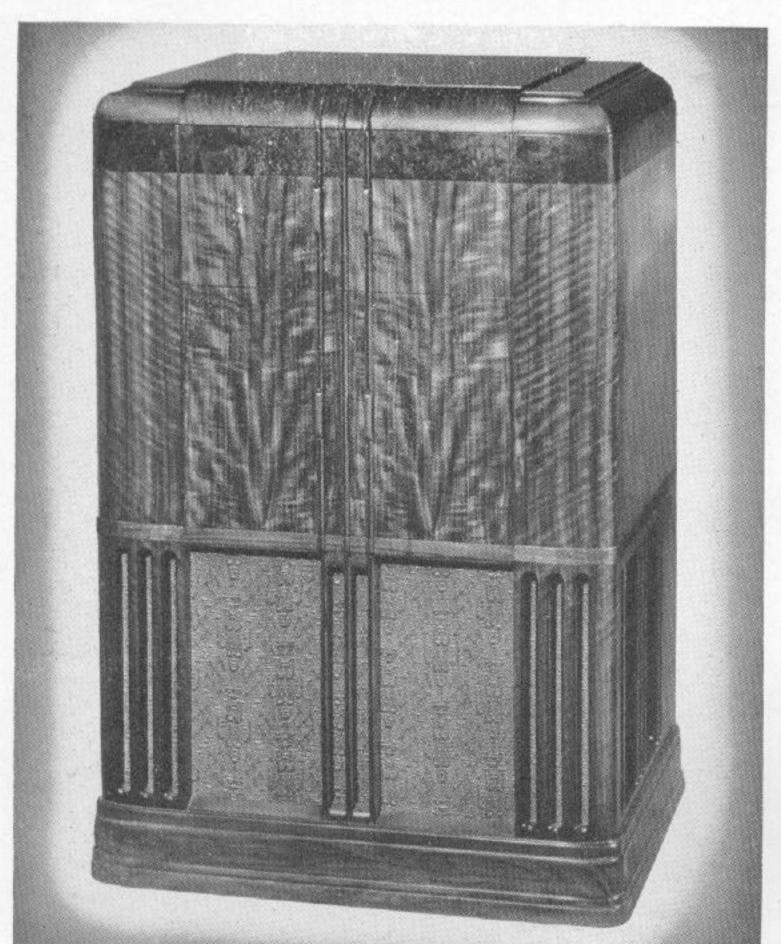
I invite you to compare the advanced engineering features incorporated in its design with those available in the ordinary high-priced production-line receivers. After such a comparison I believe you will know why SCOTT receivers have been generally acknowledged as the World's Finest for nearly 14 years. Although no exact figures are available, we believe the Scott Laboratories build the greatest percentage of all fine radio receivers bought in America. Among the outstanding features of the SCOTT SIXTEEN are the following:

• Wavelength range 550 to 22,000 Kc. (13.6 to



The Power Amplifier for Scott Sixteen

545 meters) • Sensitivity better than 0.6 microvolt • 50% Higher Fidelity than average radio receiver . Two separate Bass and Treble controls, both continuously variable . Tone Balanced Volume Control which keeps constant the relationship between bass, middle, and treble tone registers at low volume—an important point for those living in small homes and for those who do not care to listen at the higher volume settings . Undistorted Power Output approximately 300% greater than the average radio • 8 Kilocycle Selectivity which meets every present-day requirement • Two separate Automatic Gain Control Systems • Supershield Antenna Coupling System (Scott Patents Applied For) which effectively reduces a large percentage of man-made static . Non-Directional Laboratory-Type Sound Projection System with exponential high frequency cone for correct sound diffusion . Auxiliary Tuning Scale for logging of distant and foreign stations . Precision Calibrated • Inverse Feedback System which smooths out dips and peaks in loudspeaker response (ordinarily the cause of raspy reproduction on ordinary receivers) and at the same time improves bass reproduction • Strict Custom Construction • Separate Sensitivity Control for local and distant tuning • Economical Operating Costs-uses less than onefourth the electricity that is consumed by your electric iron • Improved Cathode Ray Tuning Indicator • Impregnated and Sealed against climatic changes • High-Gain Radio Frequency Amplifier Stage on all bands . Silent Tuning Between Stations . Terminals to connect phone jack for High Fidelity phonograph reproduction • Three I.F. Amplifier Stages • Two Tuning Speeds . Large, easily-read dial . All tone adjustments available on phonograph reproduction • Guaranteed FIVE Years against defects. Compare this with the usual 90-day guarantee given with even the most expensive production-line receivers being built today—a convincing proof of the quality built into every SCOTT.



# The Craftsmans SCOTT (

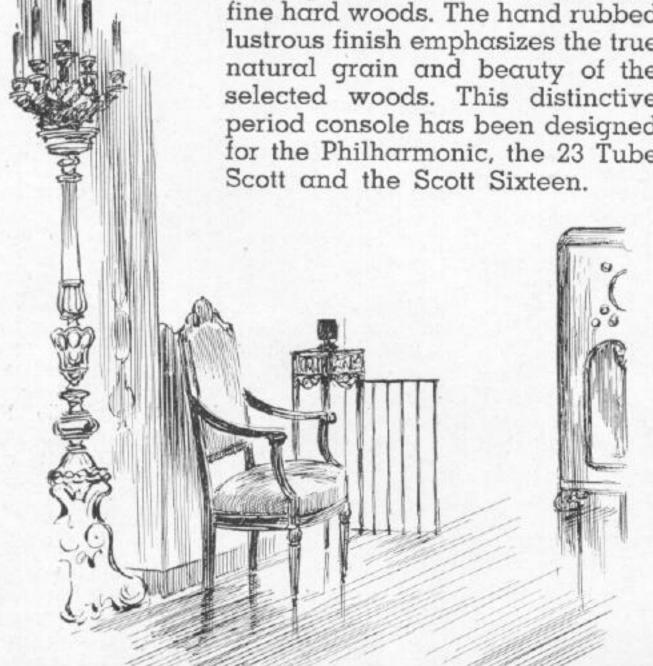
#### The Ravinia Grande

The strikingly beautiful severe lines, and the rich simplicity of the Ravinia Grande makes it particularly adaptable to the modern home. The front panel is gorgeously figured Oriental Walnut, with graceful rounded pilasters, and top trimmed with a center overlay. Designed for the Philharmonic, the 23 Tube Scott and the Scott Sixteen. This console will accommodate either the Garrard Automatic Record Changer or the single record phonograph.

For many years in th SCOTT has stood for th soles are just as distinct ing as the precision buil designed for. Each is creation of a master fur only studied beauty of well, and they are indicraftsmen who love to a ing fine things from sele tone quality of a Scott solid, scientific construc nate the periods of r Ordinary Radio Console fect reproduction, and speech coming from the as true as the original th tion. The design and qu appeal particularly to things in their home, for for a radio, but a really will add distinction to ar

#### The Chippendale

A distinctive creation of the Chippendale period with hand carved legs and speaker grille, delicate fluted Pilasters and corner overlays. Constructed of natural Mahogany and Walnut veneers and fine hard woods. The hand rubbed lustrous finish emphasizes the true natural grain and beauty of the selected woods. This distinctive period console has been designed for the Philharmonic, the 23 Tube Scott and the Scott Sixteen.





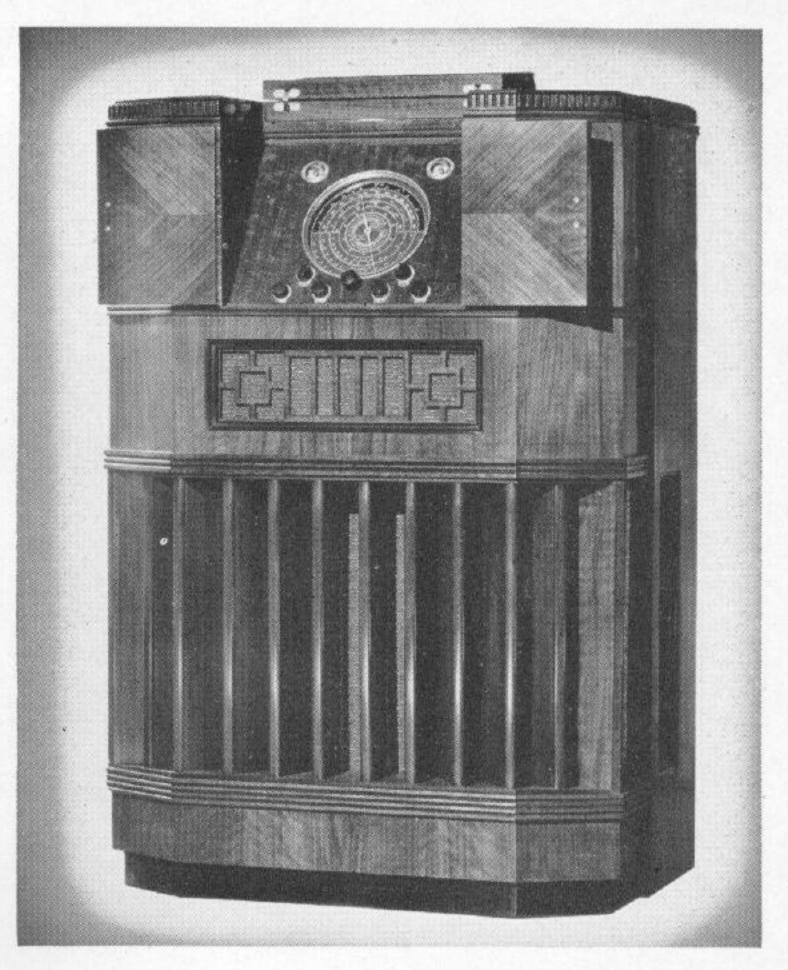
Page Eight

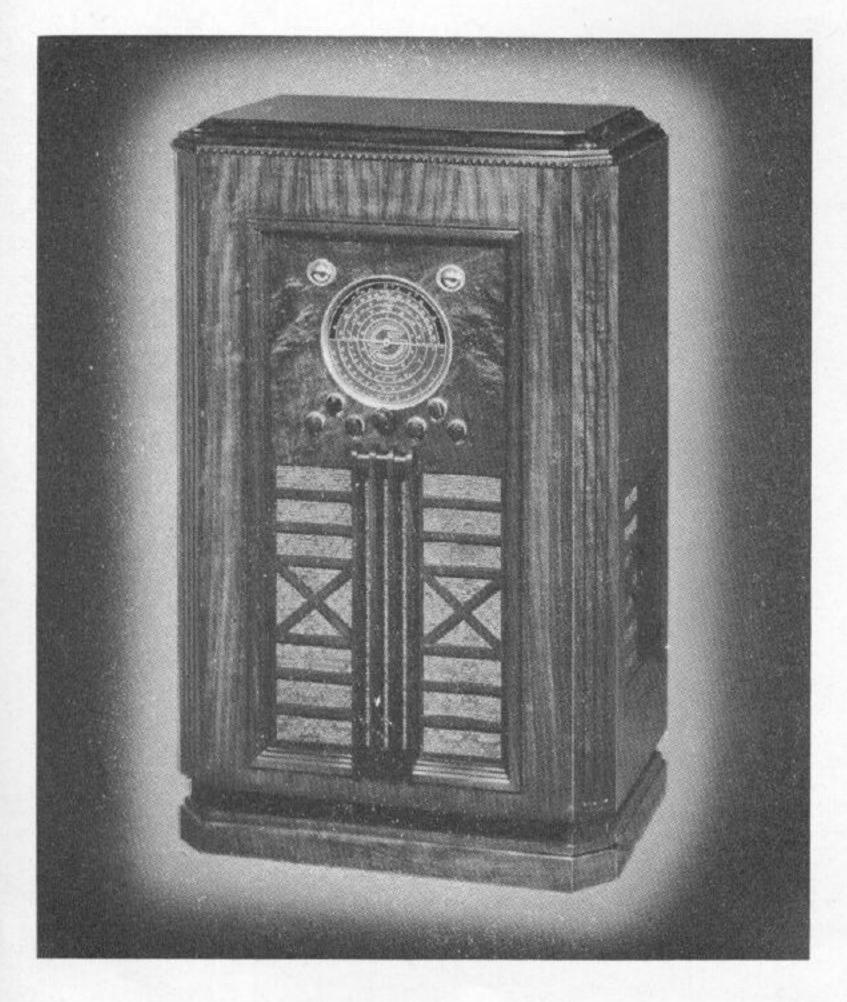
# ip of Distinctive ONSOLES

field of radio, the name World's Finest. Scott conly different and outstandhassis they are especially ORIGINAL model, the ure designer, who has not ine but ACOUSTICS as lually HAND MADE by ly their genius in fashionwoods. The very natural ceiver is partly due to the n of the console to elimionance often present in which often prevents persures you the music or eaker will reach your ear left the broadcasting staity of a Scott console will ose who prefer the finer t is not merely a housing ne piece of furniture that room.

#### The Laureate Grande

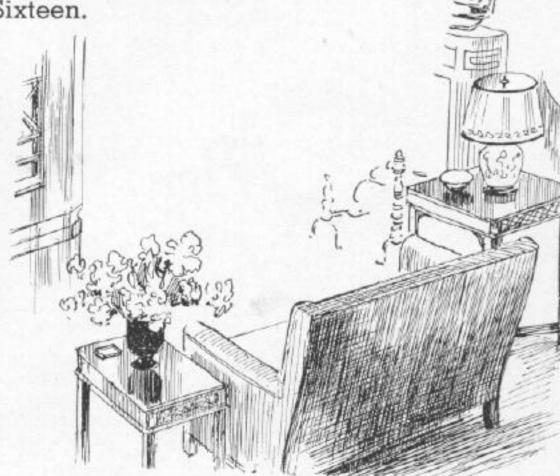
This exclusive Scott creation sets a new era in cabinet design. Constructed by hand of beautiful, rich Walnut and East Indian Laurel wood. The modern gold plated door handles are fashioned of Catalin. A special feature of this distinctive console is the fluted speaker grille designed to scientifically distribute sound and give perfect tonal reproduction in every part of the room. Designed for the Philharmonic, the 23 Tube Scott and the Scott Sixteen.





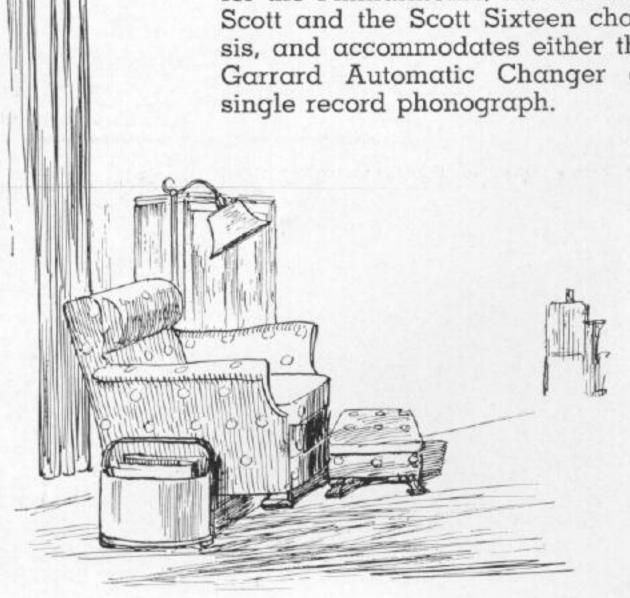
#### The Waverly

This very unusual console in authentic Swedish Modern carries an air of distinction that will add charm to any room setting. The front panel is of exquisitely matched Butt Walnut with solid Walnut. Receded top sides and fluted Pilasters are of beautiful straight grained Walnut with hand rubbed finish to emphasize the beauty of the selected woods used. Designed for the Philharmonic, the 23 Tube Scott and the Scott Sixteen.



#### The Gothic Grande

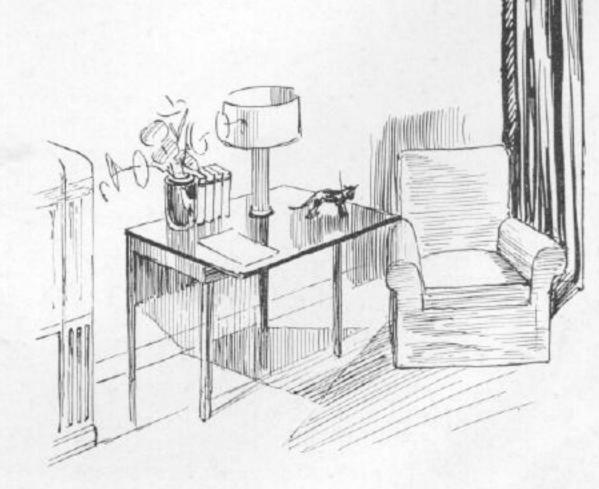
A splendid example of fine furniture craftsmanship in classic Gothic design of selected American Walnut throughout. Side and top panels beautifully hand carved in linen Fold design. An air of subdued richness characterizes this sturdy example of authentic period design. Designed for the Philharmonic, the 23 Tube Scott and the Scott Sixteen chassis, and accommodates either the Garrard Automatic Changer or single record phonograph.



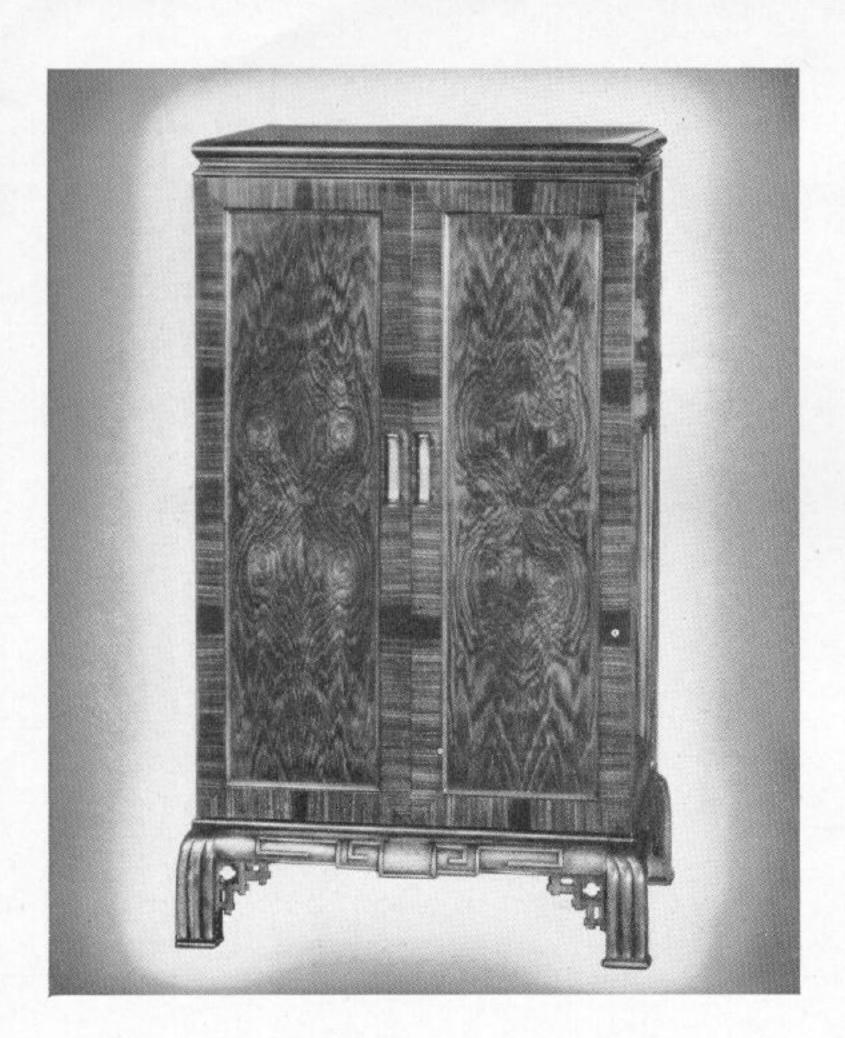


#### The Wilshire

A spirited interpretation of ultramodern console design for the room of moderate size in home or apartment, the Wilshire console is ideal, harmonizing perfectly with practically any decorative scheme. Sides and top are constructed of beautifully figured Oriental Walnut veneers, with quartered red gum base and lustrous hand rubbed finish to bring out the natural grain of the woods. Specially designed for the new Scott Sixteen.



Page Ten



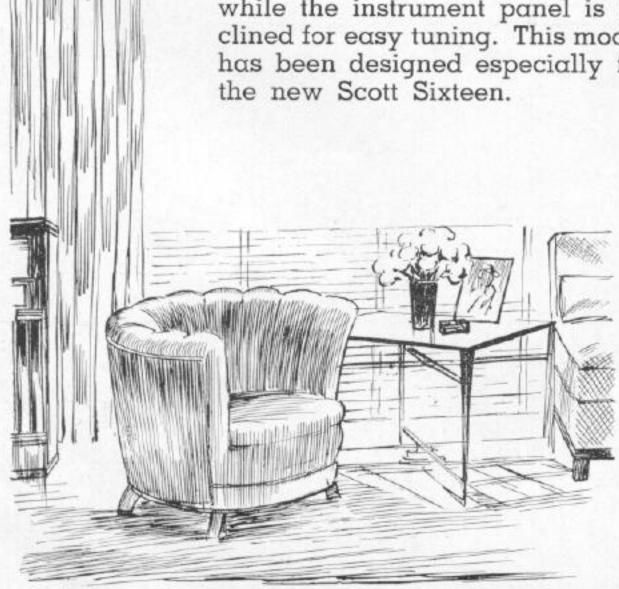
#### The Roslyn Grande

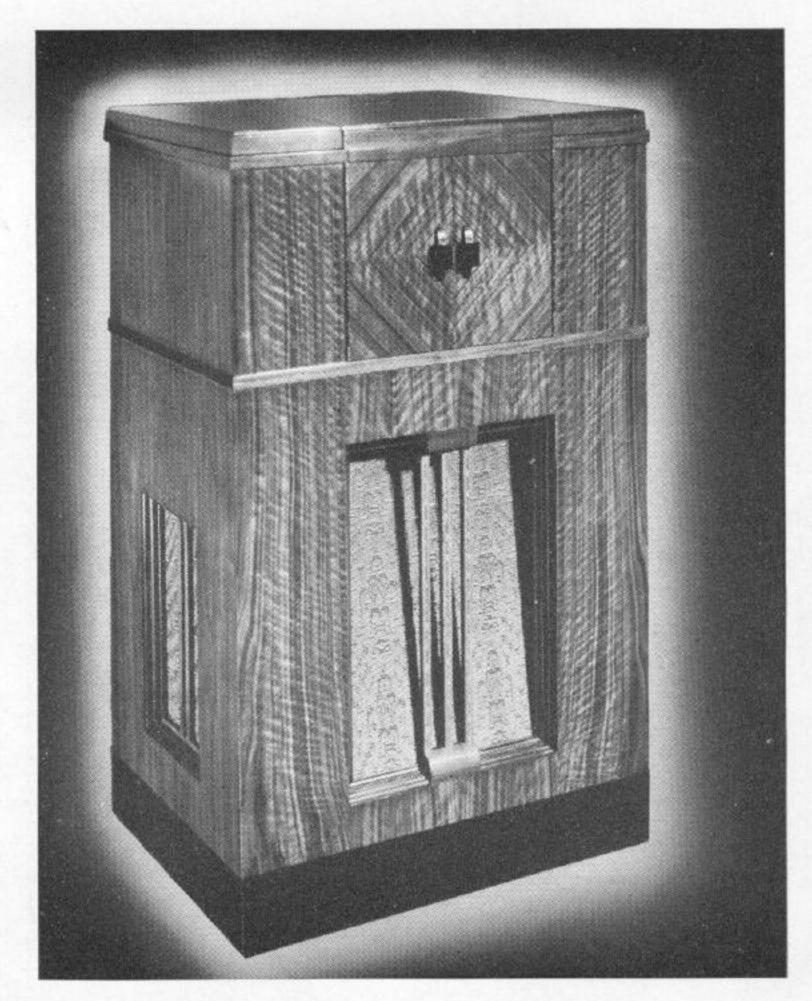
Reflected in this distinctive creation in Chinese Moderne, is all of the skill and artistry of the master craftsman. Front panels of gorgeously grained Honduras Mahogany, trimmed with rich East Indian and Brazilian Rosewood, with graceful legs and base hand carved. Designed for the Philharmonic, the 23 Tube Scott and the new Scott Sixteen chassis and will accommodate either the single record phonograph or the Garrard Automatic Phonograph.



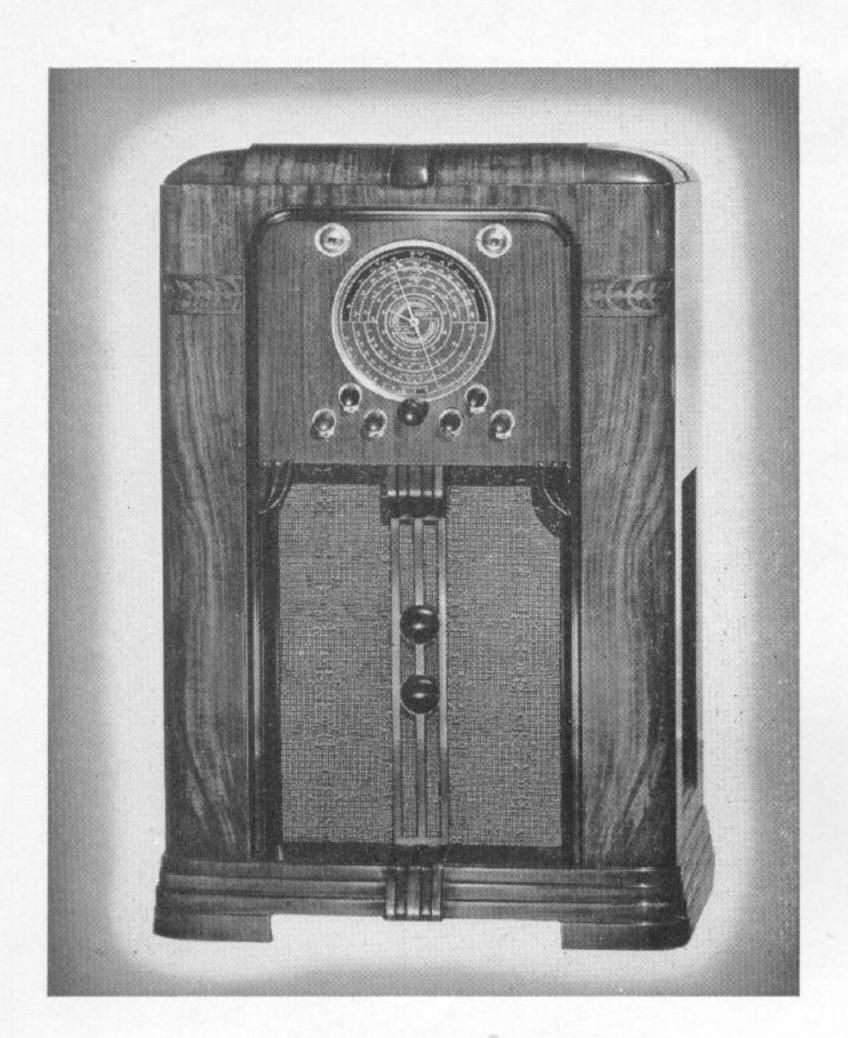
#### The acousticraft

The smart lines and unusual design of the Acousticraft make it one of our most desirable consoles. Of fiddle-back American Walnut veneers, the front with diamond match Walnut veneer doors, and bottom rail lacquered in lustrous black, all hand rubbed to a lustrous finish. The door hinges are gold plated and Catalin, while the instrument panel is inclined for easy tuning. This model has been designed especially for the new Scott Sixteen.





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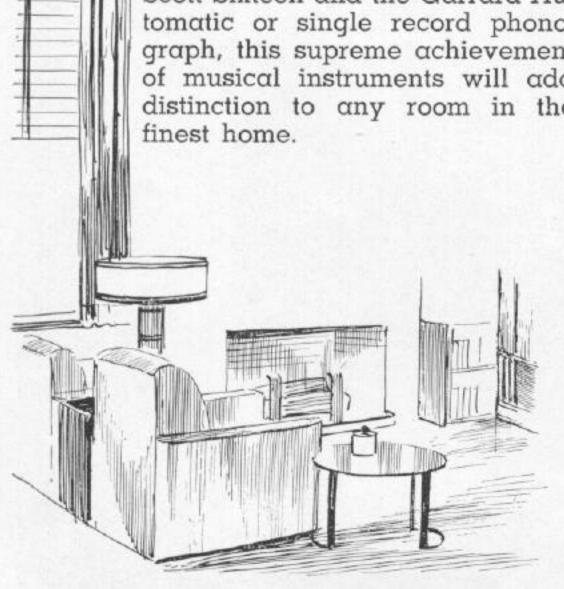


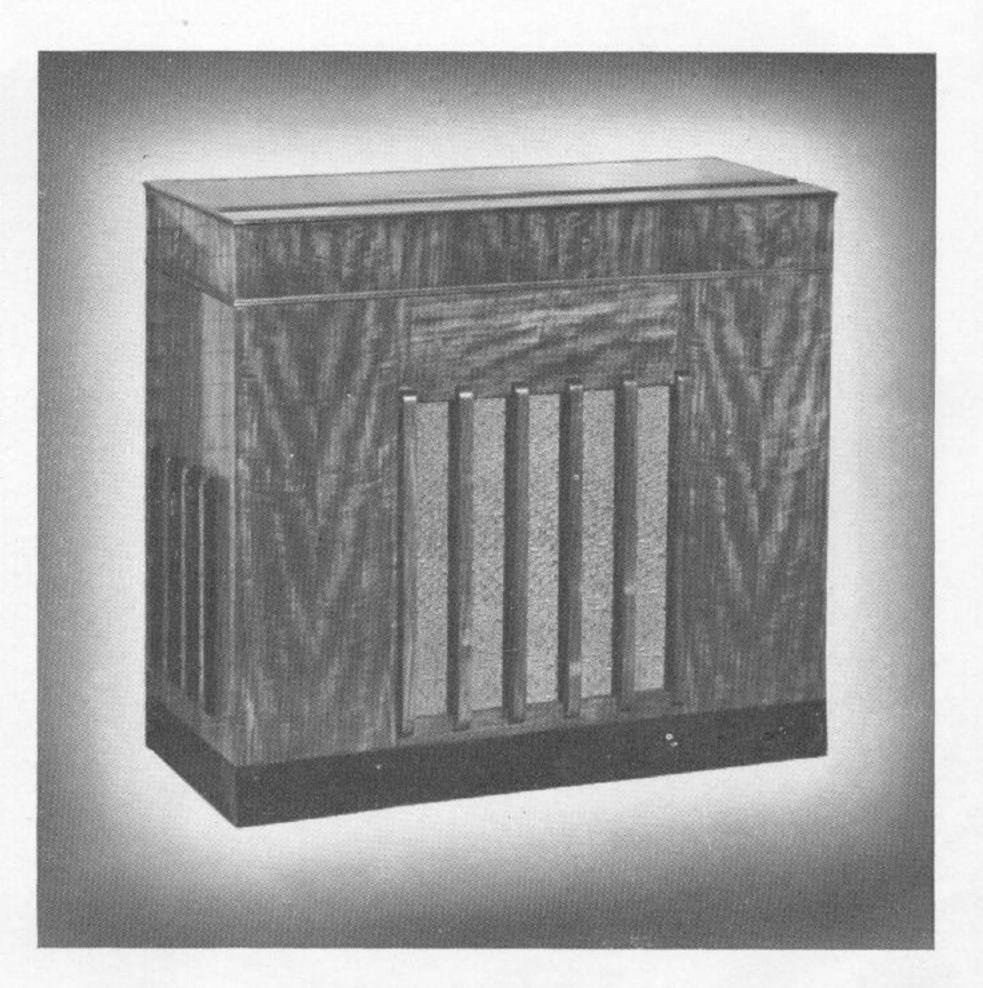
#### The Warrington

Designed by one of America's foremost furniture designers, the graceful lines make this one of our most attractive models. The front panel is of beautifully striped Walnut veneer, Pilasters of rotary-cut Walnut and rounded top of straight grained Walnut veneer. It will harmonize perfectly and add grace and distinction to any room in apartment or home. Designed for the Philharmonic, the 23 Tube Scott, and the Scott Sixteen.



The smart lines of this very modern console make it one of our most outstanding designs in Phono-Radio combinations. The front and top are of fine figured American Walnut, with base of ebonized Birch, hand rubbed preserve the fine finish for years to come. Designed especially for the Scott Sixteen and the Garrard Automatic or single record phonograph, this supreme achievement of musical instruments will add distinction to any room in the finest home.





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## A NEW DAY FOR LOVERS OF GREAT MUSIC

FIVE MODERN RADIO-PHONO COMBINATIONS FOR THOSE WHO DESIRE THE WORLD'S FINEST MUSIC IN THEIR HOME WHENEVER THEY WISH IT

Symphonies, operas and chamber music performed by the greatest artists of the world can now be heard in your home with a faithfulness that will thrill every fibre of your being. You can listen to Toscanini and the New York Philharmonic playing Haydn's "Symphony in D Minor"—to Lauritz Melchior and Lotte Lehmann as "Siegmund" and "Sieglinde" in "Die Walkure"—to Yehudi Menuhin playing the "Kreutzer" Sonata—to the Flonzaley Quartet playing Mozart's "Quartet In D Minor."

The world's great operas . . . the world's great music from Bach to Gershwin . . . conducted by Stokowski, Koussevitzky and performed by Kreisler, Heifetz, Paderewski, Rachmaninoff, Horwitz, Casals . . . and sung by Flagstad, Ponselle, Tibbet and others . . . is recorded. You can now have these artists present in your home and hear them as you would in the concert hall.

These incomparable artists and hundreds of others are yours at any hour of the day or night. They will come to you in your home and visit with you. You will hear them as you never have before.

#### Records Changed Automatically

To fully enjoy the great operas and symphonies which are usually recorded on a number of records, it is necessary one be relieved of the necessity of constantly changing them. The Garrard Record Changer is simple, compact and silent in operation. A great deal of the pleasure in listening to a symphony or opera is lost if there is too great a wait

between the changing of each record. The Garrard requires only seven seconds to change from one record to another, and the change is made so quietly one has to listen very intently to realize the mechanism is operating at all. It is an extremely sturdy and well designed changer that holds from 1 to 8 records. You load the magazine with the number of records desired, throw a switch, then the complete set of either 10-inch or 12-inch records is played through on one side without further attention, stopping automatically when the last record is played.

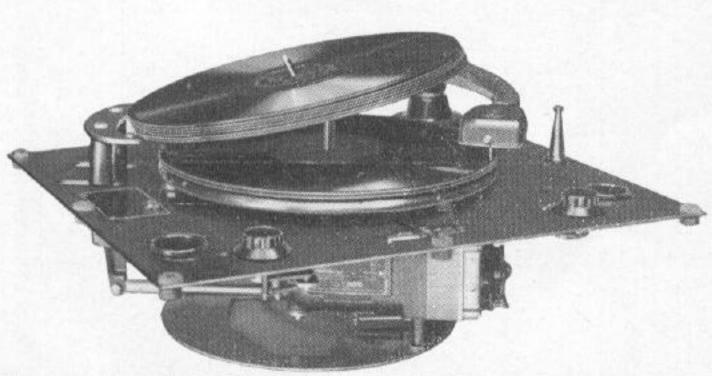
#### Five Scott Phono-Radio Combinations

Five consoles have been designed to fit the Garrard Record Changer: The Ravinia—the Gothic—the Roslyn—the Waverly and the Linden. If you live in New York, Chicago or Los Angles, why not visit one of our Studios where we will be glad to demonstrate to you the amazingly beautiful reproduction it is

now possible to secure from records and show you how a Scott puts Fidelity and Life into phonograph records and brings forth musical tones you never before realized were there.

#### Hear These Fine Radio-Phono Combinations in Any of the Three Scott Salons

NEW YORK CITY: The Scott Salon is located in the International Building, Rockefeller Center, at 630 Fifth Avenue, on the 33rd floor, Suite 3362, Telephone: Circle 7-0574. LOS ANGELES: The beautiful Scott Salon, containing five comfortable "living room" studios, is located at 115 North Robertson Boulevard (just 11/2 blocks north of Third Street and 1/2 block south of Beverly Boulevard). Telephones: Crestview 5158 or Woodbury 62401. CHICAGO: There are four fully equipped studios in our main laboratories located at 4450 Ravenswood Avenue on Chicago's North Side. Telephone: Longbeach 5172. All salons are open until 9 P.M. every day except Sunday.



The precision built Garrard Automatic Record Changer which can be built into the Linden, Ravinia, Gothic, Roslyn or Waverly Grande Consoles.



# Announcing the New SCOTT-AUTOTROPE

#### RADIO-PHONO COMBINATION

Plays Automatically 1 to 30 Records—10-Inch or 12-Inch Mixed—Either One or Both Sides—Can Be Remotely Controlled From Any Point in Home—With Any Number of Extension Speakers Up to 12 to Provide Entertainment in Any Room Desired

The science of recording has made tremendous strides during the past few years, and the beauty of recorded music is amazing to those who have not kept pace with the latest developments in this field.

When the new High Fidelity records were made available to the public recently, it was immediately realized that recorded music is now equal in every way to a High Fidelity radio broadcast. Now, through the medium of the SCOTT-AUTOTROPE, not only modern but also the immortal music of the ages comes to your home with a depth and vitality that is amazing to those hearing it for the first time.

#### Plays Both Sides of Records in Proper Sequence Automatically

All of the fine symphonies recorded cover both sides of several records. For example, symphonies, chamber music, suites, and the larger tone poems cover both sides of from 2 to 12 discs. Complete operas or symphonies may extend over as many as 20 records. With the announcement of the new SCOTT-AUTOTROPE not only has the annoyance of changing records by hand been eliminated, but complete albums are played through in their entirety—first on one side of the record, then on the other.

You simply place all of the records of an album in the magazine of the SCOTT-AUTOTROPE (which holds up to 30 records)—switch on the current and recline in your favorite easy chair. The records you have placed in the magazine are then all played to you automatically without further attention, and every record of the complete work is played on both sides in the proper sequence.

The SCOTT-AUTOTROPE is the result of over seven years' development to produce the World's Finest Record Changing Mechanism regardless of cost. The instrument is entirely automatic in

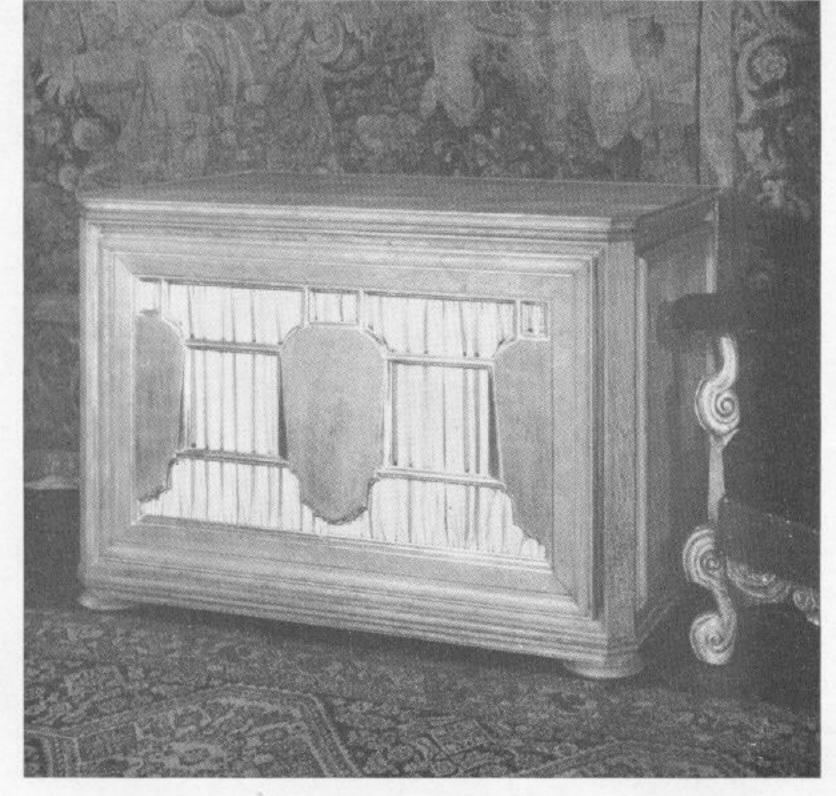
its operation, and combined with the High Fidelity Scott, it represents, I believe, the finest Deluxe radio-phono combination available today. The cost is not low, but it represents a lifetime investment, and will be appreciated by those who can afford and enjoy the finest things.

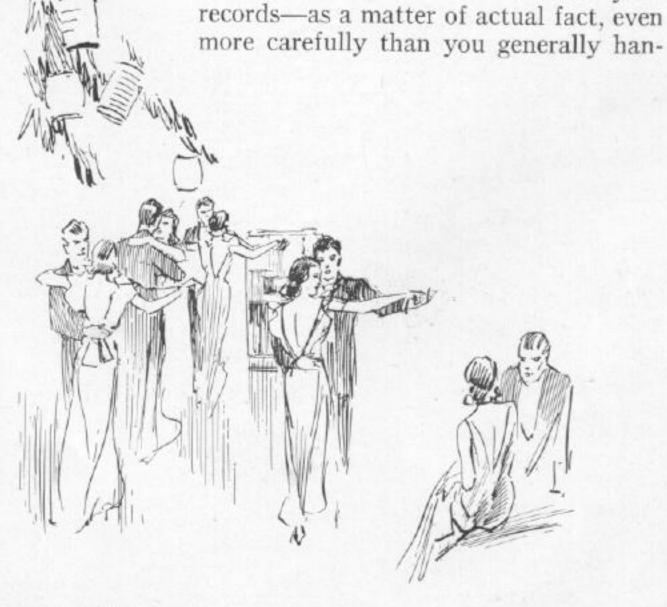
#### Handles 10-Inch or 12-Inch Records Even When Intermixed

In planning a home concert you may wish to play records of different sizes together, so that the playing of a 12-inch disc will follow the playing of a 10-inch disc, or vice versa. On most other record changers such an operation is impossible, and as a result the sequence of the program is interrupted. The SCOTT-AUTOTROPE will play perfectly and automatically both 10-inch or 12-inch records *mixed in any order*. Ingenious mechanism releases each record in turn, and automatically adjusts the pickup arm to the correct starting point for each particular size of record.

#### Handles Records More Carefully Than Human Hands

It is amazing to see how gently the SCOTT-AUTOTROPE handles your records—as a matter of actual fact, even more carefully than you generally han-





Designed by Robert Lutyens F. I. A. A.

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dle them with your own hands. Every operation in the changing cycle is essentially positive, yet there is no stress or strain on the record at any time. The playing surface of the record is never in sliding contact with any part of the mechanism, and the arm which carries each record from the magazine to the plush covered turn table engages the record by its center hole in such a way that the record cannot be either damaged or scratched.

The guides over which the record passes are beveled, so that they support the record at its extreme outer edge, away from its playing surface, and the bakelite grips which turn the record over so that both sides are played in sequence, take hold gently but firmly on opposite sides. The turn table mechanism is hinged, and is automatically lowered out of harm's way while the record is being turned over. When the record is finished playing, the pickup arm lifts vertically, thus eliminating any possibility of the needle damaging the record grooves. After a record is played, it slides gently into a felt lined rejection chamber where it is gently tipped on one side.

#### The Music You Love—Whenever You Wish

It is positively amazing to watch this unusual instrument in operation. Each record is in turn carefully extracted from the magazine, then gently placed on the turn table which is already revolving at the correct speed. The pickup is gently lowered so that the needle comes in contact with the blank edge of the record, then is given an automatic bias which smoothly guides the needle to the first groove of the record.

As soon as one side of the record has been played it is automatically turned over by the machine and the reverse side is then played. Finally, when the second side of the record is played it is just as gently carried away and placed in a felt-lined rejection chamber, then the next record is brought forward. This process is repeated until every record in the magazine has been played on both sides. It is never necessary to restack the records at any time. The instrument is entirely automatic in its operation, enabling you to enjoy complete symphonies, operas, and other sets of records in their proper sequence.

#### Also Plays One Side of Record When Desired

By merely setting a lever, the SCOTT-AUTOTROPE can be made to play only one side of each record in the magazine, so that regardless of the sequence arrangement of the album, you can play your records in their proper order with

the SCOTT-AUTOTROPE Record Changer.

Once you have listened to a High Fidelity broadcast of a great orchestra reproduced by the SCOTT-AUTO-TROPE, I believe your entire idea of recorded music will be changed, for it has remained for the Scott Laboratories to design a reproducing instrument in which the needle-scratch or surface noise is practically eliminated by a recent development of our research laboratories; (Scott Patents Applied for) without reducing or cutting the higher tones or overtones from the fidelity of the record at normal volume. This feature is available in no other radio-phono combination.

The problem of eliminating the surface noise or scratch on a phonograph record, and still keep the "highs," has intrigued research engineers for years, but it just seemed to be one of those problems for which there was no answer. The scratch was on the record—if you removed it you removed the higher frequencies, but like many other things that "couldn't be done," this new development of the Scott Research Laboratories has at last eliminated the scratch at low volumes, but does not in any way affect the reproduction of the higher volumes or overtones at normal volume. When you hear a record—with the higher tones reproduced—BUT WITH-OUT THE SCRATCH OR SURFACE NOISE—you at last are able to enjoy record reproduction to the fullest.

#### Magazine of 30 Record Capacity— Nearly Six Hours Continuous Entertainment

Simply place a selection of your favor-

ite records in the magazine of the SCOTT-AUTOTROPE—the capacity of which is 30 records, giving you 60 separate recordings—and at the mere touch of a button the SCOTT-AUTO-TROPE will entertain you for nearly six hours without further attention on your part. Of course, the machine may be stopped at any time simply by pressing a button.

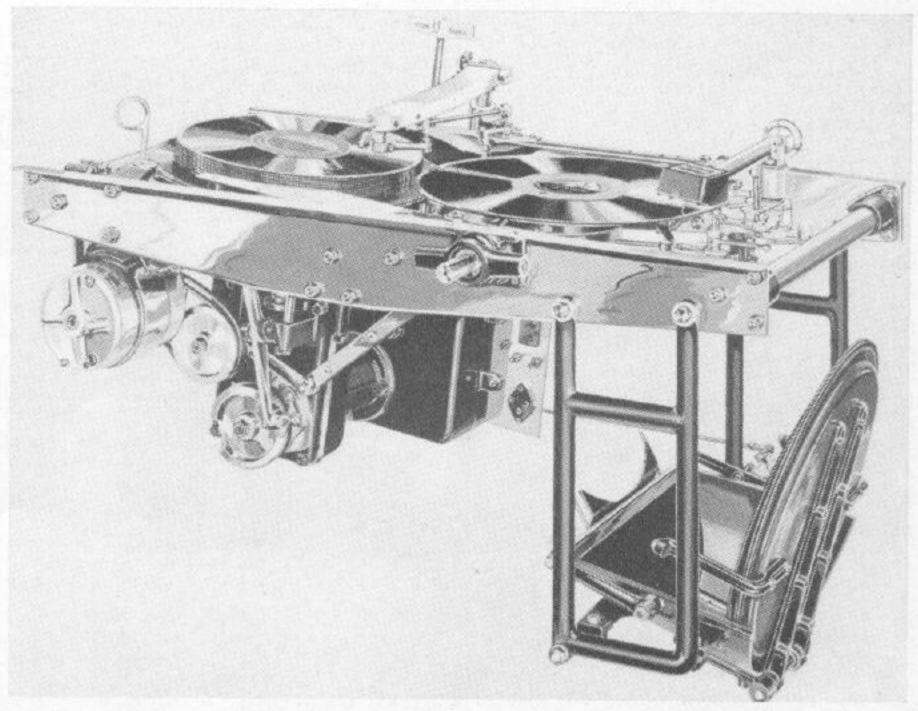
#### Remote Control From Any Room Desired

The SCOTT-AUTOTROPE combination has been especially engineered for operation by remote control from any room desired. Special speakers can be supplied for installation in any room in the home or for installation outdoors, and remote controls provided which allows the records to be changed or the volume regulated from any of these points. It is particularly suitable for built-in installations in the finer homes.

#### Guaranteed Against Defects for Five Years

No expense has been spared in making the SCOTT-AUTOTROPE Record Changer a perfectly engineered unit. The inherent soundness of its design enables us to give a FIVE YEAR Guarantee against all defects in either material or workmanship. If during this period any part becomes defective it will be replaced free of charge.

We shall be glad to arrange a demonstration of the Deluxe SCOTT-AUTOTROPE Phono-Radio Combination at either the Chicago, New York or Los Angeles Studios, or will be glad to send a special brochure describing it.



The New 30 Record Autotrope Automatic Changer

# RECEPTION REPORTS FROM OWNERS OF WORLD'S FINEST RADIO

#### NO OTHER RADIO CAN APPROACH ITS PERFORMANCE

"This instrument is truly an instrument among instruments. It meets the most critical tests imposed upon it. Have never heard any other make radio even come close to it in any way. In short wave reception I have picked up Australia, Tahiti, Java, Russia, and of course the regulars which are England, Portugal, Germany, Czechoslovakia, Belgium, and Japan."

C. Ernest Liggett, Paradise, Kansas.

#### FROM CHIEF ENGINEER OF U. S. NAVAL ACADEMY AT ANNAPOLIS

"Having been engaged directly in radio work for the past twenty-four years I have followed in a general way the developments of the Scott receiver from the first battery model, and your progress not only in circuit development but improved mechanical features, workmanship, and quality are very commendable. Without question the Scott is the best engineered receiver on the market today, and I wish to take this opportunity of thanking you for the interest you have taken in your product even after it had left your laboratory and for the bulletins and letters you have forwarded me."

W. J. Volkman, Annapolis, Maryland.

#### FAR SUPERIOR IN WORKMANSHIP AND PERFORMANCE

"Words cannot adequately express our appreciation of the Scott Sixteen. It is far superior in workmanship and performance to the production made receivers. Sunday, a friend of mine who is a naval air pilot and radio expert, heard and examined the Sixteen. He pronounced it the finest receiver he has ever seen or heard."

C. M. Keleher, Ft. Washington, Pennsylvania.

#### NEVER HAD GREATER THRILL

"'Do you remember way back when' you were thrilled with your first bicycle, or first bobsled, or rode on the original 'Jumbo' when Barnum's came to town? That almost 'dates' me, doesn't it? But I want to assure you that I never had a greater thrill than when I started tuning the new Scott Philharmonic. The radio man who made the installation, marveled at the quality, selectivity and range, and said, 'Why can't a dealer have something like this to sell?' The 'Empire News' and Big Ben from London come in as clear and loud as the new Kansas City station on the broadcast band. May I congratulate you, Mr. Scott, and your associated engineers, for giving to music lovers and radio enthusiasts a most wonderful piece of fine machinery, which seems to be perfection itself."

James O'Neill Bruen, Sedan, Kansas.

#### ELECTRICAL DISTURBANCES SUBDUED ALMOST INTO SILENCE

"At last I have realized a radio enthusiast's dream of owning a receiver capable of bringing in stations thousands of miles away clearly and powerfully enough for enjoyable loud speaker reception, yet also productive of exquisite tone quality on locals. Not one single feature claimed in your advertising is overstated or exaggerated in the slightest degree. Nobody who has not sat down and operated a Scott receiver could believe possible its performance possibilities. The most amazing feature to me, is the manner in which stations at a very great distance come in with quality equal to locals, and that even when there is static disturbances, it can very frequently be subdued away almost into silence without affecting the broadcast signals. Another remarkable feature is the fact that it is hardly ever necessary, even for the most remote stations to advance the volume control much beyond a third of its range." Neville C. Seymour, Baltimore, Maryland.

#### TONE QUALITY MARVELOUS

"I am very much pleased with my new Scott Philharmonic; the tone quality is marvelous, as natural as if the broadcasting were in your own home. In the Scott radio quality predominates."

Roy H. Kenville, Flint, Michigan.

#### THE FIRST RADIO IN 26 THAT WAS SATISFACTORY

"Since my first radio, I have had 25 different receivers and this Scott Philharmonic makes the 26th set. This included all the commercially advertised sets and a few superheterodynes which I made myself. My endeavor was always to get a true tone above everything else, and I can truthfully say that my Scott Philharmonic is the finest by far of any I have ever had. I find that

you can control it so that you can get any tone that you want for voice or instrument. It is the first time that I have been perfectly satisfied. If you have any inquiries in my locality, which is the southern part of New Jersey, near Philadelphia, I would be only too glad to demonstrate the set to any prospective purchasers. I have always admired mechanical precision, and it is a delight to view the chassis of the Scott Philharmonic."

Edwin C. Eckman, Haddonfield, New Jersey.

#### GENUINELY PLEASED

"The receiver arrived about a week ago. What a radio! I have never seen or heard anything like it. My enthusiasm started as I watched it being unpacked, and it has steadily mounted as day after day disclosed new marvels of tonal control and all 'round performance under the most trying conditions. I am more than satisfied—I am genuinely pleased."

Paul Wilcox, Yellowstone Park, Wyoming.

#### MARVELS AT RESULTS OBTAINED

"As I write this, my Scott within a few feet from me is 'putting out' as usual, a beautiful program of orchestral music, in which every individual instrument can be identified absolutely. May I take this opportunity of expressing my complete satisfaction with the excellent results my 23 tube Scott receiver is supplying.

CAV GEORGE E. WORTH TRUEF, ARIT HIALD Via Nizza, 46 TELEG. WORDS Rona 26/9/1937 The E. E. Scott Radio Laboratories, Inc., 6450, Ravenswood Avenue, Chloago, U.S.A. Just over two years ago I decided to buy a new radio but it had to be a set that would do one things get me England at any moment of the day. This really seemed to me an easy request to fulfill, but it turned out to be any-One after the other, radio sets of world-fame names were brought round to try out. One after the other they all went bank. One and all failed in the one essential: England at any old moment I want, irrespective of conditions. At last a bright young Roman came along with the information that he had just received a radio that would do all (really so little) I wanted: A Scott All Wave delaxe Superhetrodyne. By this time I was worse then St. Thomas, but, as with the previous sets tried, said "Bring it along". After baving tried out so many prior to this, so sonvinced had I become that such a set as I wanted did not exist, that I believe I was almost disappointed in a way. It was almost as though this Scott Eadle had decided to lesson. Against unwarrantable tests any station I wanted came through sure and serone. It is the envy of all my English and American friends. I am grateful to you in having made it possible for an Englishmen to be at Home just whenever the spirit moves him. 9.5. Il I can ever be of evere toyon in any long just Say the word. I am injust.

I take advantage of every opportunity that presents itself to have my friends, who enjoy REAL RADIO RECEPTION, listen to my Scott receiver. Everyone without exception, marvels at the results obtained."

W. H. Muehlhause, Baltimore, Maryland.

#### MUSIC UNBELIEVABLY NATURAL

"The Philharmonic's reproduction of voice and music is so unbelievably natural that for the past few weeks I have done nothing in my spare time but listen to my radio."

W. W. Lloyd, Salem, New Jersey.

#### DID NOT DREAM SUCH PERFECTION EXISTED

"I think it is about time I wrote to let you know that we are getting along wonderfully with our new Scott, and that we are more than delighted with it. It is the most beautiful looking, the most wonderful sounding radio receiver that we could ever dream of having. It is certainly a most wonderful piece of workmanship. The Warrington Console is a beauty. The large dial is very attractive and easy to read. The tuning eye makes it so easy to get accurate tuning. We listen to its most natural tone and can easily imagine the musicians are right in front of us. We can listen to opera and enjoy it just as much right at home. All the short wave stations come quieter than I have ever heard before, with much less interference than we received with our other set, from the trucks and buses that go by the end of the street."

Maitland B. Howe, Marlboro, Massachusetts.

#### THE E. H. SCOTT RADIO LABORATORIES, INC.

4450 RAVENSWOOD AVENUE, CHICAGO, ILLINOIS

630 Fifth Avenue, New York City

115 N. Robertson Boulevard, Los Angeles

#### SOMETHING TO MARVEL AT

"As my thirty days trial period is about up I thought I would write you and tell you how much I like the Scott Sixteen. To say that I am pleased with both the radio and the cabinet is putting it rather mildly. The performance and operation is something to marvel at—I have been able to get London, Berlin, etc., on the short wave bands consistently and with good volume and clarity, and the operation on the broadcast band is equally as good. The quietness on both the short and long wave bands is a revelation when compared to other makes of radios I have heard."

#### P. A. Swartz, Denver, Colorado.

#### ALREADY RECEIVED MONEY'S WORTH

"Let me assure you that we feel the Scott Philharmonic is everything you claim it to be. If it isn't the finest set on the market, at least we haven't heard any that is better, and we have heard quite a few. The naturalness of tone of certain programs broadcast by some of the stations is really amazing and the volume range expander gives the music that 'depth' that is lacking in music coming over the average radio. Although we have had the set only a short time, we have already received our money's worth from it."

J. A. Dudycha, Chicago, Illinois.

#### POOR LOCATION, POOR ANTENNA, MARVELOUS RESULTS

"The whole construction of the set shows your careful work, and you would derive considerable personal satisfaction if you could hear the comments of friends who see a Scott product for the first time. Our location, with its proximity to the Sierra Nevada mountains is regarded as a poor one for the reception of Europe, but the Scott Sixteen brings in London, Paris and Berlin in the daytime as well as the evening, with great volume. Please remember also that we do not have an antenna worthy of the name and the piece of solid copper wire we use is low, and between dense trees, not to mention the fact that the power lines of the Sacramento Northern Railway and the Diamond Match Company are very nearby. What the set would do, when attached to an efficient antenna, we can only surmise. On the broadcast band, stations that before we considered impossible of reception here can now hardly be to'd from 50,000 watters 200 to 500 miles away (KPO and KFI) and we never know what station will come in next."

#### R. V. Dikerson, Chico, California.

#### CALIBRATION EQUAL TO FINE LABORATORY EQUIPMENT

"The Scott 23 arrived in first class shape and is going strong. I want you to know that I am very well pleased with it in every respect. You will recall that I mentioned in my letter (enc'osed with the order) how exacting I am—fussy—about radios, especially the calibration, and the fidelity control not detuning the station when turned half on. I will say, Mr. Scott, that you really 'went to town.' The fidelity control has absolutely no detuning effect, and the dial on a laboratory test oscillator is calibrated no finer than the one on this 'High Fidelity Scott.'"

J. Haskell, Jr., Saugus, Massachusetts.

#### RADIO CRITICS AMAZED

"I received my Scott Philharmonic two weeks ago and I don't think there is a radio station in the world I have not received in these weeks, and the cabinet is simply gorgeous, if that is what you call it. I have had several occasions to invite critics in to hear this receiver and they were amazed at the performance of the instrument. I wish I were able to express myself in writing just a fraction as good as I can in speech regarding this marvelous receiver, but be assured that if anyone is interested in radio and have the financial means, I have the receiver with which a comparison can be made, as I have eight receivers of the most popular makes (none over two years o'd) in my home ready for use at all times and it will be a pleasure to show anyone just how superior the Scott really is." F. J. Schlaadorn, Cleveland, Ohio.

#### EVERY POINT BETTER THAN WE CLAIM

"I eat breakfast every morning in Japan at 7:00 A.M. and does it come in! I can see a good time ahead this winter. It's too bad you can't tell the fine features about this set in words. Every point about this set is better than you said it was. It is the only set that you can use 365 days in a year with satisfaction. I could write a book on the features it has over all other radios I have ever heard. I have heard stations that I didn't know were on the air (small 100 watt stations). If it is on the air, the Philharmonic gets it. I can see why you give 30 days trial because you know it will never come back—30 minutes is long enough, because none has ever heard anything like it. Your best asset is your truthful advertising."

A. O. Lieber, Columbus, Nebraska.