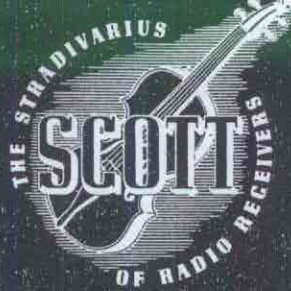


SCOTT



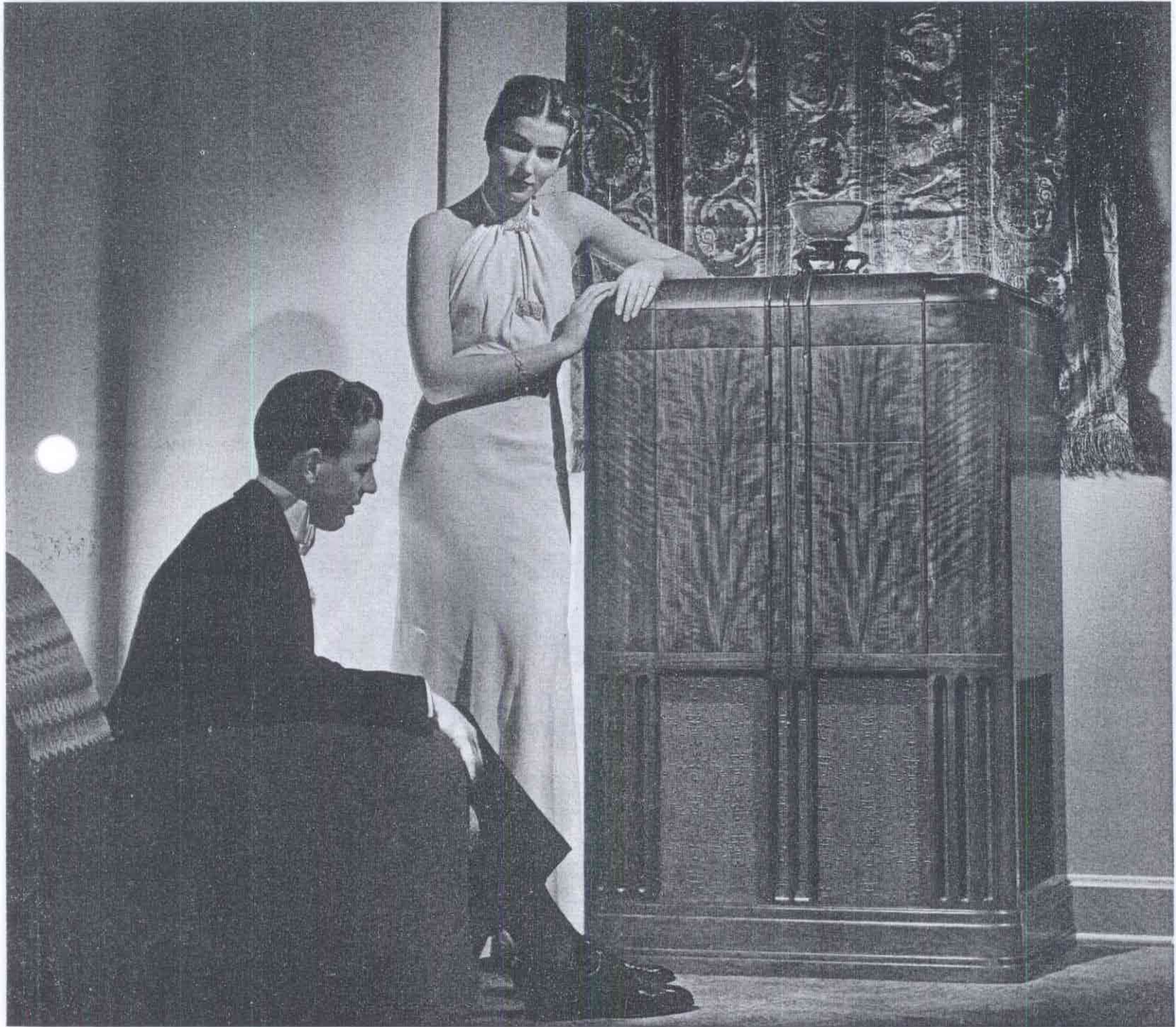
NEWS

NEWS OF LATEST DEVELOPMENTS IN THE SCOTT RESEARCH LABORATORIES

Vol. 10

MAY, 1937

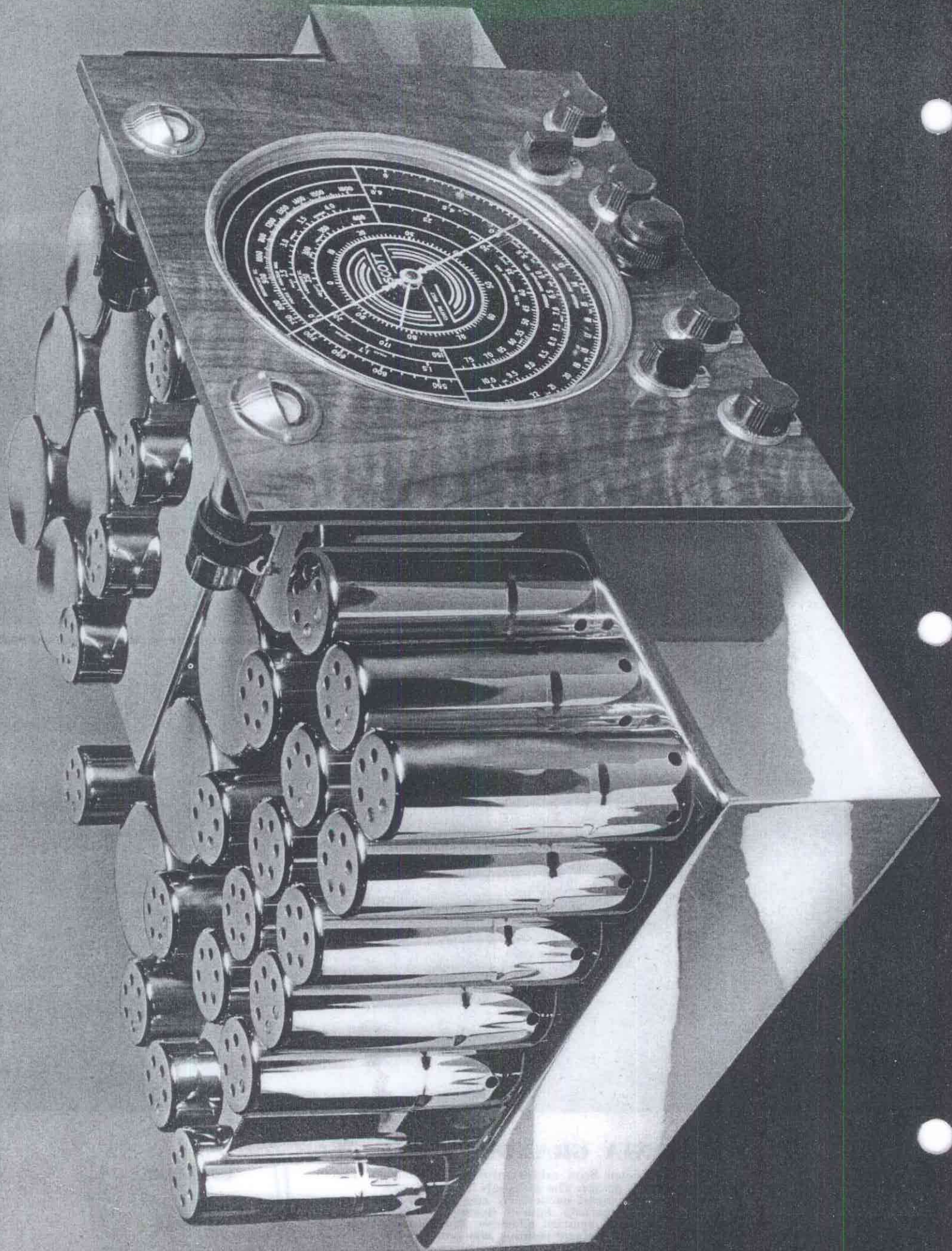
No. 3



The RAVINIA GRANDE

Following the stream line trend this new Scott cabinet provides a spirited interpretation of ultra-modern console design. The strikingly beautiful, rich simplicity of its severe lines make this model particularly adaptable to the modern home. Front panel is of gorgeously figured Oriental Walnut, trimmed with a center overlay. Graceful rounded pilasters. The lustrous handrubbed piano finish reveals the true natural coloring and grain of the selected woods.

*Custom
Built*





The Philharmonic YEARS AHEAD

NEW FEATURES MAKE IT WORLD'S FINEST RADIO

The new Scott Philharmonic is not only, we believe, the World's Finest Radio, but the most remarkable radio receiver that has ever been produced.

Tuning Range

A greater wave length coverage (from 3.75 to 2,000 meters) is afforded. With this Philharmonic you can tune in programs on the long waves, the broadcast band, the regular short wave bands which cover American and Foreign short wave stations, and the ultra-short wave lengths. Six tuning bands are employed. All wave bands are accurately calibrated on an extremely legible eight inch diameter dial, with a special 360 degree logging scale provided for logging stations on odd megacycle frequencies on the short wave bands. This dial is shown on page 8 of this issue of the "News."

Finer Tone

Finer tone and higher overall fidelity are provided by a newly designed audio amplifier and speaker system. Acoustical Engineers have proven by scientific tests, that the audible range of the human ear is from 30 to 16,000 cycles or vibrations per second. A radio receiver designed to produce less than this range of tonal frequencies misses a large part of the overtones and harmonics which give music and voice their individuality. For over two years Scott Receivers have covered the complete audible frequency range, but the new Philharmonic so accurately balances these overtones with each other at all volumes, that even finer tonal perfection that has heretofore been available is now accomplished.

Variable Fidelity

The fidelity is continuously variable by means of a fidelity selectivity control on the front panel. The system employed is exclusive with the Scott Philharmonic, and is trouble-free and positive in its action. An added feature in the Philharmonic, is a treble boost which compensates for deficiencies which may occur in the broadcasting of the music or in the recording of phonograph records. This device is entirely automatic in its action.

Noise-Free Reception

The Scott Supershield Antenna Coupling System built into every Philharmonic assures smoother and more noise-free reception on all programs, especially those received on the short wave bands than has ever before been possible in any other radio receiver. It practically eliminates electrical interference and noise picked up by the antenna lead in and at the same time effectively doubles the sensitivity or distance getting ability of the receiver and antenna combination, by providing a highly efficient transfer of the signal energy from the flat top portion of the antenna to the amplifying circuit of the radio. This new type of antenna input system has made it possible for those living under difficult receiving conditions to enjoy fine radio reception from stations all over the world.

Higher Usable Sensitivity

The Philharmonic has more usable sensitivity we believe, than any other radio that has yet been produced. This high degree of extremely usable sensitivity on all wave lengths, especially on the short wave bands where a high degree of sensitivity is so necessary to bring in programs

from distant foreign stations clearly and with good volume, is one of the most outstanding features of the Philharmonic.

Perfected Automatic Gain Control

Coupled with the high degree of usable sensitivity in the Philharmonic, is the perfected automatic gain control system used on both the RF and IF Amplifiers. The automatic gain control system incorporated in the IF Amplifier is a recent perfected development of the Scott Research Laboratories, and assures a constant volume level of the signal being received at all times.

Variable Selectivity

A high degree of selectivity which is continuously variable from 2 to 16 kilocycles is achieved in the Philharmonic by the exclusive variable selectivity feature that has been incorporated in all Scott Receivers for over two years. The mechanism controlling the variable selectivity of the Philharmonic has now incorporated a band pass R.F. which provides a range of selectivity and fidelity which we believe has never before been attained on any other super-heterodyne receiver. As the selectivity is continuously variable it can be set to give the maximum degree of fidelity possible from any station tuned in, with interference eliminated from stations on nearby frequencies. A special feature in connection with the variable selectivity control is the means to secure maximum sensitivity when the receiver is in maximum selective position.

Perfect Tonal Balance

More perfect tonal balance at all degrees of volume is now possible through the Scott Tone Balancer Volume Control System. It is much more than a control which raises and lowers the volume of the receiver, for incorporated in it is a tone balancing system which has been designed to follow almost exactly the Fletcher Curve named after Dr. Harvey Fletcher the well known acoustical engineer. The tone balanced volume control system incorporated in the Philharmonic has been scientifically designed to follow the response of the ear to the lower and higher frequencies at varying degrees of volume, maintaining at all times a perfect balance between the bass, and the brilliant higher frequencies or overtones with the mid-frequency range.

Improved Speaker Response

The new Inverse Feed Back System incorporated in the Scott Philharmonic Audio Amplifier automatically cuts down peaks and brings up the dips giving finer and more natural reproduction and flattening out the acoustical response of the speaker by a factor of approximately 2 to 1. In addition to improving the acoustical response of the speaker it extends the frequency range both at the high and low frequency ends and the objectionable hang-over often so noticeable in loud bass reproduction caused by the speaker cone vibrating after the notes or sound has actually ceased is eliminated.

Tremendous Undistorted Output

Four 6L6G tubes used in parallel push-pull in the power output stage together with a specially designed driver stage allows 75% of the gain of these tubes to be used for distortion cancellation in the tubes themselves, and the last traces of distortion are cut by a factor of 4 to 1 with a result that 40 watts of pure class "A" output is attained with less than 2% overall harmonic distortion. We have provided sufficient power so that it is possible to reproduce should you desire it, even a full symphony orchestra with the original volume and hear every note or sound as clear and undistorted as you would if you were actually in the auditorium.

New Bass Control System

Another remarkable feature of the Scott Philharmonic is the Bass Bi-Resonator System, another recent development of the Scott Laboratories. It provides perfect reproduction of the bass or lower frequencies without in any way affecting or muffling the reproduction of the speaking or singing voice or any of the higher frequencies. Generally when such a remarkable bass response is obtained in a radio receiver, it is accompanied by considerable AC hum especially when the Bass Control is set on maximum response. In the Philharmonic the bass control system will give perfect bass reproduction but the hum has been entirely eliminated. A listening test on the new Philharmonic will quickly show the tremendous improvement in bass reproduction this new system provides.

Phonograph Connections

Connections that provide for attaching a phonograph pickup to the Scott Philharmonic and a switch on the front panel allows the receiver to be instantly adjusted either for reception of programs off the air or for phonograph record reproduction. All tone adjustments are available on phonograph reproduction as well as programs received off the air.

Microphone and Home Recording Features

Other regular features of the Scott Philharmonic are connections for microphone operation and the making of recordings through the amplifying system of the receiver.

The recording feature makes the receiver ideal for recording programs directly off the air, or of recording through the microphone. This feature is especially valuable to students, such as those who desire to make recordings of the various programs they hear. The recording equipment of course, is optional, and prices on such equipment will be gladly supplied on request.

Guaranteed For Five Years

Every part of the Scott Philharmonic receiver is fully guaranteed for five years against defects in either material or workmanship and will be replaced free of charge when returned to the laboratories providing chassis seals are not broken or the receiver tampered with.



SCOTT ENGINEERS STARTLE MUSIC WORLD

NEW INVENTION IN *Philharmonic* REPRODUCES PERFECTLY Every TONE AND OVERTONE Without RECORD SCRATCH

The significance of the above fact cannot be overestimated. Not only has the research engineer accomplished the impossible, but he has given us recorded music in its full beauty *without the scratch*. Music is no longer "canned."

The world's great operas . . . the world's great music from Bach to Gershwin . . . conducted by Toscanini, Stokowski, Koussevitzky, and performed by Kreisler, Menuhin, Heifetz, Paderewski, Rachmaninoff, Horowitz, Casals . . . and sung by Caruso, 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.

The accurate fidelity and increased dynamic volume range have made recorded music a more thrilling experience than it has ever been before. Until now the principal drawback in the reproduction of music from a record has been the surface noise. All efforts to eliminate it have failed—"Cures" have been worse than the

"disease," for elimination of the scratch surface noise has meant impairment of the tone quality.

Why Response of Pickup is Sometimes Limited

The system in most general use to reduce record surface noise, limits reproduction from the "pick-up head" to about 4,000 cycles. Since many High Fidelity recordings go to 10,000 cycles, and the ordinary phonograph record ranges from 5,000 to 7,000 cycles, a pick-up that is not capable of reproducing frequencies above 4,000 cycles, can reproduce only about half the actual fidelity of tone on the record.

"Why," you ask, "is the range of the pick-up so limited? Why is it not designed to reproduce the full range recorded on records?"

Why Voice and Music Sound Boomy on Some Phono Combinations

The principal reason is that the higher the fidelity of the pick-up, the more noticeable the

scratch, particularly when the fidelity of the records goes above 4,000 cycles. By limiting the fidelity, you can eliminate or reduce the scratch, *but at the same time you also eliminate the enriching overtones*. You will notice, if you listen carefully, all music sounds very "mellow," that the low tones are usually very good, but the higher overtones of the voice and the violin for example are missing. The reproduction generally sounds slightly "boomy," and is not clear. The great brassy clash of the cymbals is missing—it is, in fact, not there, as the pick-up is incapable of reproducing it.

Scott Research Engineers Solve Record Surface Noise Problem

The problem of cutting out the scratch 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, and does not in any way affect reproduction of the higher frequencies or overtones at normal volume.

"How is it done?" you will ask.

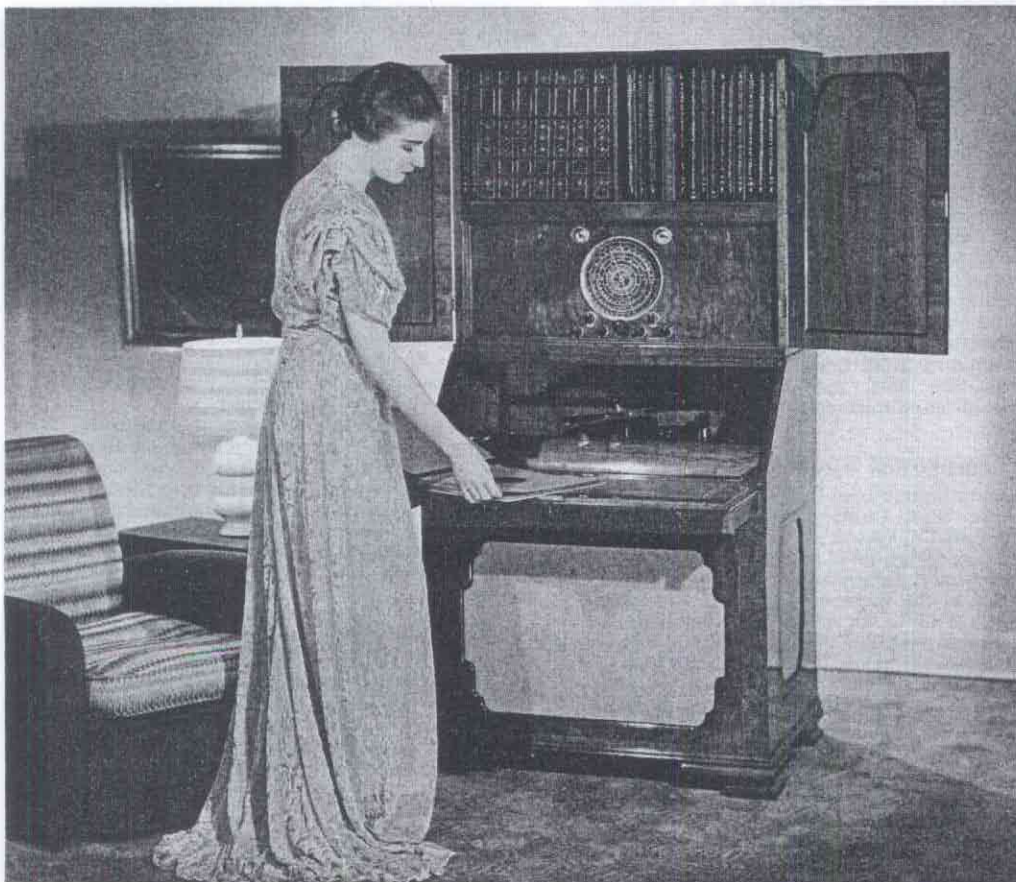
The secret lies in a special circuit on which patents have been applied for, and uses two of the 30 tubes in the new PHILHARMONIC.

Phonograph Enthusiasts Test New Development With Their Own Records

During the past month we have had a large number of visitors at our Studios in New York,

THE SECRETAIRE

Scott designers have deftly combined the pleasures of phonograph and radio in this exquisitely styled *Secrétaire*. Answers the need for both radio performance and preferred phonograph reproduction. Has ample space for albums and favorite recordings. Built by hand of selected Butt and Figured Walnut. A lustrous hand-rubbed piano finish emphasizes the true beauty and natural grain of the selected woods used.





Chicago and Los Angeles. Dozens of them have been phonograph enthusiasts—who arrived with an armful of their favorite records and needles—They wanted to be shown! Frankly, I believe that 90% of them were firmly convinced that what we had been claiming for this new development was impossible. They knew their records—they knew, or thought they knew, that it was impossible to eliminate scratch, yet reproduce the “highs” or overtones at normal volume. But after they had heard their favorite records on the PHILHARMONIC, most of them could find no word to express their enthusiasm. They hardly recognized their own records! There were tones and overtones they had not known were there. The “lows” were reproduced with a new beauty and clearness. The “highs” had the same clearness, but no surface noise. It was incredible!

Why You Must Actually Hear This Remarkable New Development

Suppose you were standing on the deck of a vessel way out at sea—in the distance was a small dot on the ocean—then suppose someone were to stand beside you and describe the beauties of the island—the white coral beaches—the blue lagoons—the waving palm trees—the groves of tropical fruit, and flowers of every hue. This description would give you *some* idea of the beauty that lay before you, but I think you will agree that you would realize more of its beauty by looking for ten minutes at the actual beaches—the lagoons—the trees and flowers—than you could by listening for ten days to a verbal description.

I could write a book about what you are missing on the records you are now listening to—and still not make you realize the tremendous difference between the present reproduction of your records and the reproduction on the new PHILHARMONIC. At our Studios in New York, Chicago, and Los Angeles we can demonstrate this difference in two minutes. By means of our variable Fidelity Control we can make your records sound as they do on your present machine or on any regular phonograph reproducer, then, by gradually increasing the fidelity range of the PHILHARMONIC, show you exactly what you have been missing.

Your Records Live on New Philharmonic

However, this article was not intended to describe the High Fidelity range of the PHILHARMONIC—but only the new Scratch-Suppression feature. Referring again to our ship analogy, imagine that you are again on the deck: It is a beautiful day . . . the sun is shining . . . you hear the faint sound of the rippling water . . . and nearby is your island. You see its gleaming white beaches—waving

palm trees with a blaze of color thru them. But, suppose all at once the sky becomes overcast . . . rain begins to fall. Perhaps you could still see the beach and the trees, but they would be dimmer and indistinct. When you hear a record—with all the higher tones reproduced, *but without the scratch or surface noise*—you can sit back and enjoy it to the fullest—as you would the view of your island on a beautiful sunny day. When the scratch is in—immediately the pleasure of listening is decreased, as your pleasure would be if you saw your island on a dark, rainy day.

Perhaps, you now are thinking that what you have read is exaggerated, or improbable. My answer is: I extend an invitation to you to visit any one of our studios—bring your own records and make the test yourself. If you cannot come to the Studios, send in your order for the new PHILHARMONIC, and make the test in your own home, for thirty days. If the PHILHARMONIC is not exactly as described you can return it any time during this period and your money will be promptly refunded.

To make this test, you locate the small button below the main tuning knob which controls the Scratch Suppressor. Put on a record and start playing it with the Scratch Suppressor off—turn up the Fidelity Control until you are getting the complete fidelity your record is capable of giving. You will hear the higher tones—the lower tones—together with the record scratch. Then pull out the Scratch Suppressor control—and immediately the surface noise disappears—and to your utter amazement the thrilling crescendo and forte passages come thru *reproduced exactly as they were recorded.*

Remarkable Record Reproduction Constantly Amazes Visitors

When you hear your favorite record on the PHILHARMONIC, you will be amazed.

“Why, it does not sound like a radio at all.”

“Are you *sure* that is a record you are playing and not something off the air?”

“I never heard anything like this before in my life. It is unbelievable!”

“Whatever you have done, it has put the third dimension into phonograph records.”

These are exclamations we are hearing every day in all of our studios.

Perfect Reproduction Due to Number of Perfected Features

What is the secret of it all? Why is the reproduction so realistic and perfect that it arouses such enthusiasm? The answer is that it is not due to any one feature, but to a combination of them—perfected to a high degree and incorporated in an instrument that can only be described as a “miracle of perfection.”

FIRST: The new SCOTT Scratch Suppressor, eliminates the “s-s-sh” and the reminder that you are listening to a phonograph record—but *does not eliminate the overtones at normal volume.*

SECOND: The Scott push-pull (not single channel) Program Volume Range Expander restores the dynamic volume range without a trace of distortion.

THIRD: The perfect fidelity from 30 to 16,000 cycles that is continuously variable from 30 to 16,000 cycles, enables the fidelity to be set to cover completely the range of the highest fidelity record.

FOURTH: The great reserve power—40 watts with less than 2% distortion—enables every passage from the softest pianissimo to the loudest sforzando to be reproduced without distortion at any desired degree of volume.

A New Day For Lovers of Great Music

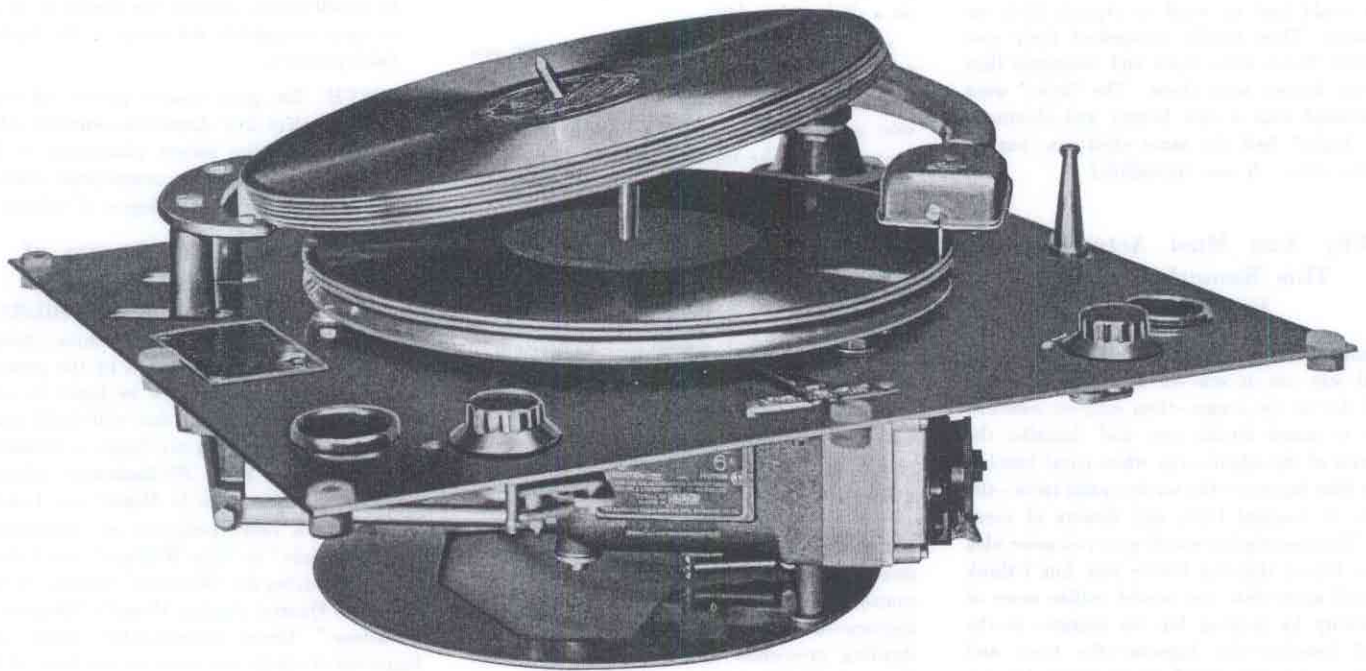
To lovers of great music, the new PHILHARMONIC means a new day. Symphonies, Operas, and Chamber Music performed by the greatest artists of the world can now be heard in your home with a faithfulness that will thrill every fibre of your being. You can listen to Toscanini and the New York Philharmonic playing Haydn’s “Symphony in D Minor”—to Lauritz Melchior and Lotte Lehmann as “Siegfried” and “Sieglinde” in “Die Walkure”—to Yehudi Menuhin playing the “Kreutzer” Sonata—to the Flonzaley Quartet playing Mozart’s “Quartet In D Minor.” 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 see them—know them—and hear them as you have never known them before.

Hear This Amazing New Development in Any of the Three Scott Salons

If you live in or near New York City, Los Angeles, or Chicago, let us show you just how this new development puts vitality into phonograph records and brings forth musical tones you did not realize were there.

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 1½ blocks north of Third Street and ½ 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 Finest Features of Record Changer Engineering are Incorporated in New *Philharmonic* Phono-Radio



To get perfect reproduction you must not only have a perfect record changer, but also a perfect amplifier and speaker system. This point is made clear because many people imagine that *the record changer* is the part that is mainly responsible for the tone reproduction on the record but this is not so. The record changer is merely the mechanism that turns the record around and transfers the vibrations or sounds from the record to your amplifier, which in turn reproduces the music or other selection on the record through the loud speaker.

Why Pick-up is Most Important Part of Phono Combination

The first part to check in any record changer is the "pick-up" head. If it is too heavy, the record grooves will wear rapidly. The ideal weight of the pick-up is between $2\frac{3}{4}$ oz. and $3\frac{1}{2}$ oz. A rough idea of the weight of the pick-up head can be obtained by balancing it on the end of one of your fingers, but a special scale is used to weigh the pick-up accurately. All of the weight of the pick-up head is concentrated on the end of the needle, and since phonograph

records are not made of steel, but from a comparatively soft composition, if the pick-up head weighs more than $3\frac{1}{2}$ oz. it will soon ruin any record by altering the shape of the record groove, as the needle digs in and makes the record groove deeper, so increasing scratch or surface noise and reducing the fidelity.

Tracking of Tone Arm Also Important

The next point to look for in your ideal record changer is the amount of "tracking error." The

relation of the needle to its path across the groove is called "needle track alignment." When the path is straight . . . that is, when the face of the pick-up head is at a right angle (90°) to the path from the edge of the record to the center . . . the alignment is correct.

Error of alignment in tracking is one of the most common causes of record wear. When it exists the needle point cannot rest evenly in the record grooves; it will thrust against the sides and break down the wall; moreover, since the needle point cannot rest in the fullest depth of the groove, reproduction will suffer.

The tracking error of the average 8" straight pick-up arm, set in its customary position so that the needle crosses over the center of the turn table spindle, is more than minus 15° at the extremity of a 12" record. As the needle crosses the record this error is gradually reduced, but gradually picks up again on the positive side, and so introduces *another* cause of excessive record wear. A needle, as will be shown by the illustration, wears out to fit the record groove. If it rests evenly in the groove . . . the alignment error being zero (0) . . . the wear is even and does not appreciably harm

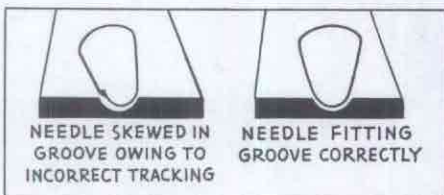


RECORD CHANGER IN CONSOLE



the record. But if the needle is canted . . . because of a plus or minus alignment or tracking error . . . and the cant of the needle changes from one side to another, the needle point is continually reshaped at the expense of the record walls.

Under a microscope, it would be seen that the needle develops chisel-sharp horns; since pressure at the point of the needle is many tons, it can be imagined what happens to a valuable record when the needle is skewed across a groove by poor tracking, riding on the top of one wall of the groove with its horns digging into the other walls.



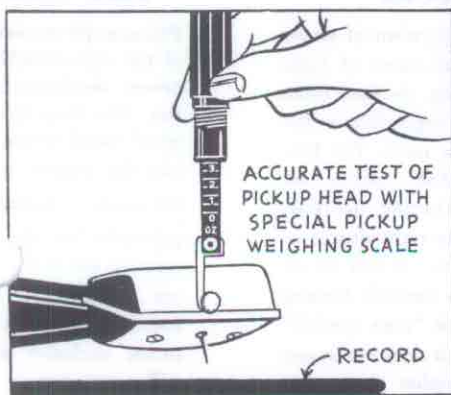
Tracking Error Less Than 3% in Garrard

Tracking error can be practically eliminated by correct curve shape given the tone arm. In the Garrard changer the needle is held practically true to tangent thruout the entire playing surface of the record, with a maximum tracking error never exceeding 3%.

A special protractor is used to test the tracking alignment of pickups to within a fraction of a degree, but a rough test can be made as follows: One corner of a sheet of paper is passed thru the needle point, and the edge extended from this corner is passed over the center of the turn table. Viewed from the face of the pick-up, the other edge should make a straight line, passing thru the center of the needle. So much as it is to the left is a positive error, and so much to the right is a negative error.

Why Needles Should be Changed Frequently

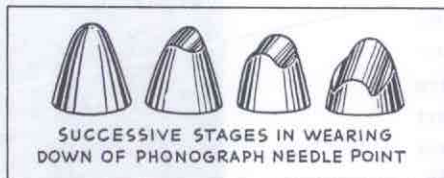
A needle should be used preferably for not more than five sides of a record and certainly not



more than eight sides, if you desire to keep your records in good playing condition. There are several makes of needles on the market which are described as good for 25 sides of a record. They are extremely hard and will undoubtedly play this number of records, but after the twenty-fifth record is played it will not give you the fine reproduction you will get from a high quality steel needle that has played five sides of a record or less. Five sides of a 12 inch record will provide you with 25 minutes of music, and 10 seconds will change a needle, surely a short time to spend if it means keeping from five to eighteen dollars' worth of records in perfect condition.

Here's How Needles Wear as Successive Records are Played

From the moment your records starts to revolve the needle point commences to wear. When a needle reaches the last groove of a 12 inch record it has traveled approximately 500 feet or a total of 2500 feet on five 12 inch records. A shoulder is gradually worn on the sides of the needle point, and as this shoulder becomes deeper, the point fails to follow the groove and rattles from side to side producing a fuzzy tone. The diagram illustrates the various stages of wear on a phonograph needle point as it plays successive records, and shows why it is so necessary to change the needle preferably after no more than five sides have been played.



Some Pointers on Automatic Record Changers

An automatic record changer is to be preferred if it is your intention to reproduce complete symphonies, operas, or a series of records. Today you can secure albums of records containing from one to twelve records which provide about as delightful an hour's entertainment as one would wish for.

A great deal of the pleasure of listening to a symphony or opera is lost if there is too great a wait between the changing of each side of a record. The Garrard Changer which is supplied with our deluxe phono installations requires only seven seconds to change from one side of a record to another, and the change is made so quietly that one has to listen very intently to realize the mechanism is operating at all. It is an extremely sturdy and well designed changer, with a magazine that holds from one to eight records, with an adjustment which allows you to use either 10 or 12 inch records. You simply load up the magazine with the number of records required, throw the switch,

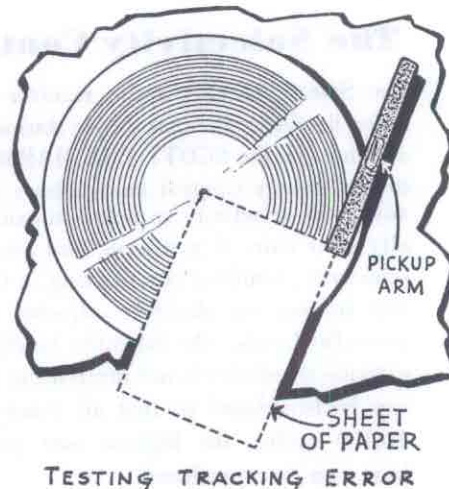
then the complete set of either 10 or 12 inch records is played through on one side without further attention, stopping automatically when the last record has been played. The pick-up on the Garrard weighs 3¼ oz., with a tracking error of less than 3%, and it is guaranteed against defects for five years.

The albums can be secured with the symphonies, operas, or other selections arranged on the records in two ways according to the type of record changer you are using. To play through a complete symphony or opera on the Garrard the type AM albums are used, in which the records are arranged as follows: First part on top of No. 1 record, second part on top of No. 2 record, third part on top of No. 3 record, etc. When the complete series of records is played thru the record changer will automatically stop, then you simply turn over the complete pile of records (which does not take more than ten seconds), and the album of records will be played thru to the finish in their proper order without further attention.

The Garrard Record Changer

The large picture on the opposite page shows the Garrard Record Changing Mechanism. It is simple, compact and silent in operation. The small picture at the bottom of the page in the center shows this mechanism mounted in a console. Several of the exclusive Scott Consoles will accommodate this record changer and they are so designated on both the order blank and the descriptions of them which follow in this book.

If you order a Scott Console that will accommodate phonograph equipment when you place your order for the Philharmonic, you can always add a Garrard Record Changer at a later date if you desire. This is a good point to consider when selecting a console, because when you select one which will not accommodate phonograph equipment you will have to have a record changing mechanism installed in a separate cabinet if you decide later on that you want it.



Perfect Control OF EVERY SIGNAL AND

Accurate Calibration

Neatness, simplicity, and visibility are outstanding features of the dial on the new SCOTT PHILHARMONIC. The dial is 8" in diameter with large, easily read white numerals, illuminated by ingeniously placed lights which not only show you just what *scale* you are tuning on, but exactly *where* you are tuning on that scale. The six tuning bands covering all frequencies from 3.75 meters to 2,000 meters are each accurately calibrated. A logging scale from 0 to 100 is provided to enable short wave stations to be instantly located at a later date.

The Tuning Control

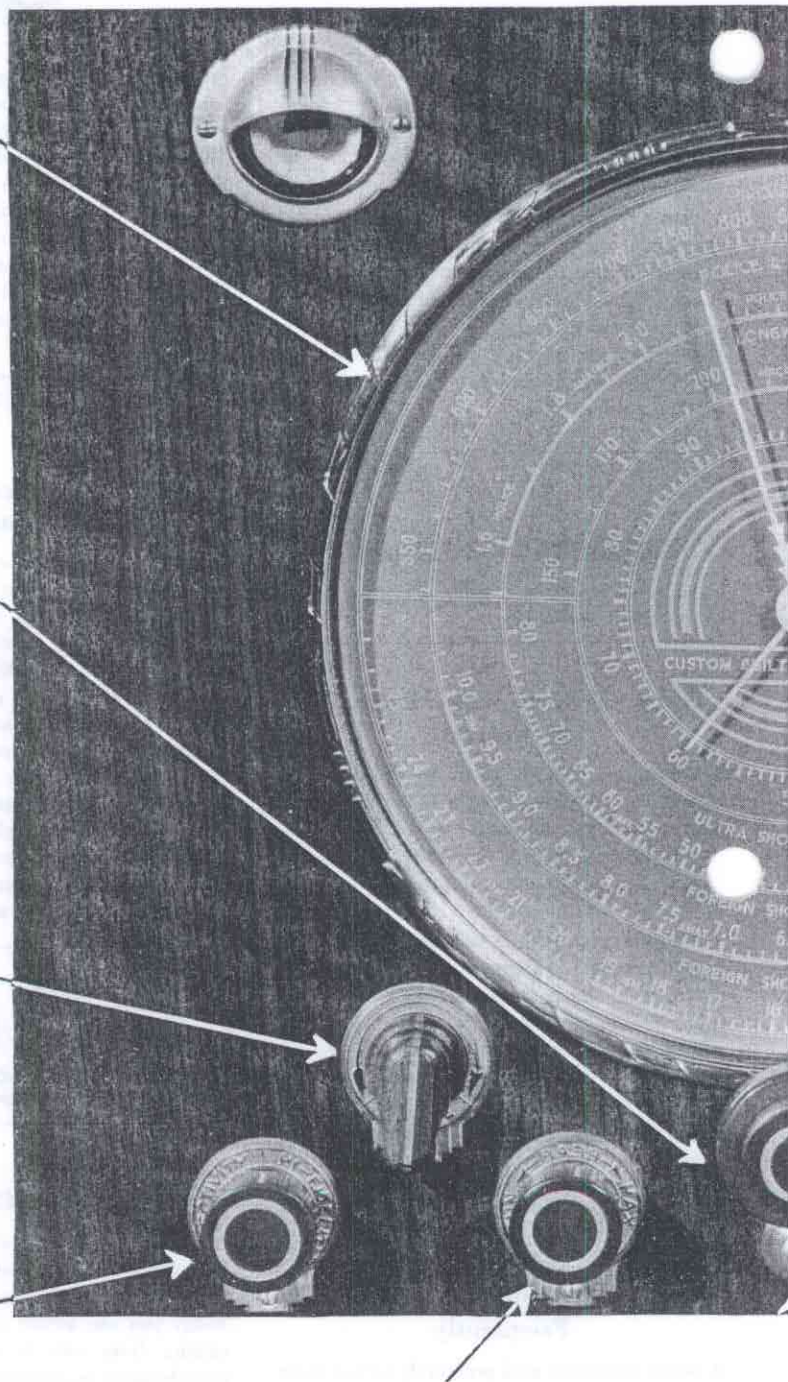
Turning the large knob at bottom of dial moves the large pointer very rapidly around the scale, while turning the small knob in the center of larger knob gives a very slow movement to the pointer making it extremely easy to locate weak distant foreign short wave stations.

The Volume Control

The knob which controls the volume on the SCOTT PHILHARMONIC does much more than simply raise or lower the volume. You have probably noticed that most radio receivers sound better at loud volume than when played softly. This is due to the fact that at low volume a great part of the lower notes are not heard. On the SCOTT PHILHARMONIC a *perfected tone compensated Volume Control* that properly balances the high, medium and low notes, at *all* volumes, gives you a full rounded tonal beauty regardless of whether you play it at low or high volumes.

The Selectivity Control

The Selectivity of a radio receiver determines its ability to separate one station from another. In the SCOTT PHILHARMONIC the Selectivity Control knob allows you to adjust the selectivity so that you can virtually split hairs if you wish, and get 2 Kc. selectivity, enabling you to bring in far distant stations on channels adjacent to the powerful locals. On the other hand, when extreme selectivity is not desired the tuning can be broadened so that all tones up to 16,000 cycles, the highest note you can hear, can be reproduced.



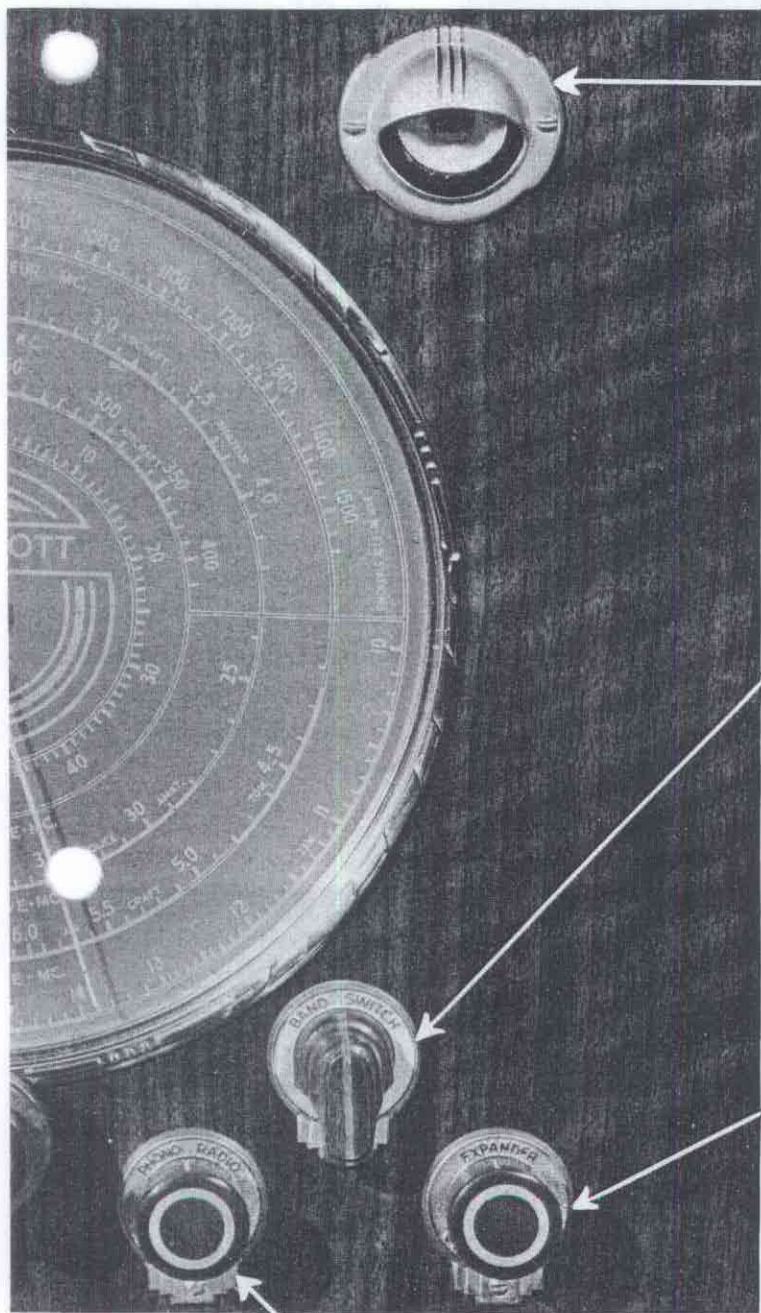
The Bass Control

For the perfect interpretation and enjoyment of music there must be a proper balance at all times of high, medium and low tones. In broadcasting, the bass often suffers for various reasons, making it impossible on the ordinary receiver to hear the rich low tones. The bass Control on the SCOTT PHILHARMONIC enables you to compensate for this deficiency. Turning the Bass Control enables you to secure just the right degree of bass that is most pleasing to *your* ears. It has an extremely wide range and is completely variable thruout the whole range. Unlike the so called "tone control," with which it should not be confused, it does not in any way, affect the reproduction of the higher tones.

The Scratch

Phonograph recordings loaded with the objectionable new developments of the latest series, The Scott Scratch Switch, a small switch below the main volume knob, and the scratch is gone—the music is missing. This is primarily for the purpose of removing the scratch, but it has no effect on the other bands. This is just another feature, exclusive with the SCOTT PHILHARMONIC, which will amaze you.

ONE . . . YOURS WITH THE *Philharmonic*



The Tuning Indicators

Next to the dial itself, the thing you will probably notice foremost on the front of your PHILHARMONIC are the tuning eyes above the dial. The one on the far left shows you when you have the station tuned in perfectly—you need not trust to your ears alone for tuning, for this indicator shows by a varying width of light when the station is tuned to get the best tone. The other indicator on the right works in conjunction with the Volume Range Expander which is explained in more detail at the bottom of the page.

The Wave Band Switch

The Wave Band Switch enables you to select the wave band or frequency you wish to tune. The PHILHARMONIC covers all wave lengths from 3.75 to 2,000 meters, or 80 megs. to 140 cycles. As the Wave Change Switch knob is turned from one band to the other, a light appears behind the white dial point and it shows you instantly just what band you are tuning on. You don't have to consult any chart or name plate to see if you are on the broadcast or short wave bands when you own a PHILHARMONIC.

The Volume Range Expander

THE SCOTT PROGRAM VOLUME RANGE EXPANDER is controlled by this knob. It is now built into the PHILHARMONIC receiver as an integral part of the radio because it adds so much to radio and recorded music. Very few radio and phonograph enthusiasts know that in broadcasting and recording studios an engineer known as a "monitor" stands before an instrument panel with a number of controls and dials in front of him. It is his duty to *increase* the strength of the soft passages, and *decrease* the volume on the loud passages. He decreases the soft passages on the radio so that you may hear them clearly above the line noise, tube hiss, etc. and on phonograph records to lessen needle scratch. The loud passages are cut on the radio to prevent overloading of the amplifier, and on records to prevent overcutting the record groove. The SCOTT PROGRAM VOLUME RANGE EXPANDER automatically restores the dynamic volume range, making the soft passages and the loud passages as soft and loud *in proportion to each other*, as they were in the original performance.

Suppressor

of their appeal because catch noise. One of the Scott Research Laboratory suppressor is controlled by a tuning knob. Pull it out—none of the beauty of feature was developed of phonograph needle very live in cutting tuning the short wave development of our laboratory. PHILHARMONIC, which

The Sensitivity Control

The sensitivity of a receiver determines its ability to receive weak, distant stations. A fine radio *should* have a wide range of sensitivity at the instant control of the user. The sensitivity knob on the PHILHARMONIC gives you complete control of the sensitivity. If the signal strength of the station you wish to receive is low, a turn of this knob will increase the sensitivity to enable you to bring in the desired station with good volume. If reception conditions are bad, then the sensitivity can be decreased to the point where only sufficient sensitivity is being used to bring in the desired station. This knob also operates the switch which enables you to play phonograph records when you wish.

The Chippendale

A distinctive creation of the Chippendale period. Reflected in this distinctive console is all the beauty and exquisite workmanship of the master craftsman. Hand carved legs and speaker grille. Delicate fluted pilasters and corner overlays. Constructed of natural mahogany or walnut veneers and fine hardwoods. The handrubbed lustrous finish emphasizes the true natural grain and beauty of the selected woods. This distinctive period console will fit into those homes of particular period settings.



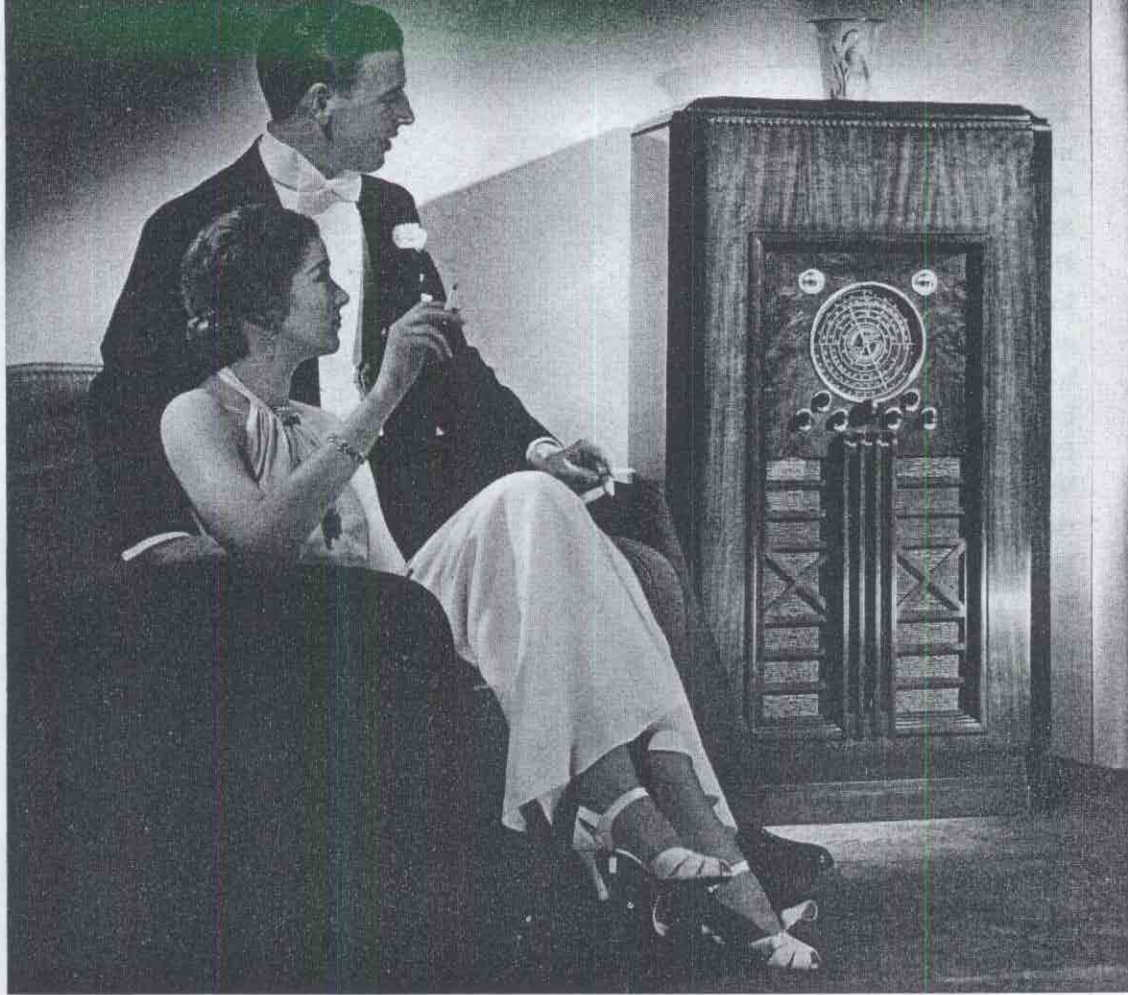
The Gothic Grande

A splendid example of fine furniture craftsmanship in classic Gothic design. Selected American Walnut throughout. Side panels beautifully hand carved and in linen fold design. Top panel with either Heraldic as shown, or linen Fold design. An air of subdued richness characterizes this sturdy example of authentic period design. Expert hand rubbing enriches the natural beauty of the woods. Will accommodate single record or automatic phonograph.



The Waverly Grande

A very unusual model that is expertly fashioned in authentic Swedish Moderne and carries in its design an air of distinction that will add charm to any room setting. The front panel is of exquisitely matched Butt Walnut. Solid Walnut recessed top. Sides and fluted pilasters are of beautiful straight grained Walnut. The hand rubbed finish more than emphasizes the beauty of the selected woods used. Will accommodate single record or automatic phonograph.



The Roslyn Grande

A beautifully styled console in Chinese Modern design. Reflected in this distinctive creation is all the skill and artistry of the master craftsman. Front panel of gorgeously grained Honduras Mahogany trimmed with rich East Indian and Brazilian Rosewood. The graceful legs and base are hand carved. Gold plated door handles. Hand rubbed lustrous finish emphasizes the exquisite graining and color of the selected woods. Will accommodate single record or automatic phonograph.

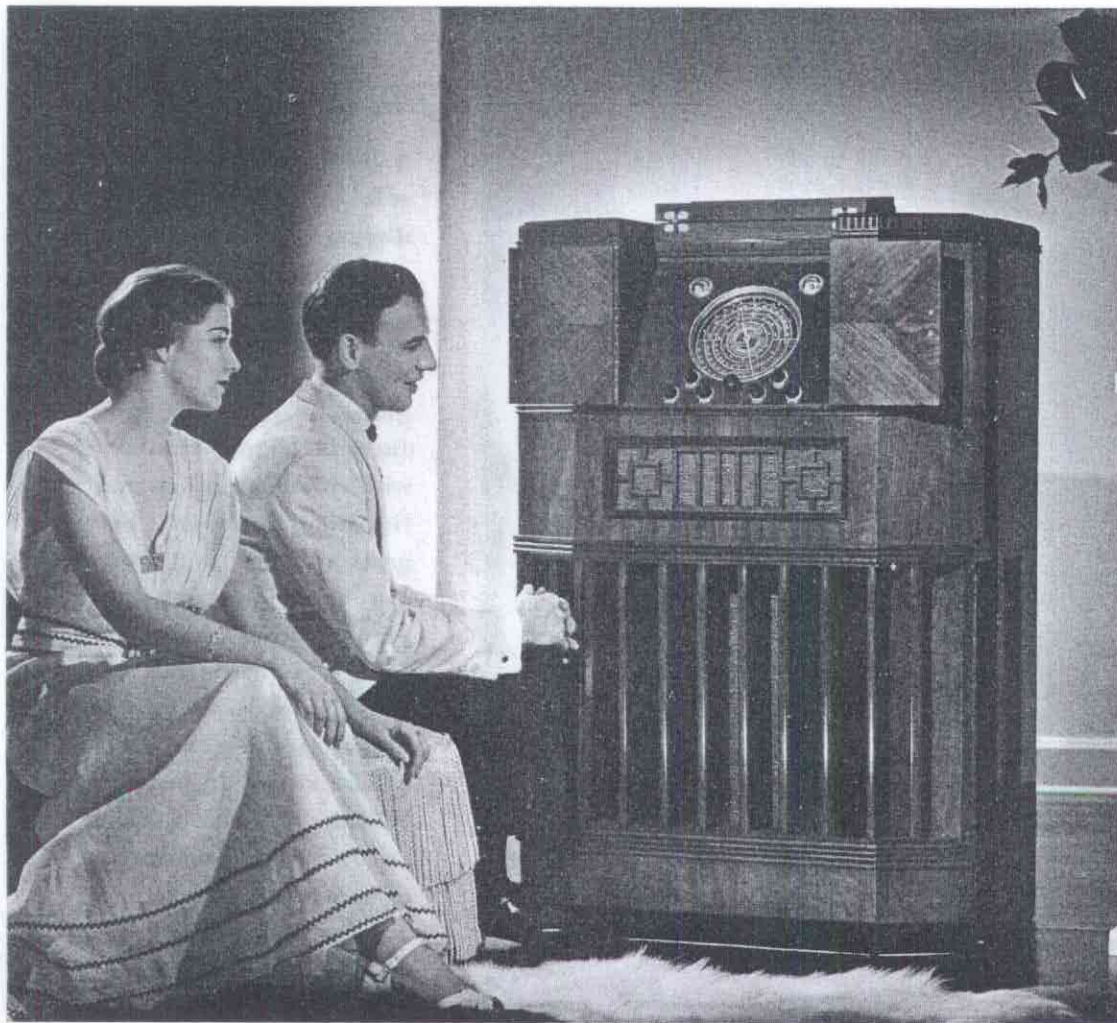
The Warrington

The smart lines and unusual design of this console make it one of our most desirable models. Designed by one of America's foremost furniture authorities, it brings a new type of console beauty to the fine home. Pilasters of rotary cut Walnut give an air of distinction and enhance the beautiful striped Walnut front panel. Rounded top of straight grained Walnut veneer. The hand-rubbed lustrous finish brings out the true beauty of the selected woods used.



The Laureate Grande

Setting a new era in cabinet design this exclusive Scott creation is the ideal console for those who favor the modernistic trend. Constructed by hand of beautiful, rich Walnut and East Indian Laurel wood. The front panel is of exquisitely V-matched woods. The modern gold plated door handles are fashioned of Catalin. The lustrous hand-rubbed finish emphasizes the natural grain and beauty of the woods. A special feature is the fluted speaker grille designed to scientifically distribute sound and give perfect tonal reproduction in every part of the room.





NOTED MUSIC CRITICS PRAISE NEW SCOTT *Philharmonic*

The announcement of the new Scott Philharmonic was heralded by music critics from coast to coast as one of the most decisive forward steps in radio tonal perfection during the past decade. Below are reproduced a few of these enthusiastic reviews.

From the "Music News"

At last a radio set has been achieved that is acceptable to the most critical musician not only as a remarkable engineering product but as a musical instrument that makes it difficult for the listener to believe that he is not actually hearing the sounds direct. Many radio manufacturers have been using phrases much like the foregoing to impress the public with the worth of their creations, but sensitive music lovers have been loud in their expressions of disappointment with the standard radio set which is not capable of reproducing the necessary overtones, and which distorts those it does coax into its loudspeaker.

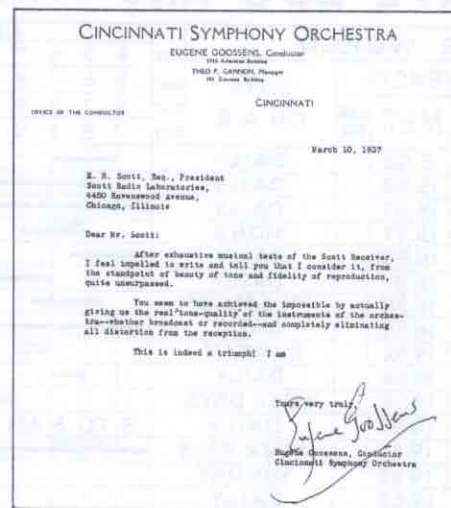
The host of the afternoon was one of the pioneer radio engineers, Mr. E. H. Scott, a most interesting gentleman. The Scott Laboratories have, under his supervision constructed a radio-phonograph instrument that has no peer in the world day according to authorities. And so it seemed from the moment it was turned on.

One thing was immediately apparent. The broadcast sounded as if we were really present at a Metropolitan performance, but only after listening to the program for some little time were we able to analyze to any extent the amazing difference between this and an ordinary radio.

First of all, the volume was not constant. It is well known that in broadcasting the engineer in the control room tries to maintain an almost level volume within a certain range. When the volume drops he increases the amplification by means of a volume control similar to that on your own radio, and when it exceeds a certain point he is quick to decrease it. This manipulation produces a flat and extremely limited and unnatural dynamic range. Consequently we, on the other end, may hear a normally soft flute passage at the same volume as the full orchestra due to this tampering on the part of the engineer. This is further distorted by the fact that an engineer, even if he can read music, is not allowed to see the score and must depend on another person seated beside him for his information concerning approaching passages which have sudden dynamic changes. This is a definite fault on the part of the broadcasting companies but Mr. Scott has incorporated a device in

his new Philharmonic which expands the almost imperceptible fluctuations in volume so that the soft flute sounds soft and the full orchestra fills the room. It is startling what an effect this has on a broadcast; it restores life to music and recreates the dynamic proportions of the orchestra and singers.

The second improvement is in the high fidelity of the reproduction both in con-



nection with the radio reception and with the playing of recordings. Naturally the characteristic timbre of an instrument is determined by its overtones and if these are missing due to imperfections in the radio set the result is something that cannot be identified but which actually is far from the real tone quality. Mr. Scott's new radio faithfully projects all the tones that it is possible for the human ear to hear. Therefore you do not hear music that merely *sounds* like an orchestra; you really *hear* the orchestra with all of its colorful variations.

We could write columns about this new set but we are sure that Mr. Scott himself would say that it has to be heard to be appreciated. We might add, however, that Toscanini has a Scott set, which is certainly a supreme compliment to a man whose untiring research keeps him so far ahead of the field in radio and who has devoted himself to the development of perfect reception for the layman as well as the discriminating musician.

EDWIN MARSHALL

From "Musical Leader"

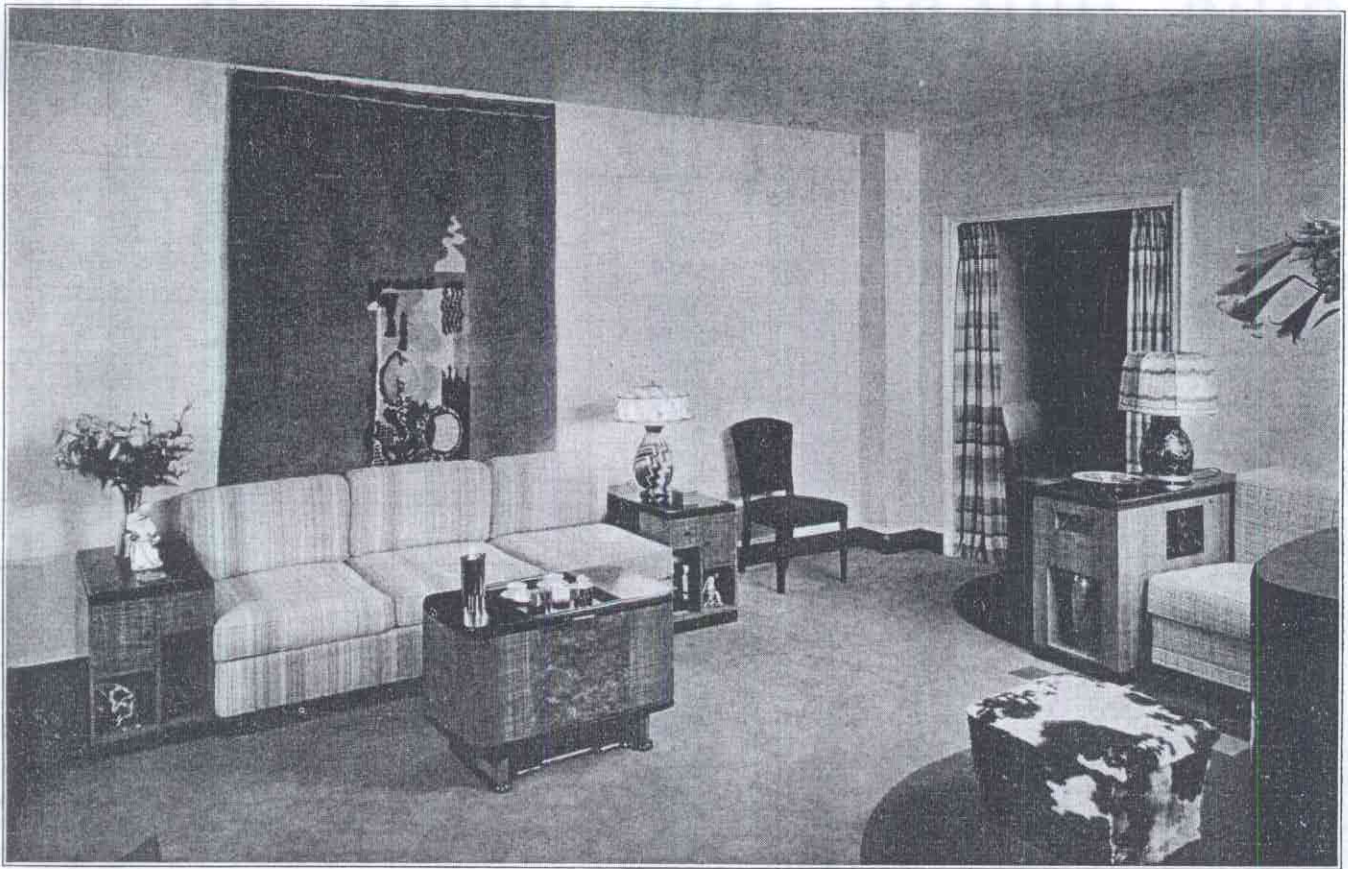
Have you heard a radio broadcast with a Scott Philharmonic? Once having had the experience of hearing an opera or symphony program on this perfect machine you will never be satisfied until you own one.

E. H. Scott, who perfected this radio invited a few of us to a demonstration a week or so ago, and it was an afternoon of perfect delight and *thrills*. Here is a practical inventor, one who knows why he does things and what effects changes will make. The Scott laboratories are the last word in modern equipment and interior decoration, the rooms are spacious and beautifully furnished, and the room in which we listened to the "Siegfried" performance at the Metropolitan Opera was an exquisite salon. Upon entering we thought "Where is this much discussed radio?" Then our attention was directed to the fireplace and we saw a screen of beautiful wood carving. This was the cabinet. Then the radio was turned on. The accuracy of tone, the color effects, the shading, the balance of orchestral parts, and the announcer's messages came over the air as clearly and as expressively as if we were sitting in the opera house.

A few minutes after the broadcast, Mr. Scott revealed that he had been recording the broadcast and he released the record as we listened to it. No scratch, nothing mechanical but pure, expressive music, words clearly enunciated, it was an experience never to be forgotten.

I am told that every Scott Philharmonic is hand made. Truly it is the musician's radio, for it has no imperfections in performance and no discrepancies in purity of tone or pitch. We heard a record made by Lawrence Tibbett in which he sang the Largo from "The Barber." We heard a beautiful violin number played by Mischa Elman, and we heard Mme. Bori's record of an aria. We were shown the mechanism of the radio and the recording machine, and were permitted to manipulate the several controls which increase or diminish volume and character. It was a remarkable experience.

EVELYNE FRENCH SMITH



Interior by Eugene Schoen & Sons

Photograph by F. S. Lincoln

A FINE MODERN INTERIOR

The picture above, appearing in the latest edition of the Encyclopaedia Britannica, illustrates some interesting trends in modern home decoration. In keeping with the spirit of this luxurious room is the Scott radio conveniently housed in the unique cabinet at the end of the davenport—an arrangement which makes tuning comfortable and easy. A corner of the speaker console may

be seen at the extreme right of the picture. This distinctive interior, in the town house of one of New York's most prominent families, is typical of the many hundreds of fine homes in which the Scott occupies a prominent place. A few other recent purchasers of Scott receivers are the following:

W. R. Angell, Jr.
President
Continental Motors

Philip D. Armour
Director
Armour and Company

B. Balaban
President
Paramount Pictures Inc.

C. J. Barkdull
Director
Standard Oil (Indiana)

W. C. Bird
Director
Lambert Company

E. J. Block
Director
Inland Steel Company

George W. Borg
Chairman of Board
Borg-Warner Corporation

Chauncey Blair Borland
Director
Elgin Watch Company

Major Edward Bowes
Vice-President
Metro-Goldwyn-Mayer

Lymann J. Briggs
Director
National Bureau of Standards

John Crosby
Director
General Mills, Inc.

Charles W. Deeds
Director
United Aircraft

A. C. Dodge
Vice-President
Fairbanks, Morse Company

J. O. Eaton
President
Eaton Mfg. Co.

George R. Ford
Director
Libbey-Owens-Ford Glass Co.

Henry Ford
Chairman of Board
Ford Motor Company

George L. Hartford
Chairman of Board
Great Atlantic and Pacific Tea Company

Barton Haselton
Chairman of Board
Revere Copper and Brass, Inc.

C. P. Holt
Director
Caterpillar Tractor Co.

John Hulst
Vice-President
U. S. Steel Corporation

J. Harold Hunt
Director
Motor Wheel Corp.

E. W. Isom
Director
Consolidated Oil Corp.

George W. Johnson
President
Endicott Johnson Corp.

C. F. Kettering
Director
General Motors

Walter J. Kohler
President
Kohler Company

R. H. Kress
Director
S. H. Kress and Co.

E. D. Levy
President
Fisk Rubber Corp.

Ernst Mahler
Vice-President
Kimberly-Clark Corp.

George Malcolm
Director
Otis Elevator Co.

Fowler McCormick
Director
International Harvester

Clement McKaig
Director
Carnegie Steel Co.

W. L. Mellon
Director
Westinghouse Electric

J. J. Mitchell
Director
United Airlines

P. G. Mitchell
Vice-President
International Mercantile Marine Company

Thomas A. Morgan
Chairman of Board
Curtiss-Wright

W. J. Murray
Director
McKesson and Robbins

C. B. Nolte
President
Crane Company

Carl Nyquist
Director
Chicago, Rock Island and Pacific Railway

Stanley Partridge
Director
Pillsbury Flour Mills

Frank Purnell
President
Youngstown Sheet and Tube Company

C. B. Raymond
Director
B. F. Goodrich Company

D. E. Ritter
Director
Lehigh Portland Cement Company

A. R. Rumbles
Vice-President
Remington-Rand

Edward L. Ryerson, Jr.
Director
Quaker Oats Co.

R. G. Schmitt
Director
Walgreen Company

D. R. Snow
Director
Barnsdall Oil Company

C. A. Stillman
Director
Goodyear Tire and Rubber Company

C. A. Tilt
President
Diamond T Motor Company

W. F. Titus
Vice-President
International Business Machines

William K. Vanderbilt
Director
New York Central Railway

A. U. Williams
President
Williams Oil-O-Matic Heating Corp.

Darryl F. Zanuck
Vice-Pres. chge. Production
20th Century-Fox Film

E. H. SCOTT RADIO LABORATORIES, INC.

Laboratories and Salon — 4450 RAVENSWOOD AVE., CHICAGO

Demonstration Salons — 630 FIFTH AVE., NEW YORK CITY and 115 N. ROBERTSON BLVD., LOS ANGELES