

# Radio Retailing

*The Business Magazine of the Radio Industry*



## Micadons

### *Found in famous radio sets*

In radio sets that have earned fame and reputation for quality, you will find Micadons—the foremost fixed condensers of radio.

### *Over 25 Million in Use*

More than 25 million Micadons are today giving satisfactory service—they are found in 90% of all the radio sets in use.

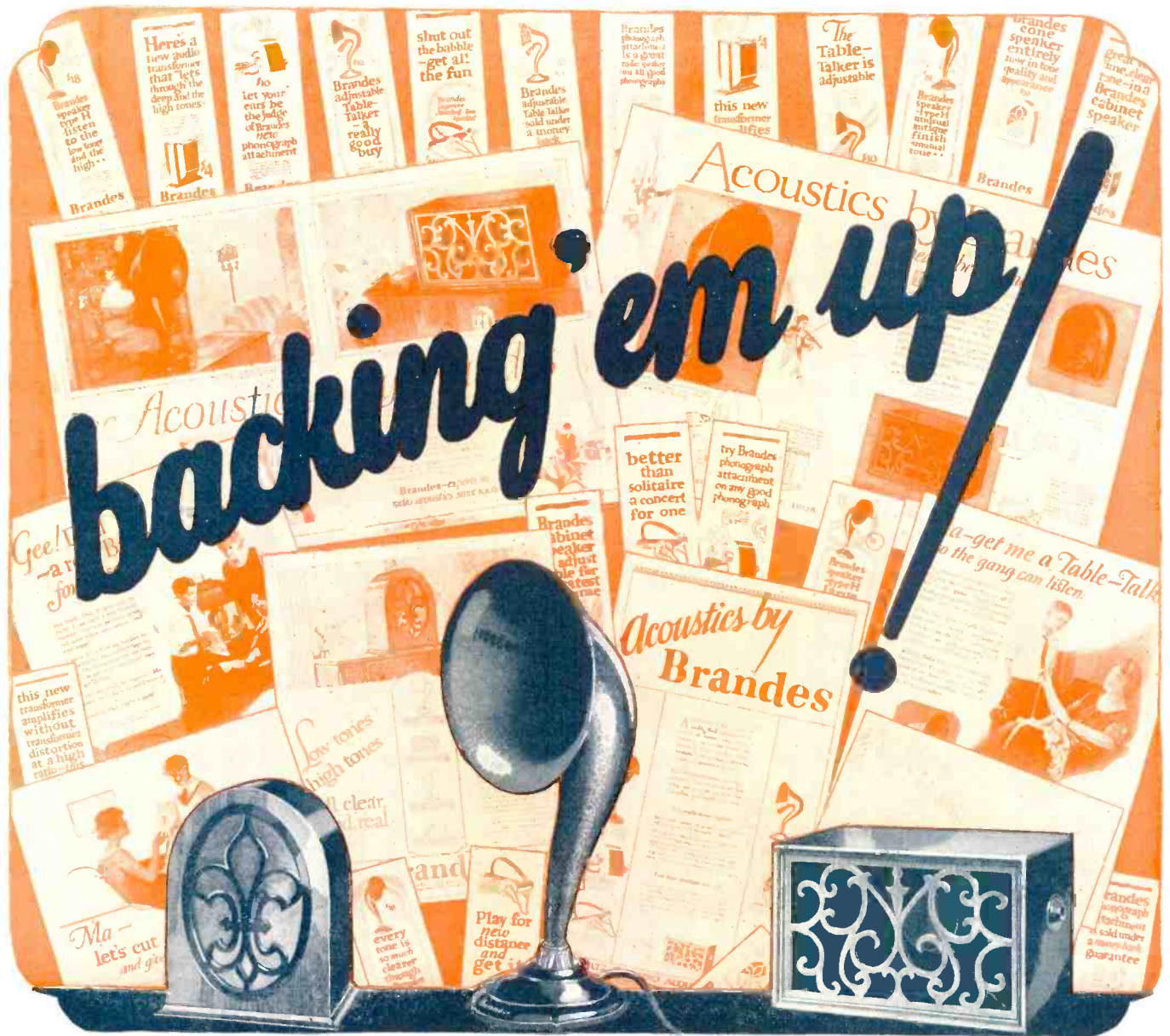
### *The reason is*

Dubilier *knows how* to make efficient fixed condensers and their methods are fully protected by basic patents. Micadons are the result of twenty years intensive, scientific research.

# Dubilier

CONDENSER AND RADIO CORPORATION





We've been asking you to order just one of the new Brandes speakers—any one. That's because we know you will surely stock up if you hear 'em.

Now we want you to know that you'll sell them if you stock 'em. Millions of Brandes ads (double spreads and single pages in color, in the Saturday Evening Post

and other magazines) tell the Brandes story and arouse a buying mood.

And a \$100,000 newspaper campaign will bring in local business that your endorsement can clinch.

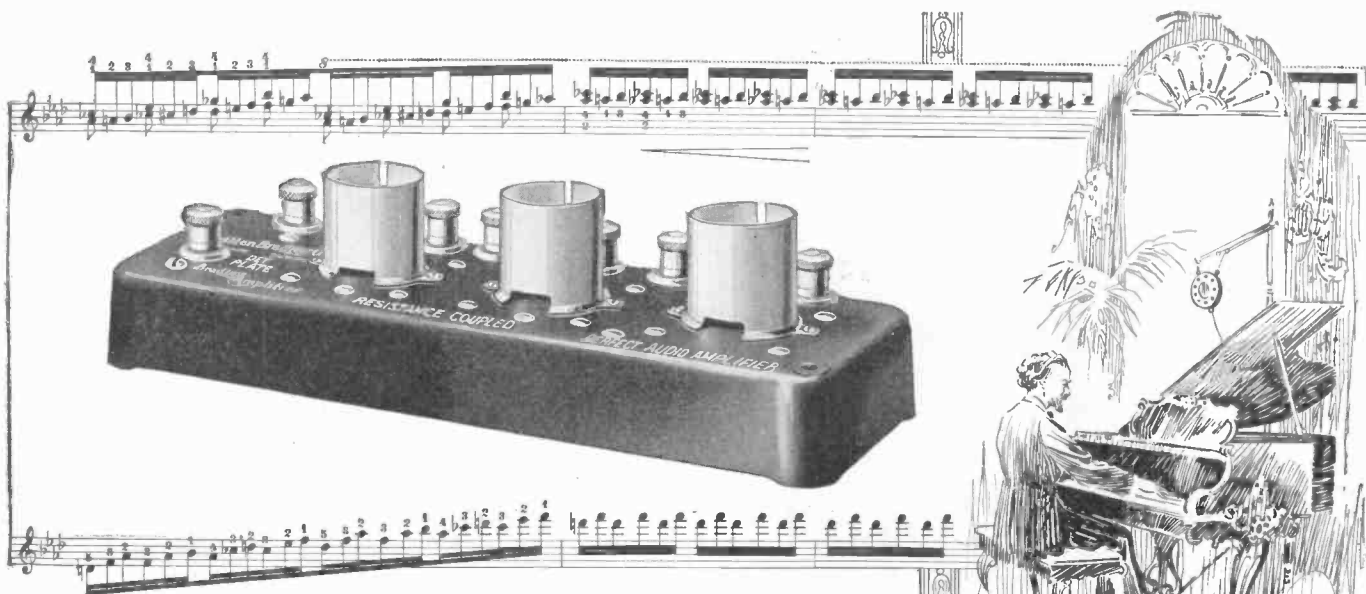
Just remember—you bought the Brandes speakers because you heard 'em. Your customers will, too.

# Brandes

EXPERTS IN RADIO ACOUSTICS SINCE 1908

© Copyrighted by Brandes Products Corp. 1925

Radio Retailing, December, 1925, Vol. 2, No. 6. Published Monthly, McGraw-Hill Co., Inc., Tenth Avenue at Thirty-sixth Street, New York, N. Y. \$2 per year, 25 cents per copy. Entered as second-class matter, April 10, 1925, at the Post Office at New York, N. Y., under the Act of March 3, 1879.



## An Important Accessory that sells fast at a good profit

**T**HE Bradley-Amplifier is not a "radio part". It is an essential, fast-selling radio accessory that appeals equally to the owner of a factory-built set and to the man who has built his own receiver. This is a "resistance-coupled" year! There is a marked tendency to use resistance-coupling in place of transformer coupling for audio-amplification.

Capitalize on the trend of the times and make the maximum profit by boosting the Bradley-Amplifier, the most compact resistance-coupled amplifier in the radio field. It is widely advertised and backed by an established manufacturer of high-grade radio devices.

*Investigate, today.*

*Recommend the*

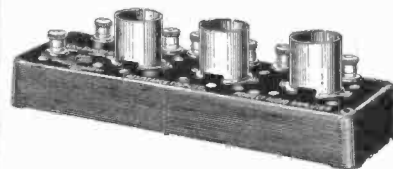
### Bradley-Amplifier Resistance-Coupled PERFECT AUDIO AMPLIFIER

*Write for Literature*

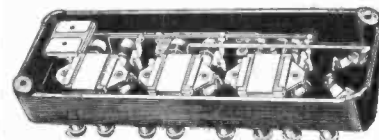
**Allen-Bradley Co.**  
Electric Controlling Apparatus



MILWAUKEE,  
WISCONSIN



*Can be installed within radio cabinet. UX as well as old tubes can be used.*



*All resistors, condensers, and wiring, are concealed within Bakelite base.*



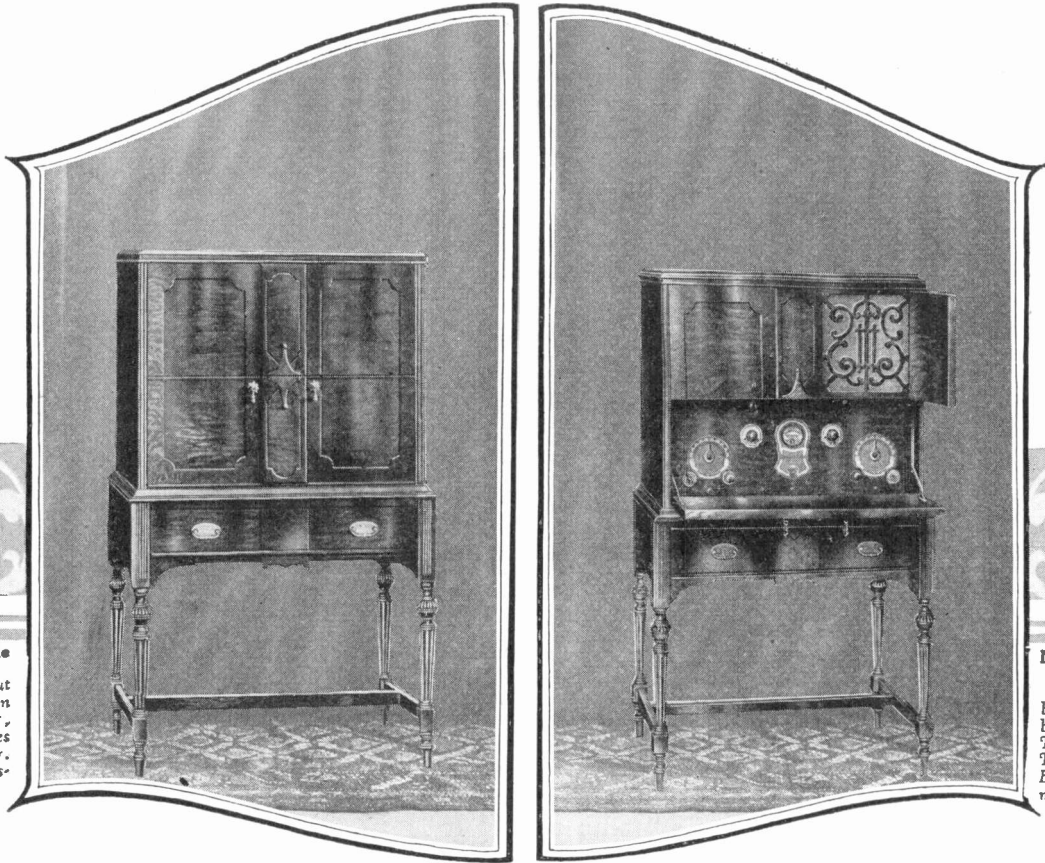
*Bradleyunit resistor is made of solid molded material which does not change with age. All units are soldered.*

ALLEN-BRADLEY CO.  
489 Clinton St., Milwaukee, Wisconsin  
Please send us dealer information on the Bradley-Amplifier.

Dealer .....

Address .....

**Mail  
the Coupon**



**No. 602 Art Console (Closed)**  
 American Walnut Cabinet, Built in Loud Speaker, Spaces for batteries and battery charger. \$340 without accessories.

**No. 602 Art Console (Open)**  
 Showing control board with encased bronze selectors; 6 Tubes; Dual control; Totally shielded; Equipped with volt meter.

## DOUBLY SALEABLE for Beauty and Performance

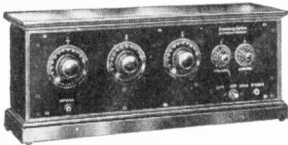
You will attract your finest prospects for radio sales—the leaders of radio opinion in your sales area—with the Stromberg-Carlson No. 602 Art Console Receiver.

Its exquisite design and beautiful finish make this Receiver as safe and permanent a furniture purchase as that of the finest antique cabinet.

Its advanced radio design, ease of control, protected price and unmatched radio results

make it the most permanent investment from the viewpoint of radio.

*It's rejectivity*—the radio quality vital in nearly all sales territory where the finest radio receiver can be afforded—is practically a Stromberg-Carlson discovery and wholly a Stromberg-Carlson development. Your prospects are going to ask a great deal about *rejectivity* this year and about the receiver which possesses it.



No. 1 Type Table Model, 5-tube; has antenna coupling switch; also key for switching from first audio to second audio frequency amplifier. Solid Mahogany. \$180 without accessories.

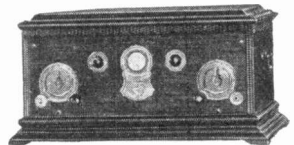
**STROMBERG-CARLSON TELEPHONE MFG. CO.**  
 1060 University Avenue, Rochester, N. Y.

*Builders of apparatus for voice transmission and voice reception—standard throughout the world for more than thirty years.*

Prices quoted are for the



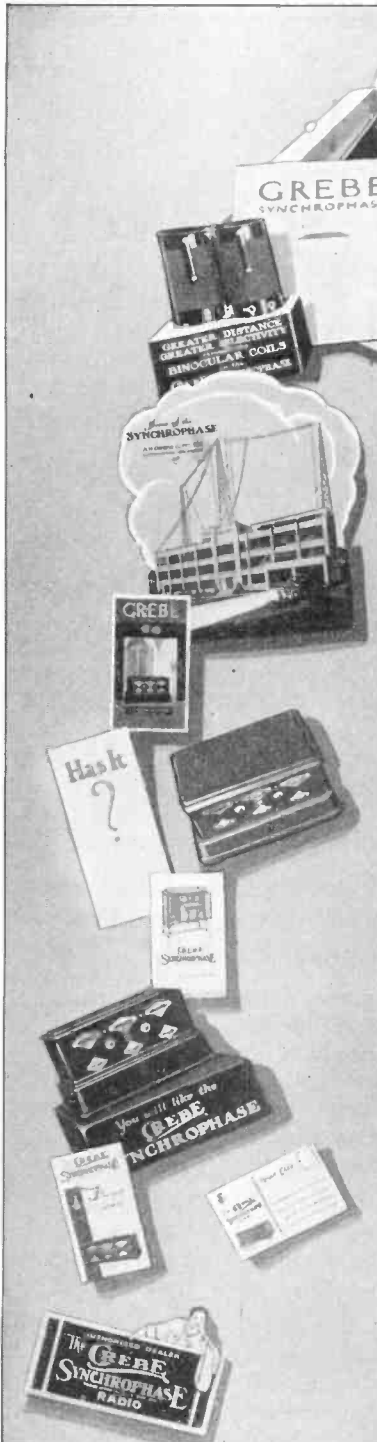
United States east of the Rockies



No. 601 Table Model, 6-tube; totally shielded; dual control; volt meter; takes new tube bases; operates either horn or cone type loud speaker. Solid Mahogany. \$210 without accessories.







## The Sales Possibilities in the Grebe "Dealer Helps Package"

**T**O make a superior radio receiver is not enough. It is necessary that its virtues be well told to the public.

In newspapers and magazines this company is emphasizing the advantages of the Synchrophase. In the "Dealer Helps Package" direct tie-ups with this are offered you. Only by the use of these booklets, folders, display cards, etc., can you reap the full benefit of Grebe publicity.

The Grebe cooperative newspaper plan is a further means of keeping your stock moving. As a large distributor writes, "We are sure the dealers will be anxious to use some of this copy, and we will surely see that they are informed of your advertising allowance proposition." You ought to write for full details of this and

*Send at once for our "Dealer Helps Package"*

A. H. Grebe & Co., Inc., 109 West 57th St., New York

Factory: Richmond Hill, N. Y.

Western Branch: 443 So. San Pedro Street, Los Angeles, Cal.

The **GREBE**  
**SYNCHROPHASE**  
TRADE MARK REG. U.S. PAT. OFF.

This company owns and operates stations WAHG and WBOQ; also low-wave rebroadcasting stations mobile WGMU, and marine WRMU.

The Synchrophase is also supplied with base for batteries and in a de luxe Console Model.

"The Gods cannot help one who loses opportunities."  
—Mencius

The wise man will seize the opportunity for good profits by selling the Synchrophase.

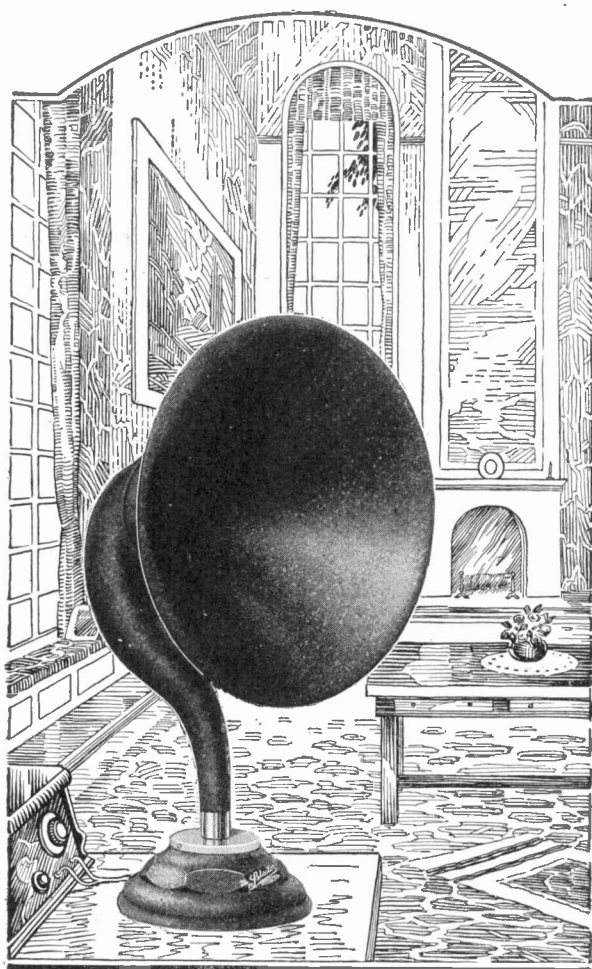
*Doctor M...*



TRADE MARK  
REG. U.S. PAT. OFF.

All Grebe apparatus is covered by patents granted and pending.

# Out of the West— Comes a wonderful new speaker *The Selector* The Super-Power Tube Speaker



Height 22½ in. with 14-in. bell.

Adjusted, tested, checked. Fool-proof and ready to cut in.

A demonstrated comparison of the Selector's recreative powers is more convincing than any description possibly could be. Back of the Dealer is the Manufacturer—the Selector Company's guarantee deals directly with the purchaser.

**WRITE OR WIRE TODAY**

For Dealer's Franchise and  
STATE NAME OF YOUR JOBBER

*Representative Jobbers Throughout the Country*

**THE SELECTOR CO.**

2005 Sixth Ave.

Seattle, Wash.

This speaker fulfills to the last degree all the requirements of the perfect Re-Producer, which are:

- 1—*Tone Quality*, of par excellence.
- 2—*Volume*, with power tube amplification, without chatter.
- 3—*Sensitivity*, on weakest current impulse.
- 4—*Beauty of Finish* and dignity of appearance.

These are the qualities combined in *one* instrument and achieved through pride of workmanship and engineering skill.

The Selector is a loud speaker with a perfect tonal reproduction regardless of the desired volume. It is so sensitive that the weakest signals that can be amplified will be faithfully reproduced, and yet it is capable of reproducing distinctly and clearly the tremendous volume of the new U X type of power tubes with all the richness and color of the original.

Attractive in appearance, it is scientifically and practically constructed to reproduce both vocal and instrumental reception realistically, dimming and submerging annoying noises due to sharp static cracks and distortion.

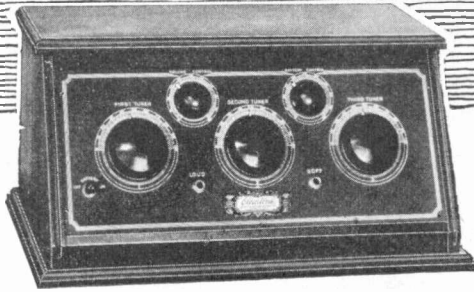
Every detail from the finest instrument construction, expert adjusting and testing to the beautiful Black Crystalline finish of the non-resonant, all aluminum goose-neck type horn incites admiration and pride of ownership.



The same unit for phonograph attachment—beautifully finished in nickel case—with 12 ft. cord.



# Announcing



## Clearartone Series 100

*as companion sets to our  
7 tube No. 90 series Loop Receivers*

We are now ready with our series "100"—five tube sets consisting of two stages of controlled tuned radio frequency amplification, detector and two stages of transformer coupled audio frequency amplification.

This series "100" has been brought out in direct response to repeated requests of the trade.

We have in developing this new series followed the highly successful Clearartone Sales principle of selling a complete matched unit—equipped with Radiotron tubes. This series "100" will operate with equal efficiency using dry cell or storage battery equipment.

Our well known series "90" Loop receivers and this new series "100" make an ideal selling combination for any radio dealer whether urban or rural.

There is no necessity of our emphasizing the fact that the parts used thruout are of most efficient design because the Clearartone receivers now in use prove that. Here then is the answer to Clearartone Dealer requests and the series "90" and "100" answer the "what to sell" question for all dealers.

*Write or wire for exclusive dealer proposition*

The CLEARTONE RADIO COMPANY  
2429 Gilbert Avenue, CINCINNATI, O.

# CLEARTONE

*Complete*  
RADIO SETS

# Kolster Begins Large



**MODEL 6-C**  
 Kolster Six in mahogany, semi-console, with space for A and B batteries—especially designed adjustable reproducer built in.



# Newspaper Campaign

To localize the national magazine advertising now reaching millions of people everywhere, the Kolster newspaper campaign in leading cities has begun.

Dominating space in magazines. Dominating space in newspapers.

This is the Kolster policy of cooperating with Kolster dealers—everything is being done to sell the public and to make easy sales for Kolster dealers.

In both the magazine and newspaper advertising the public is urged to visit a Kolster dealer.

F. T. C. executives appreciate the importance of the dealer's success—hence constant plans to help him to the limit.

This newspaper campaign is but one of many supports offered Kolster dealers.

The Kolster proposition is built around profit for the dealer.

Learn about it. Learn what it offers you.

Write today.

FEDERAL TELEGRAPH COMPANY  
(of California)

Woolworth Building, New York City



This sales feature—simplified control—is winning nation-wide interest. Kolsters give the dealer countless selling arguments.

# Think of the profit



Patented May 15, 1923

We have B-Limiter literature for your customers, signs for your windows and our advertising in radio publications and newspapers is under way. Let us know if there is any other way we can help you sell B-Limiters.

Think of how much you make on a single B-Limiter

At new discounts, you certainly have a nice profit

**Price \$28.50** *List*

—And B-Limiters stay sold. Remember, B-Limiters have been endorsed by 18 radio publications and newspapers, after the most severe tests. Thousands are in successful use on all types of 5 tube sets, also on 6 tube dry cell sets, especially Radiola superheterodynes.

## The New Timmons Cone Talker

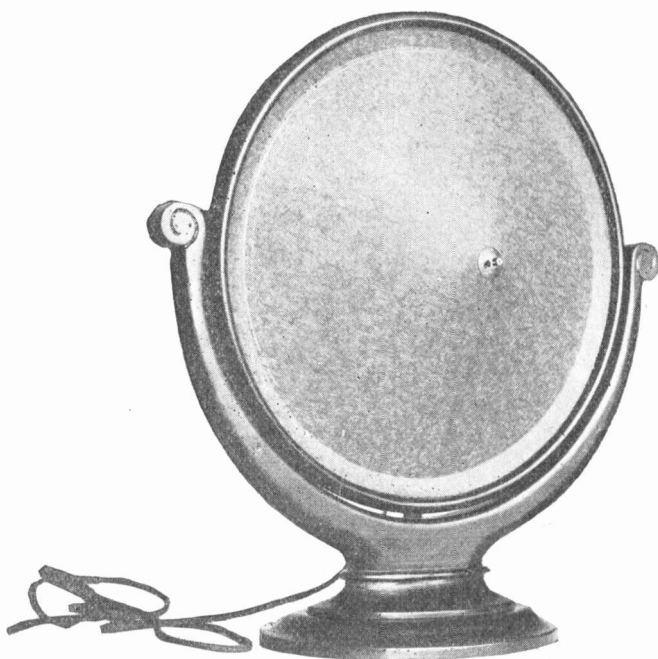
is a product  
of the Timmons Laboratories

Timmons engineers, long recognized as authorities in acoustics, have developed a wonderful Cone Talker. Besides having a beautiful clear tone, the Timmons Cone Talker is a finely designed piece of radio equipment. Side arms and base are wood, with a rich hand-rubbed mahogany finish.

At \$25.00, the New Timmons Cone Talker offers a wonderful opportunity for a large volume of sales. We'll be glad to send literature for your customers, describing the new Timmons Cone Talker.



Timmons Radio Products Corporation  
Germantown, Philadelphia, Pa.



# TIMMONS *Radio Products*





# Farrand Speaker

## For XMAS--and AFTER

THE great Christmas rush is on! And Old Santa is carrying Farrand Speakers into happy homes everywhere. No product in radio history has ever enjoyed so great a demand.

Yet, to the dealer who carries Farrand Speakers, Christmas will prove but the forerunner of even greater sales and profits. For here is quality—outstanding quality that knows neither season nor calendar. Think of the thousands upon thousands of speakers that will be replaced by Farrands during the next few months alone! Yes, indeed—1926, even more than 1925, is a Farrand Year!

SENIOR MODEL  
\$32<sup>50</sup>

FARRAND MANUFACTURING CO., Inc.

Thompson Ave. at Court Street

Long Island City, N. Y.

JUNIOR MODEL  
\$16<sup>50</sup>

# Let "The Radio Trade

**T**HE November issue of "The Radio Trade Directory" is just off the press. In the next few days every radio jobber and retailer handling radio parts and accessories will receive his copy.

Before this new issue could be published, it was necessary for us to make 2,500 changes in our data. Manufacturers cease making certain products, new manufacturers enter the field, trade names change, companies move—all these corrections must be made in the buying data placed at your elbow in each copy of "The Radio Trade Directory."

In the new Directory, you will find, alphabetically arranged, complete classified lists of all the products sold or used in the radio industry. Under each product you will find the names and addresses of all known companies that manufacture it. You will find, too, the trade names of manufacturers. Likewise you will find advertisements of various manufacturers giving condensed catalogs of their products—data on types, sizes, finishes, prices, etc. In many instances too you will find the addresses of local distributors.

Whenever you are in the market for anything from Adapters to Zincite it will pay you to look up the sources of supply in the latest issue of "The Radio Trade Directory." You will find information that will help you to buy in a flash.

If by chance you do not receive a copy of the new November issue of "The Radio Trade Directory" and if you sell radio sets and parts or radio parts, write us on your business letterhead and we will see that a copy is sent you at once.



## *The Radio Trade*

"The Catalog Carrier of the  
Published by the



# Directory" Help You Buy



“Whenever you are in the market for anything in radio from Adapters to Zincite it will pay you to look up the sources of supply in ‘The Radio Trade Directory.’ Let ‘The Directory’ help you buy.”

## *Directory*

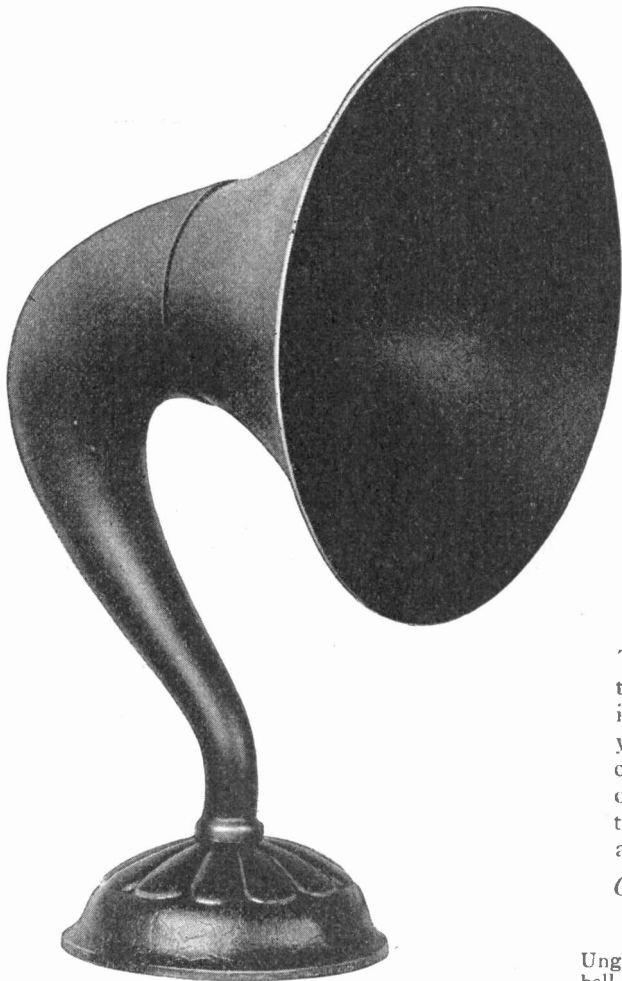
Radio Industry”

McGraw-Hill Company, Inc., Tenth Avenue at 36th St., New York

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# Will you test our Speaker on this Fair and Square Basis?

## You Can't Lose!



**MONEY-BACK GUARANTEE**

Send us your check for \$7.85 (to cover actual manufacturing cost) and we will send you a sample Unger Speaker, pre-paid. Try it out—you are the judge—and if you want to return it your money will be refunded. Only one Speaker to each Dealer at this special price.

This is an unusual offer. It is prompted by our sincere conviction that we have an unusual Speaker. We believe you will see in it the same sterling qualities and value which we do. When you get your sample—try it out yourself on any set—you will concede it to be \$25.00 in retail value anywhere—even in view of the excellent values offered by other loudspeaker manufacturers. We leave the whole proposition in your hands—all we ask is a fair test in competition with what you consider the best.

*Could anything be fairer?*

Unger Speaker is a master size speaker—21-in. high with 12-in. bell. The bell is of LAMINITE, a laminated wood, having wonderful acoustic properties for natural reproduction of tone. The throat is of cast aluminum, which is non-vibrant and magnifies the tone, producing the volume. The unit is an instrument of precision, reproducing the high as well as the low notes in their natural tone.

### RUSH ORDERS

If your Xmas stock of speakers runs low, wire us and we will guarantee to ship express, day order is received.

### UNGER RADIO MFG. CO.

272 Fourth Avenue, MILWAUKEE, WIS.

Unger Radio Mfg. Co.,  
272 Fourth Ave., Milwaukee, Wis.

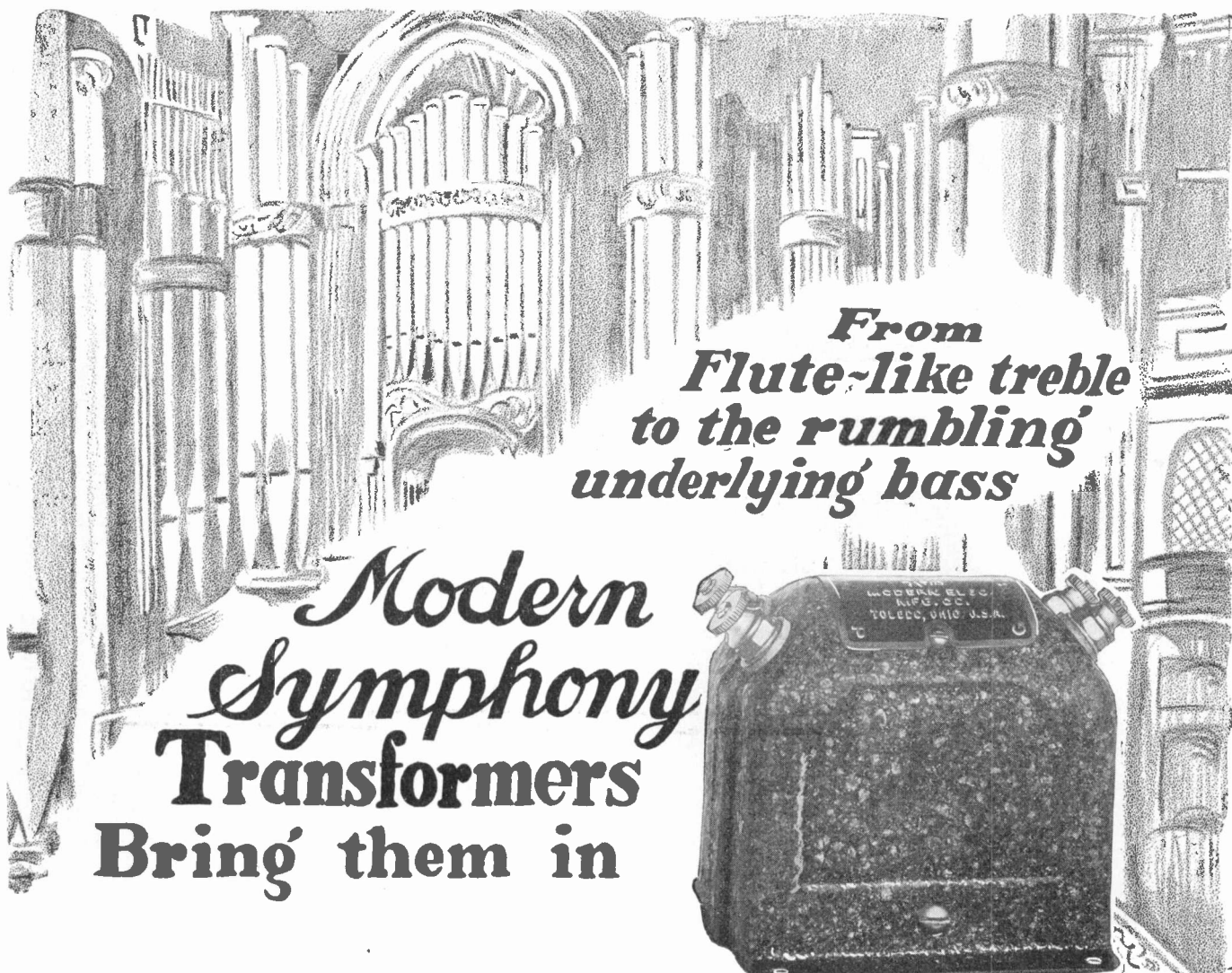
Gentlemen:—Enclosed find check for \$7.85 for which send a sample Unger Speaker. I may return it within five days and my money will be refunded.

Name .....

Address .....

City and State .....





*From  
Flute-like treble  
to the rumbling  
underlying bass*

*Modern  
Symphony  
Transformers  
Bring them in*

The unsurpassed tone range and the crystal purity of the notes passed will be appreciated by your best customers.

The great amplification, increased distance range, and unequalled purity of tone in both high and low ranges will be gratifying to your customers who are building for the best reception.

These qualities in "Modern" Transformers are the result of advanced design, careful selection of materials, and painstaking manufacture.

Core and coil are generously proportioned. There is no scrimping of material at any point. The case with its mottled finish is in keeping with the high value inside.

"Modern" Transformers are not built to a price. They are built to a standard of operation and appearance, and then a price is applied that will allow dealers an equitable profit. And that price is low enough to make them highly attractive merchandise to people who want to build good sets.

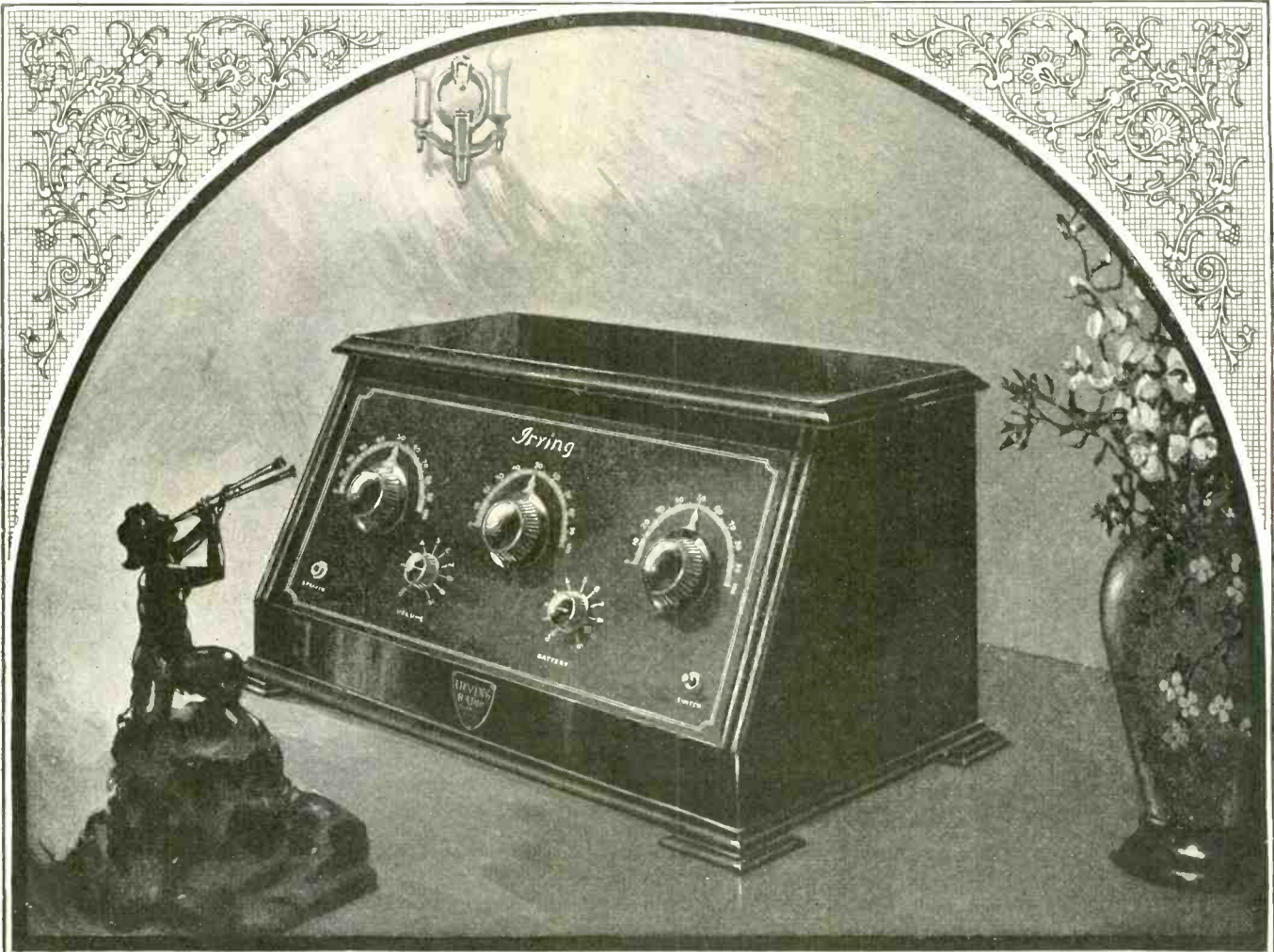
*Write today for complete descriptive material and discounts.*

**DON'T PUT IT OFF!**

**List Price \$6.00**

**The Modern Electric Mfg. Co.**  
1231 Summit Street, Toledo, Ohio





## THE IRVING MEANS MORE PROFIT FOR YOU

Distributors, jobbers, dealers — let us talk facts as they affect your radio business and profits.

High price has kept radio out of thousands of homes which should be prospects for you. Low price, heretofore, has been associated with mediocre merchandise and buyers have hesitated about purchasing.

The Irving has opened this profitable field to you and now is the time to step in and get your share of the moderate priced radio business. The Irving is priced to open new channels for distributors, jobbers, and dealers and manufacturers to compete with higher priced sets.

The Irving is of the popular and efficient Tuned Radio Frequency (non-radiating) type now used by 95 per cent of the radio receiving set manufacturers.

For tone, range, volume, and selectivity the Irving is unequalled in its field and will hold its own against higher priced sets.

In genuine solid mahogany or walnut cabinets with bronze panels lacquered to match the Irving is as beautiful as it is efficient. The three models, the "Irvington" in mahogany or walnut finished cabinet, at \$55.00; the "Favorite," at \$65.00; the "Aristocrat," with a self-contained loud speaker, at \$95.00, were designed to meet individual taste in style and price.

We are establishing a nation-wide distributing and selling organization and we want you to write us about our exclusive sales franchise. Our jobber and dealer policies are based on common sense, square dealing, and sound business principles which enable you to build up a permanent and profitable radio business. We will be glad to send you complete information about the Irving.

### IRVING RADIO CORPORATION

Executive Offices and Factory: Skidmore and Culbertson Sts., Columbus, Ohio

# IRVING

# Profit, Protection, Prestige and Permanence Guaranteed Every STEWART-WARNER DEALER

## Profit

Stewart-Warner Radios are sold direct to you from our own distributing stations. We have no jobbers. You get all the profit. Individuals can not buy at dealers' prices, they must come to you. Stewart-Warner Radios are sold by authorized representatives only.

## Protection

There is only one Stewart-Warner authorized dealer in each vicinity. Your business is protected, because there are no other dealers handling Stewart-Warner Radios in your immediate locality. No possibility of a store down the street or around the corner cutting in on a share of your profits

## Prestige

We have invested millions of dollars in the name "Stewart-Warner," and that name on the radio that you sell means that your customer receives the biggest thing he desires—complete radio satisfaction.

## Permanence

Stewart-Warner have been building quality products for over twenty years and are today the biggest institution of their kind. We will be building radios tomorrow, next year and for years to come.

A Stewart-Warner franchise means money in your pocket. Write today for complete information.

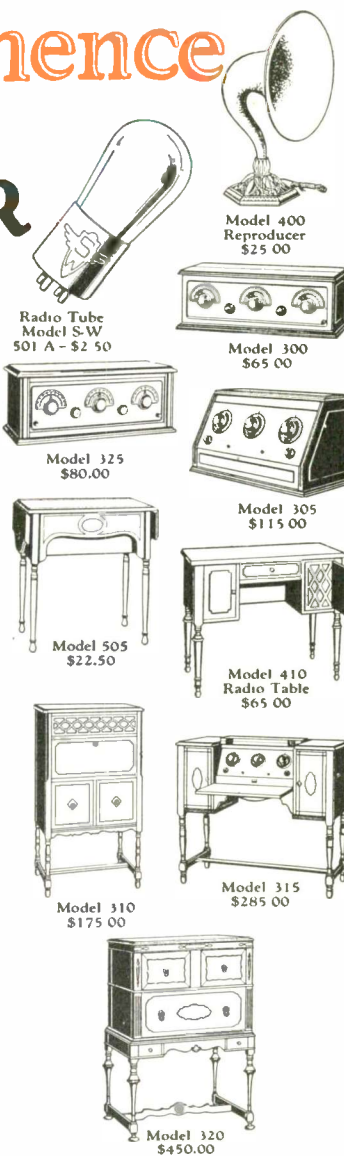
STEWART-WARNER SPEEDOMETER CORPORATION  
1820 DIVERSEY PARKWAY - CHICAGO

# Stewart-Warner

## Matched-Unit Radio

INSTRUMENT + TUBES + REPRODUCER + ACCESSORIES

TWELVE MILLION PEOPLE ARE TODAY USING STEWART-WARNER PRODUCTS



Tune in Stewart-Warner Programs

Station WBBM, 226 meters  
 Mon. 12-3 a.m., 6-7 p.m. Thur. 8-10 p.m.  
 Tue. 9-12 p.m. Fri. 8-10 p.m.  
 Wed. 8-10, 12-2 a.m. Sat. 8-9:30, 11-2 a.m.  
 Sunday 4-6, 8-10 p.m.  
 Chicago Time



Enjoy this on your Stewart-Warner Matched-Unit Radio



# ATWATER KENT RADIO



Work fast  
Send that  
wire today!

WHEN those belated Christmas shoppers rush into your store to buy Atwater Kent Radio, what are you going to tell them?

Are you going to shake your head and say, "Sorry—we're sold out"? Or will you, instead, pick up your sales-book and answer, "Certainly, we made provision for last minute customers"?

Are you prepared to collect your full share of Christmas prosperity?

You are well aware that December is radio's biggest month. Reception is best. Programs are best. Manufacturers' lines are established. Uncertainty ends. The people stop putting off purchases. They swing into the buying mood.

And the bulk of December buying is Christmas buying. As surely as thoughts turn to Christmas, they turn

nowadays to Radio—the perfect gift. And especially they turn to Atwater Kent Radio—the most desired of all.

Are you ready for December? For Christmas? You will be if you act now.

We have planned our production schedule with December fully in mind. Every month we have met a demand much larger than that of the corresponding month last year, and at the same time we have realized that this Christmas demand would be even more extraordinary, and have planned accordingly.

But even the largest radio factory in the world, fully manned, running day and night, has its limitations. Orders received *now* can be filled, but if you delay we can guarantee nothing.

Earnestly, we urge you *not* to delay.

Because many of your customers will postpone their Christmas shop-

ping until the eleventh hour there is all the more reason why you should be forehanded with yours. You won't want to disappoint a single one of them.

So get out your pencil and paper. Make your calculations. Leave a margin for safety.

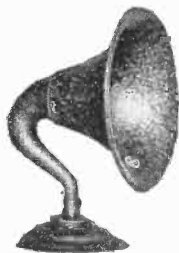
Then wire or telephone your Atwater Kent distributor—TODAY.

Hear the Atwater Kent Radio Artists every Sunday evening at 9:15 o'clock (Eastern Standard Time) through stations:

WEAF . . . . . New York	WCAE . . . . . Pittsburgh
WJAR . . . . . Providence	WCCO . . . . . Minneapolis
WEI . . . . . Boston	St. Paul
WFI } . . . . . Philadelphia	WGR . . . . . Buffalo
WOO } alternating	WOC . . . . . Davenport
WCAP . . . . . Washington	WTAG . . . . . Worcester
WSAI . . . . . Cincinnati	KSD . . . . . St. Louis
WWJ . . . . . Detroit	

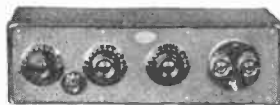
Write for illustrated booklet of Atwater Kent Radio

ATWATER KENT MFG. COMPANY  
A. Atwater Kent, President  
4733 WISSAHICKON AVE., PHILADELPHIA, PA.



Model L, with 9' flexible cord, \$17

Prices slightly higher from the Rockies west, and in Canada



Model 20 Compact, including battery cable, but without tubes, \$80



Model 10, including battery cable, but without tubes, \$80



Model H, with 9' flexible cord, \$22



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# Radio Retailing

The Business Magazine of the Radio Industry

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RAY SUTLIFFE, Chicago

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## *Make Each Set in a User's Home Sell More Sets for You During January-March*



Date \_\_\_\_\_ 192

Gentlemen:

Please send your representative to see me regarding  
Radio Set on Date \_\_\_\_\_ Hour \_\_\_\_\_ AM/PM

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

Phone \_\_\_\_\_

*A dozen of these postcards, stamped and with the dealer's address, are mounted handily in a spring-clip on the underside of the cover of the set. When a visitor, after hearing the set, expresses interest, the set owner is asked to hand him one of the cards.*

**I**N ALL sets sold during the present Christmas season, certain New York dealers are mounting spring clips carrying return postcards, as shown at left. When the set is installed the dealer makes this request of the owner: "If you have a caller who likes your set after listening to it, won't you do him and us a favor by simply lifting up the lid, thus, and handing him one of these addressed stamped cards? We'll do the rest."

This method of building future sales from present users is being urged upon radio dealers by George L. Patterson, president Stanley & Patterson, who also recommends that dealers put similar packs of cards in *all* sets they service.

# Radio Retailing

With Which Is Incorporated *Electrical Retailing*

VOLUME 2

December, 1925

NUMBER 6



## *It's a Merry Christmas, Mr. Radio Man! And Here's Why*



AS WE go to press, inquiries made among radio distributors from all sections, indicate the soundness of the public's continued demand for radio products. People are buying sets—and better sets. In fact the whole radio situation now shows signs of stabilizing itself into something like the piano business, whose sales keep up, month after month, quietly and persistently.

In many places the radio "hurrah" of last season and the years preceding, is pretty well over. But the steady demand for radio as matter-of-fact merchandise, continues and grows. Quality sets and established lines are being sought by the buying public. And among dealers, the better merchant, with inviting sales methods and capable service, is getting the call for business.

Most of the manufacturers have heeded the lesson of last season and have watched their production schedules, guarding against overstocking and dumping. In that respect the situation can be confidently ex-

pected to be much improved this year. Of course there will be "sales" here and there with strong appeals on price. But there is evidence that in the case of sales held so far, the public is not taking as much to seductive price offers as heretofore. Instead, people are coming to insist on sets of established reputation. Or sets backed and recommended by dealers in whom they have confidence.

All these things, as we see them, are working for the good of radio and the radio trade. The underlying situation in radio is certainly sound. And radio's position grows stronger, season by season, as the process of stabilization goes steadily on.

Business up through Christmas is bound to be good. And business after the first of the year will continue to be good for the dealer who promptly adapts his selling methods to the situation as he then finds it,—and who, when any slackening comes, goes out after business. Selling will sell. The law of sales will still be working in 1926. Business will come to the man who goes after it.



# Music Houses Sell "Beauty and Tone" of Radio

**"Personality plus Publicity" Can Be Said to Explain Why These Three Leading Chicago Music-Radio Dealers Have Been Successful in Merchandising Radio Receivers**

*("Radio Retailing" asked two of Chicago's leading music-radio jobbers for a list of music dealers who, in their opinion, were doing the most notable job in merchandising radio. Six names were obtained. The owners of these six music stores were visited. From these interviews three of the most interesting and helpful were selected for presentation to our readers. These dealers probably represent as fair an average of good business practice in the merchandising of radio through the music store outlet as has to date been developed.)*

**T**HE Grosvenor Music House, 1022 Wilson Avenue, is located in the heart of Chicago's "Uptown District." It is without doubt the largest house of its kind north of the "Loop."

Grosvenor is doing a volume business in high class radio sets, consoles and so forth, because he has created in his store an atmosphere of quality and refinement and because William F. Grosvenor himself is a man with a pronounced personality. The human equation is a very important factor in the music store business. It requires real sales ability to sell from three to five radio installations a day averaging not less than \$450 each. Grosvenor is a master salesman and he sees to it that his assistants (he doesn't call them clerks) are men who have an individuality altogether their own and who are able to impress this feeling of decisiveness upon their clients.

Mr. Grosvenor is a musician of note. His activities in this line naturally give him many contacts with the kind of people who are excellent prospects for the better class of radio receivers.

An excellent store location plus personal magnetism and integrity are prime requisites in the music

house business. Grosvenor has both. **Grosvenor says:**

"As long as we can persuade prospects to come to us it will not be, in my opinion, an economic thing to organize a crew of outside salesmen. They are coming to us because we have a store that invites and a service that satisfies."

C. B. Clemons is probably the liveliest music dealer on Chicago's great West Side. He is located at 4238 West Madison Street. This neighborhood constitutes a city in itself. It has its local weekly newspaper, "The Garfieldian," and a progressive business men's organization. Mr. Clemons is past president of this latter organization. He is deep-rooted in the entire social and civic life of this populous community.

He has been selling pianos for twenty years and radio for the last three.

Clemons is a natural born publicity man. He has an aptitude for writing, naturally therefore, his efforts in promoting the sale of radio are directed along the line of modern and somewhat unusual advertising "stunts." The "Garfieldian" comes out once a week. Every issue bears a seven-inch single column "talk" from the House of Clemons. In fact, it is headed "Clemons Talk." They are informal, they are breezy, the people look for them and enjoy hearing "what Clemons has to say this week."

Here is one of these reminder advertisements:

"You certainly have a lively home—musicians fiddling, girls singing, comedians joking, wise men lecturing, an actor reciting poetry and a nice old lady telling you how to stuff tomatoes with bread-crumbs!

"You don't quite get us?


"Then we know you have no radio."

Here's another:

"They call this a music store. It isn't. No one can sell music for it is intangible. We simply sell things which enable people to interpret music, or listen to it.

"We are largely responsible for the quality of music which exists in the homes of our patrons. If we sell an instrument which enables one to enjoy better music, we not only give that person pleasure, but we help music—and aside from making a living, that's what we're here for. We're here for that just as an architect is here to make the town beautiful.

"Certainly this is an advertisement, but we want to tell you something: If we didn't know that wherever one of our radio receivers goes, music is placed on a higher



**HOME**

The Expression: "All the Comforts of Home" originated when Home was Leader in the race for popularity. Home, with a parlor-organ, a checker-board, some books, kerosene lamps and a wood-stove.

To get away from Home one had to hitch up the old horse—and it took a long time to drive ten miles.

The Bicycle came. Here was competition, but Home put in steam-heat, a piano and electric lights. It subscribed for magazines and installed a telephone which made it easier to call people up than to pedal over to their houses; so Home held its own.

Then, in the Automobile, came the Most Awful Wallop of all! Poor old Home struggled, but in spite of oil-heaters, phonographs, billiard-tables and player pianos, it shipped, and became a place to sleep in and to eat breakfast in.

You see, people wanted "Life." The family circle was small. Here was a circle 50 miles in diameter, for one could drive 100 miles in an evening and be back by midnight. Hang expense! Hang tires, gas, depreciation! Give us "Life!"

It is now Home's play in the Great Game.

And Home wins. The Brunswick-Radiola, exquisite in design and marvellous in performance, reaches out thousands of miles and brings in "Life!"

Back in the garage—but we're not talking of the garage! We're talking of Home.

**C. B. CLEMONS CO.**  
4238-4240 Madison St. CHICAGO

A small, single column "chatty," original advertisement, written direct-from-the-shoulder for local consumption, is the very best kind of dealer advertising, according to Clemons of Chicago. The public has gotten into the habit of looking for and enjoying these intimate little talks.

plane, we wouldn't advertise them nor sell them.

"If you don't believe this, keep away from us."

These advertisements cost Clemons about \$6 a week.

Occasionally, he comes out with a full-page spread. One of these efforts, entitled "Home," was the subject of editorial comment by the newspaper and was also reprinted in large quantities and distributed by the manufacturer whose set it advertised, to 5,000 dealers throughout the United States and English-speaking foreign countries.

Clemons believes in direct-by-mail advertising. He is in fact a specialist in this line. Last year he wrote a series of original, illustrated letters which were so effective and which were so highly thought of by the radio manufacturer whose line they presented, that arrangements were made for copyrighting and selling this series to other music-radio dealers who desired to purchase them. The demand was an active one. Clemons' letters are today being used by dealers throughout the United States.

**Clemons Says:**

"Service shouldn't be given in the spirit of reluctance, it is the most constructive thing in business today.

"Don't ask me technical questions—this is a music house—we sell beauty and tone. The manufacturers have taken care of the machinery.

**These Three Leading Chicago Music Houses—**

**Maintain clean and inviting stores.**

**Take an active part in the musical and civic affairs of their respective communities.**

**Sell at full prices and on the easy payment basis.**

**Believe in getting the prospect to come into the store.**

**Are controlled by men of marked personality.**

**Use the mails or hand distribution for some unique piece of their own literature.**

"Time payment on radio sets doesn't worry the music house. We are used to three-year accounts on \$1,000 grand pianos; a \$200 six months' account is play for us.

"Keep the price up and the public will walk in. Cut the price too much and the public loses interest—they become skeptical."

The Boller Piano Company, Milwaukee Avenue at Fulton, was selected because its trade is exceedingly cosmopolitan in character and so many dealers nowadays have to sell to every type in this polyglot civilization of ours. Jew and Gen-

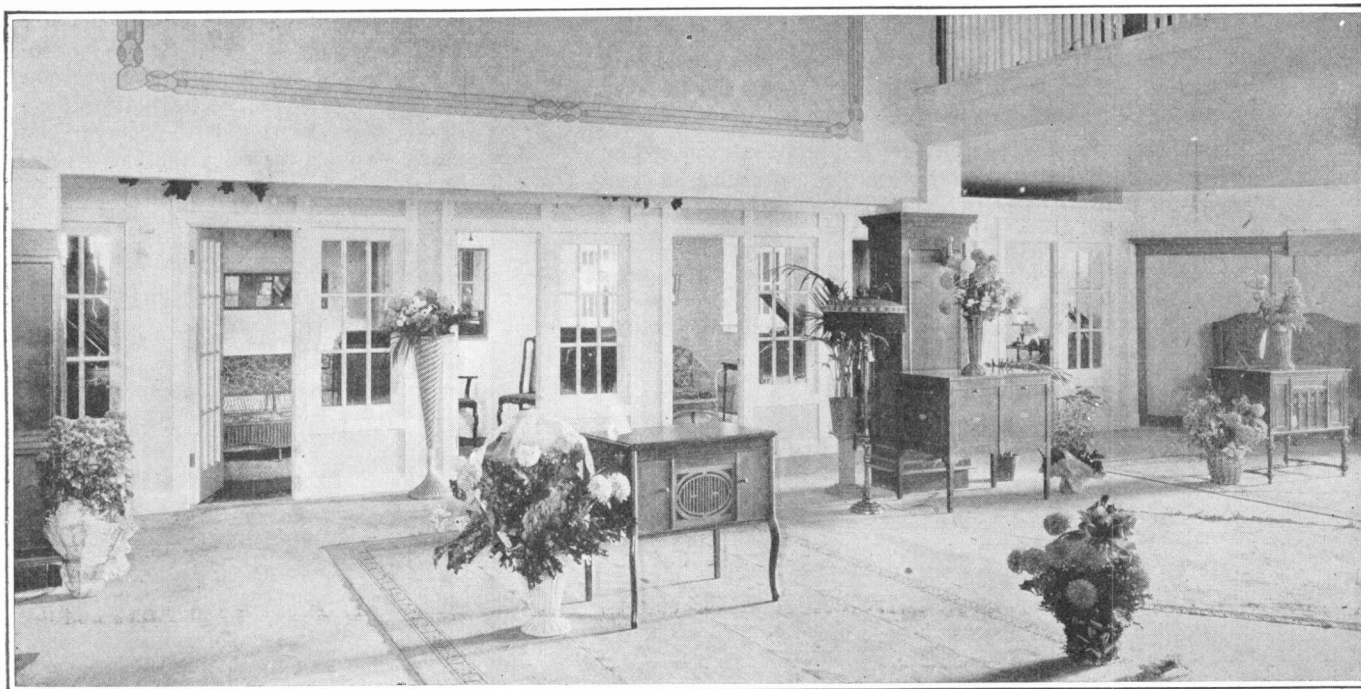
tile, Protestant and Catholic, well-to-do and ne'er-do-well, all live within a few blocks of each other in more or less harmony. All is grist, however, that comes to the Boller mill. Boller has been in the music business in this neighborhood for twenty-five years. He has earned a reputation for reliability of which he is justly proud. His opinion of radio merchandising as it relates to the music house and to the average citizen cannot therefore be taken lightly. Boller hasn't permitted himself to get into a rut either. He is a progressive merchant; this is best evidenced by the fact that he issues a house organ. Three times during the season he prints "The Boller Radio News," a four-page store booster that is circulated by a professional hand distributing concern to selected homes. This 9 x 12 sheet costs \$20 a thousand to print and deliver.

"How do you know that it pays you?" we asked him.

"I know because last year we ran 15,000 and our sales ledger figures gave me the answer," he replied.

This store paper is Boller's main promotional effort. He personally checks up after an issue has been distributed and knows that there is very little wastage.

The paper is profusely illustrated. In addition to carrying a number of straight advertisements, it also runs interesting editorials and news items. He obtains this material from radio



How does Grosvenor sell so many high priced sets? Perhaps this store interior

may be one of the answers. Notice the five demonstration booths in the background

and the effect created by the judicious placing of several baskets of flowers.

## "WHY THEY SUCCEEDED"



### *Sells and Delivers Sets to Rural Customers*

**C** W. BESEL and W. A. Besel, brothers, doing business as the Windsor Hardware and Supply Company at Windsor, Colo., have as their immediate sales field a farming community of 1,300 persons situated on a branch line railroad. They are 50 miles north of Denver, yet they are known as among the foremost retailers of radio in the state. They are midway between two cities of 12,000 each. They have sold sets retailing for \$450 in both places. Some of their methods and policies are:

Handle one standardized line. They entered the radio business when the first sets reached Denver. After trying out many lines, they settled on one offering a diversity of sets behind which the manufacturer stood solidly.

Cater only to best class of trade and do not attempt to meet competition of "gyps."

Selling range limited only by drive to prospect's house in evening, demonstrate set and return home by midnight. Have sold sets to farmers living 25 miles distant.

Keep down investment by stocking but one or two sets of each model sufficient to cover their demand. As more sets are needed for delivery, they are ordered by phone from the distributor.

Have working agreement with piano salesman who covers surrounding farming territory whereby he lists prospects and helps with evening demonstrations on a commission basis.

Watch birthdays of people in community and suggest radio gifts to members of family. Also make special drive prior to Christmas, emphasizing desirability of sets as gifts.

Service sets free of charge for 90 days.

Make specialty of battery advice. Test various types of batteries and give their comparative value for use in radio sets.

Quote sets complete. When customer buys, there are no extras.

Never cut prices under any circumstances.

Sell sets on demonstration rather than on claims. Substantiate all statements.

authorities and writes a great deal of his store news himself.

#### **Boller Says:**

"I like to deal with the wage earner because he does not try to drive a sharp bargain with me. He has no 'friends' who are in a position to obtain 'a special discount direct from the manufacturers' for him. He accepts my prices at their face value.

"If it wasn't for radio our music business would be in a bad way. There has been a slump in piano sales the last few months.

"I do not believe it is good business to try and force the sale of radio by house-to-house solicitation—at least, not in a neighborhood such as ours. The prospects who are brought to light by this method are not the best credit risks. They represent a less desirable class of customers than those who have sold themselves on the desirability of radio. Their desire to buy has been artificially stimulated and therefore they are more likely to default in their monthly payments. And I do not believe a commission man will be able to find enough real prospects to keep him going during the off months. The door-to-door business is a forced business, therefore we must give more liberal terms. How this works out has been well illustrated by the tendency in washing machine merchandising where the down payments are now ridiculously and dangerously low.

"The credit situation is getting worse. This is because the wage-earners and the average salary men are now so loaded up with time payment obligations that they have very little reserve capacity to take on another purchase."

### **Robert Wolfers Joins Directory Staff**

Robert Wolfers has joined the staff of the McGraw-Hill Company and will be in charge of Directories, Lists and a Direct-Mail Department which is being developed to serve McGraw-Hill advertisers.

The E. M. F. Electrical Year Book has recently been purchased. Other McGraw-Hill reference publications are McGraw Central Station Directory, McGraw Electric Railway Directory and The Radio Trade Directory. It is planned to extend the directory and list services into other industries now served by McGraw-Hill publications.

Mr. Wolfers was formerly connected with the Automobile Trade Directory and Chilton Automobile Directory.





## Handling Store Customers During the Christmas Rush

From one-fifth to one-third of the radio dealer's yearly business is done during the Christmas season—that golden month from Thanksgiving to Christmas. Here are some time and money savers that other merchants use.

**SHOP EARLY.** Teach your customers to "shop early"—early in the month and early in the day. This is usually an inconvenient time for your public. Make it worth their while by offering price inducements during the early hours.

**Extra Salespeople** will be needed during the rush periods—11:30 a.m. to 3:30 p.m. and in the early evening, usually. Use "part-time" people for this. One of the best sources is the high school lad who is a radio fan. But teach him to sell, not to discourse and above all *not to argue with other fans*. Another excellent source are young married women who were formerly trained salespeople and who will welcome the opportunity of making some extra "Christmas money."

**Stockwork** should be done in the early morning. Have plenty of merchandise brought forward from reserve and conveniently placed in the most accessible locations. Dusting and cleaning should be done upon opening.

**Test Plenty of Tubes and Batteries** each morning and seal cartons with a guarantee that this has been done. A tremendous amount of time will be saved this way. Have a sign that explains it is "For Your Convenience."

**Eleven Months** in the year your problem is to get customers in—in December your problem is to get them in and out. Place convenience merchandise nearest the exit and sets in a more secluded spot, thus reversing your usual procedure. "For Your Convenience."

**Pre-wrap** as much merchandise as possible, in the quantities usually purchased. You carry

your antenna wire that way now—do the same with other things. "For Your Convenience."

**Small Inexpensive Parts** should be made accessible to your customers. Encourage them to wait on themselves in this way. Ever watch the crowd in a "5 & 10"? "For Your Convenience."

**Gift Cards** with envelopes and without advertising should be provided. Get good ones. Don't make too hard and fast a rule if customers request them, but offer them on \$10 gifts and over. "For Your Convenience."

**Window Displays** should stimulate the Christmas Spirit even to the slightest detail. Very important. Study the department store windows for suggestions.

**Related Merchandise** should be placed in close proximity—save your customers and clerks steps and time.

**Interior Display** should be maintained insofar as possible, but subordinate it to convenience and speed in handling.

**Strip Your Store for Action.** Clear the usual débris from the aisles and counters. "A place for everything and everything in its place" not in the way, is the rule for December. Aisles should be wider than usual. Customers intent on buying should not be crowded and jostled.

**The Wrapping** of gift merchandise, especially, is highly important. Train someone in advance to do this. Don't be afraid to use some tissue, a gift card and even ribbon in some cases. Judgment will dictate this. Even a block of B battery can be made to resemble a jewel casket.

# Demonstrations Close the Sale

Hilliard of Putnam County, Indiana, Believes Demonstrations Are Necessary in Selling Radio Sets—But He Saves Time and Money by Giving Them in His Own Home—Not at the Prospect's

By RAY V. SUTLIFFE

**T**HIS great fertile field for radio—the farm—how am I to receive the maximum profit from it?"

Every radio dealer within touch of a rural market has asked himself this question many times.

The position of the farmer today is excellent. He is in a strong buying mood. He is prosperous. His sense of value is acute, he knows what he wants and when he wants it. He wants the best this year. That is why S. T. Hilliard, of Rensselaer, Ind., sells him quality sets, completely installed, and is able to show a healthy profit on his farmer business.

## "Decide on a Policy— and Stick to It"

Here is a dealer who has evolved a clean-cut, progressive sales policy and who is sticking to it. The story of Hilliard's success with the farmer is a tale of a man who has had some apparently sound, and certainly modern, ideas for merchandising radio—and then has had the courage to put his convictions into practice.

This merchant is located in the seat of a farming county. The latest census gives Rensselaer a scant 3,000 population and the entire Putnam County but 14,000. Yet, before next February, Hilliard estimates he will place over 85 complete installations among the retired farmers living in town and the active, well-to-do farmers of the country round about. None of these "complete jobs" will be taken for less than \$150. Most of them will run well over \$200.

Here are the principles he has worked—principles that are progressive, that represent "good sound business sense":

He sells the complete installation from antenna to ground—or no sale.

Installs antenna and ground just as soon as he obtains the verbal order.

Gives a one-year free service guarantee.

Maintains a minimum overhead by demonstrating and closing the sale in his own home—not at the store or on the farm.

Will not tolerate kicks—"all of my sets work or I buy them back."

Writes a radio column in local paper. Telephones his set owners about unusual programs to listen for.

Delivers a table runner with each set.

Let us follow this Rensselaer merchant as, step by step, he strengthens his contacts and finally brings another prospect to the point of signing on the dotted line.

Step One—Hilliard will not waste time or money digging around the country trying to warm up cold, disinterested or financially weak prospects. He goes out on live tips only. He says, "I try, if possible, to get them to come to my store. I can generally accomplish this by using the telephone. If a prospect is not interested enough to come and see me, he is not the kind of a prospect who will buy my service."

Step Two—"I make most of my

demonstrations and close most of the orders in my own home." Mr. Hilliard states he will not make a demonstration unless weather conditions are favorable. "When that time arrives," he says, "I telephone the customer. I generally try to have three or four prospects ready for the same evening. These people have seen the sets in my store, or have simply been in touch with me by telephone. On the right evening I assemble them in my sitting room. A box of good cigars is handy. An assortment of loud speakers is available on a side table. I let my customers try out and select their own speaker. I find that, as a rule, the built-in speaker is not so popular in this part of the country. My trade likes to see where the sound is coming from."

## A Sales Argument to Close the Deal

Step Three—The closing. Hilliard has developed some good salesmanship right here where it is needed the most. If a farmer says, "Yes, I am interested but I would like to hear this set on my own farm," Hilliard replies: "Certainly if you insist, but you know, of course, that the reception on your farm will be even better than it is here." Most farmers appreciate this fact and do not press the point.

Hilliard then maneuvers his prospect into a position where he admits that he would like to buy a radio. "But I can't afford to just now," says the farmer.

"That's all right," replies Hilliard, "we'll just run up and install the aerial and ground connection while my men have the time; then when you are ready just telephone me and the first favorable evening I will bring out the set itself, install and demonstrate it and teach you how to run it."

"Of course," continued Hilliard, "there are not many families who will wait very long for the new radio set after they see the antenna on the house and the terminal plate in posi-

**RENSELAER, INDIANA,**

**Radio**

BY  
**DIAL TWISTER**

Reception was considerably better last evening than it was Monday night a week ago at which time one could not get anything:

Both WLW and WSAI had wonderful programs but had the usual trouble with Cincinnati—fading. Did you hear the music from "The Miracle" now showing in Cincinnati as broadcast by WLW? It was worth the price of a radio.

Doesn't it seem strange to hear old WSB's announcer calling from WSM? His voice is so attractively slow and drawing one could not fail to identify it.

Silent night doesn't mean much to us here in Rensselaer. If we

This column, headed, "Radio, by Dial Twister," is one of Hilliard's publicity schemes. Of course, his name is never mentioned and he never includes "plugs" for his store, but everyone in town is well aware of the fact that "Dial Twister" is nobody else but S. T. Hilliard. The column not only includes comment on radio in general, but is a review and a forecast of radio programs, written in an everyday, intimate style.

tion in the sitting room wall all ready for the set."

Step Four—The Guarantee. Hilliard's service guarantee is a very important part of his selling plan. It reads as follows:

"This radio set is hereby guaranteed against any mechanical defects for twelve months from the above date. We agree to give the purchaser one year's free service, not exceeding six calls, at any time requested. This service guarantee is given to you as an assurance of our interest in rendering complete satisfaction, and as an evidence of our faith in the products we have installed for you, and does not include cost of replacements of batteries, tubes or other accessories unless we can secure same from the manufacturer.

"Tampering in any way with this machine cancels this guarantee.

"This policy may be renewed at any time for the nominal charge of \$7.50 for six calls—payable in advance.

"Single calls rendered at \$1.50 each."

"I insist on using our own antenna," Hilliard went on. "I will not install a set using the aerial and ground connection which have been put in place by some previous set owner. The importance of a right start by knowing that you have a properly installed one-piece antenna without soldered joints, and a ground connection which is technically correct, cannot be overestimated."



"Complete Installation or No Sale" is one of Hilliard's biggest sales features and he makes the installation as perfect as it is possible to make it, burying the ground wire even if there is a good pipe connection available. On every installation job done by Hilliard, an engraved, bakelite nameplate is included, reading, "Installation by Hilliard for

This results in excellent advertising for Hilliard when the proud set owner shows off his equipment to friends.

It is Hilliard's opinion that every radio dealer should have some sort of a similar trademark on every installation so as to create a word-of-mouth advertising, which, in the final analysis, is the most desired type of publicity.

### Hilliard Saves Time and Money—

- By getting the prospect to come to the store.
- By giving the demonstration in his (the dealer's) home.
- By installing aerial, ground and terminal plate at the first opportunity.
- By doing an installation job on the antenna and ground that the customer can be proud of.

Hilliard always drives a 10-foot 1½-inch galvanized pipe beneath the surface of the ground. The lead and wire is buried so that it comes out beside the house.

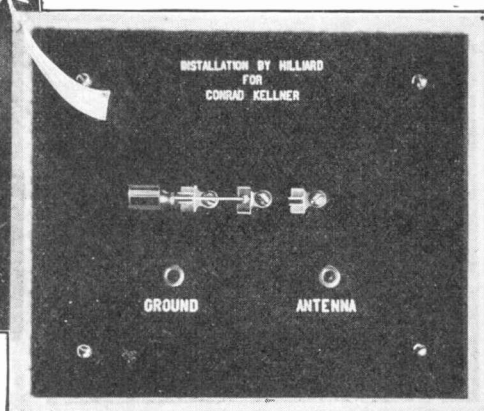
#### Uses a Special Wall Plate

Hilliard brings in his antenna and ground connections between the outer wall and the plaster of the house partition. They are then fastened to the back of two single circuit jacks on a terminal plate. This is made out of bakelite and is engraved in Hilliard's own shop as follows:

Installation by Hilliard  
for  
(name of set owner)

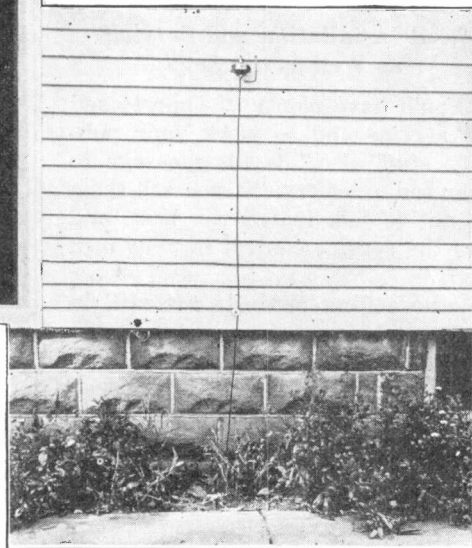
Here is a permanent advertisement for the dealer right in the living room of every customer's home.

"The Dial Twister" is the catchy title of a radio column which appears each week in the county paper—*The Evening Republican*.



Above—The nameplate which Hilliard makes part of every sale.

At right—The buried ground wire, with lightning arrester, which may be said to be equally as much of a trademark for Hilliard as is the nameplate. "As a ground, the water pipe is unsatisfactory," Hilliard says, "so I drive ten feet of 1½ inch galvanized iron pipe into the ground and bury it a foot under the top soil."



And who writes this stimulating radio news and comment? Hilliard, of course.

"But I play absolutely fair with my competitors," he adds. "Everybody in the county knows who 'The Dial Twister' is, but I never mention my name or the business in my copy. I put in a lot of local stuff—kid somebody or tell them when to be on the lookout for good programs. It certainly keeps up the radio interest in this township and helps me a lot in becoming more widely known."

Another publicity stunt employed by Hilliard is the use of so-called "teaser" copy in his newspaper advertising and on his direct-by-mail postal cards. Advertising men know that the unsigned catch line, which arouses the curiosity, is the quickest way to make an impression on the mind.

Here are some of the expressions he uses on direct-mail cards:

Every evening you may have Organ Music with your supper—if you have a radio.

Raining! Can't go any place tonight. Don't know what to do—Buy a radio.

Buying a cheap radio to save money is like stopping the clock to save time.

Marked newspaper copies of something about Hilliard service or "Hilliard Installing a Radio Set for Mrs. So-and-So," are prepared by the hundreds and mailed where they will do the most good. Needless to relate that these news items were written and sent to the paper by Hilliard himself.

#### Keeps a Record of Battery Life

"I keep a separate record of every "B" battery sold and phone the customer about four months afterward to check up on its condition."

Just another detail, but an im-



### Hilliard Sells Radio Because He—

Gives demonstrations under favorable conditions in his own home—or waits until they are.

Is frank about it—explains that there are some nights when radio should be forgotten.

Installs his own aerial and ground. Wants every set to give satisfaction and doesn't take chances on these vital

factors turning out imperfect. Sells the entire equipment as one unit. Doesn't itemize tubes, batteries, wire and accessories.

Delivers the set and gives the instructions himself.

Keeps a record of battery life and beats customers to it on replacements.

Maintains service for one year.

portant one if a dealer wants to do a real job in his chosen profession.

Hilliard was originally a clothing merchant. He still maintains this prosperous business in the same store that houses the radio shop. "In the small towns, it isn't the store that counts," he says, "it's knowing radio and selling satisfaction—not noise, distance or so many tubes."

#### Does All Repairing in His Own Shop

Hilliard is thoroughly posted on the technique of radio.

"When they phone me," he explained, "I can generally tell from the symptoms where the trouble is. I take out replacement parts, replace the defective or worn out ones and make my get-away as soon as I possibly can. No puttering around in the customer's house. I do my repairing in my own workshop."

Window displays also play an important part in Hilliard's radio selling scheme. A recent window captured the first prize of \$250 at the National Radio Exposition held in Chicago this October.

#### "Sell Installation and Service as Well as the Set"

"You'll have plenty of time to sell and service and to work your publicity stuff also," is his message to other radio dealers, "if you sell them the entire job, install the best, and keep the service control in your own hands."

Radio selling methods are still in a state of formation. Like S. T. Hilliard, the dealer who creates his own original, aggressive methods—and then goes out and works them—will build an outstanding reputation for himself and will be in a position to dominate the business in his town or county.

### Trade Association Suggests Selling Rules

The following motions and suggestions were passed by the San Francisco Retail Radio Dealers' Association at its last meeting in San Francisco, Cal.:

**Terms**—Not less than 25 per cent down payment; not more than ten months contract. It is suggested that not less than one-half of one per cent for interest be charged.

**Guarantee**—That this be incorporated in the sales contract.

**Service charges**—That the service charge be \$1.50 per hour, with a minimum charge of \$0.75. That evenings, Sundays and holidays be considered overtime, and the regular charges be doubled. That overtime be at all times discouraged.

**Antennæ**—That all antennæ erected comply with the city ordinances in all

respects, and equipped with painted poles at a minimum charge of \$10.

**Demonstration Antennæ**—That all antennæ erected for demonstration purposes shall be charged for at a rate of \$10 minimum charge if set is bought and \$15 minimum if set is not sold.

**B Batteries**—That 5-tube sets, or over, be equipped with B Batteries of a size not smaller than Eveready No. 770, or its equivalent, providing the set is not manufactured to hold a smaller battery.

### Small Paster Announces Repairs and Service

To increase its service and repair business, the Indiana Radio Service, Indianapolis, Ind., recently sent to all known radio set owners, a direct-mail card, announcing its service facilities, together with a small paster to paste inside the lid of the set.

The paster, one side of which was gummed, measured 2½ by 1¾ inches, and read:

#### Paste Inside Lid of Set

*In case of trouble call*

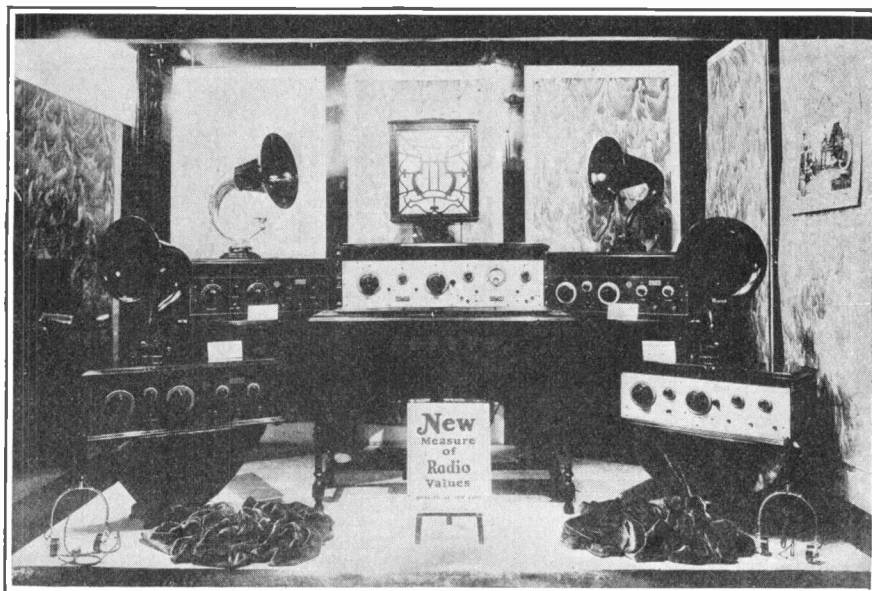
Indiana Radio Service

Kenwood 3288

N. E. Corner 17th and Central  
Indianapolis, Ind.

Batteries Tubes Repairs

This idea is an inexpensive one and may be profitably utilized by any dealer who desires to increase his service and repair trade.



This neatly laid out, well balanced radio window is typical of Hilliard's displays. The window pictured above is the one that captured the first prize of \$250 offered for

the best radio window display in the contest held at the National Radio Exposition this Fall at Chicago. This display won because of its symmetry and simplicity.

# Window Displays That Tell a Definite Story

## A Living Model "Stopped the Show"

Right—"Solid Comfort" might be the title of the radio window at the right. The C. W. Down Company New York City, used a live model to good advantage in this display, the very simplicity of which puts its story across with telling effect. During most of the day, a wax figure was used, but during the rush hours, the living model took its place. The girl in the window was such an unusual stunt that the crowds were literally "stopped in their tracks." Naturally, the radio receiver got quite a bit of attention, too.



## Using the Bank's Windows

Left—This is a window in the Greenebaum Sons' Bank and Trust Company, Chicago, Ill. It tells the story of thrift but it is also advertising, in this valuable space at the corner of La Salle and Madison, the radio business of the dealer who loaned the radio sets and equipment. Notice the tie-up of the towers, upper left, with the loop antenna at the extreme right.



## "Radio Day" Sponsored by Dealers

At right is shown the splendid array of prizes given by radio dealers of Salt Lake City, Utah, in connection with a "Radio Day" outing at Saltair, the famous summer resort a few miles west of the city.



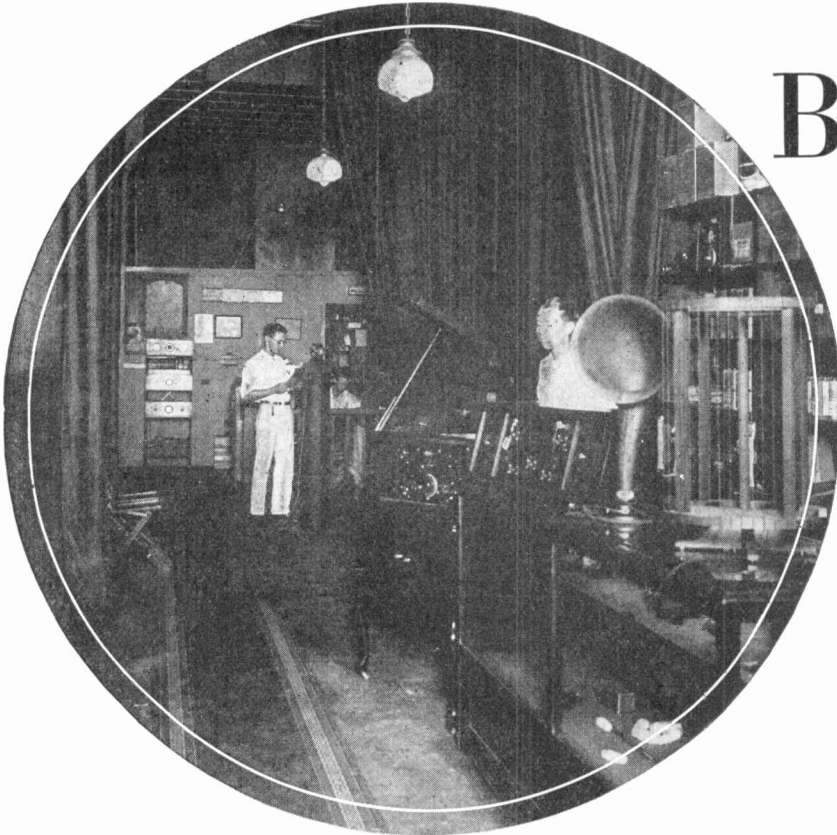
## A Striking Christmas Display

Left—The De Luxe Radio Shoppe, of Princeton, Ill., got the Christmas season off to an early start by presenting this Yuletide window early in November. It was set up and photographed especially for *Radio Retailing*, but read what G. E. Brooke, proprietor of the store, says about it—"As it happened luck was with us, for when we pulled up the shades on this Christmas window which we set up for you, there was about two inches of snow on the ground and it was still snowing hard. If anything ever looked like Christmas, that surely did. It almost caused a riot and has kept us busy answering telephone calls and taking orders for Christmas deliveries. It certainly started the people in this town thinking about their Christmas shopping."



Dealer's Own

# Broadcasting Boosted Sales



Alabama Radio Dealer Builds His Own Transmitting Station and Supplies Programs in Barren Territory—Says Broadcasting Can Be Made a Profitable Feature

By J. C. BELL  
 Manager Bell Radio Corporation,  
 Birmingham, Ala.

The Bell Radio Corporation of Birmingham, Ala., has found room for its entire organization in this one store. The front is the sets and parts retail department, in the center is the broadcasting studio and equipment and in the rear is the repair shop. D. J. Connolly, of the Bell company, is at the microphone, preparing to open one of the studio programs.

**A** STORE studio. The dream of many radio dealers. An impracticable dream you will say. In the large majority of cases, yes, but where conditions are right, as they are in Birmingham, and the station operated as we run ours—well, I reckon it's the one biggest sales and advertising stunt we could possibly get and one that creates a great amount of good will as well.

That our sales increase due to our broadcasting, is at best a guess. We do know, however, that our volume is running thirty-five per cent ahead of a year ago at this time, and we know that we get from one to two hundred telephone calls every night we send—as many as one man assigned to the 'phone can handle three evenings a week from eight-thirty till ten.

### Birmingham Had No Local Broadcasting

When we built our sending set in March of this year, WSY, Alabama's only real broadcasting plant, had closed up. This left our city without local summer or daylight reception. We fooled around a 10-watt outfit at first, but the public re-

sponse, in fact, demand, for us to keep it up, forced us, you might say, into a bigger unit.

We believe the 50-watt capacity just about right for the way we use it; large enough to cover our entire trading territory, weak enough to permit the big fellows to get through.

We have been heard in Cincinnati, Lexington, Ky., and points in Texas. We strive, however, for good modulation and real tone, not distance. What's the result? Thousands of people have told us how much they appreciate what the Bell Radio Corporation is doing for Birmingham.

What did it cost to build and operate? Not nearly as much as you think. Our three biggest items were the very best microphone we could get: \$100; \$175 worth of tubes (includes extras) and 219 yards of heavy green burlap. This last item, together with sewing it, cost us \$115. You see our ceilings are over twenty feet high.

The set we built ourselves from store parts. We are using a Western Electric amplifier in conjunction with a loose-coupled, Hartley transmitting circuit. Wavelength, 248 meters. We do not have to use expensive steel masts, or other fancy

equipment. A dealer can build a sending set of this character and equip a modest studio (excepting the piano) for about \$665.

### The Monthly Upkeep

The operating expense of a station such as WBRC shapes up per month as follows:

For tube depreciation or replacements .....	\$10
Power bill .....	10
Store and window illumination bill 10	
"B" batteries .....	3
Set depreciation .....	5
Miscellaneous .....	22
	\$60
Help (extra salary) .....	35
Total.....	\$95

Now, about the programs. So far we haven't paid a nickel for talent. We can't. It isn't that kind of a station, and our listeners and artists know it. But I could sight a good many instances of where this indirect advertising has been of big help to the performers. Take Riley's dance orchestra. Besides getting him six dance engagements that I know of, he himself has had published by a New York music house a song which he wrote and which



his orchestra popularized from our studio.

We calculate to give our fans what they want—mostly popular selections. Everything is informal, lots of kidding—just one big family.

#### The Studio Director

One of our own boys, D. J. Connolly, is studio director. Connolly started in radio in the old spark days. He was in knee britches then, he's only twenty-four now. Knows the service end of the game from A to Z. He sells and services during the day and appreciates the fact that part of his job calls for three nights a week as well. It takes him on the average of one hour a day working up programs. Dudley has a good radio voice and a pretty good line of chatter, leastwise the folks seem to like it. He always announces us as "the oldest exclusive radio house in Alabama."

We've had some wonderful co-operation. Loew's Theatre sends us lots of their performers. The San Antonio "Siamese Twins" for example. The *News* arranged to have "Miss Birmingham" sing and play. That night one hundred and fifty people packed our store. We drew aside the curtains so that they could see.

#### Station Gets Fine Newspaper Publicity

The Birmingham *News* gives us lots of space, in fact features us. Mentions our street address, runs our contests, etc. Couldn't begin to figure up the thousands of dollars worth of free publicity they have given us.

I feel quite positive that the time and money it has taken to operate WBRC has been well repaid. We haven't much broadcasting competition here in Alabama. That's an important factor, of course. Last year our sale of parts and batteries amounted to 35 per cent of our business. This year we are running over seventy per cent on finished sets which seems to be sufficient proof that we made a wise move in starting to broadcast.

#### Service Calls Make Free Service Pay

J. Kitt, of the Kitt Radio Company, Stockton, California, is a radio dealer who makes free service pay for itself. He does not believe in waiting for the customer to come into the store with a service com-

### Less Than \$100 a Month

is the operating cost of a broadcasting station, according to the Bell Radio Corporation of Birmingham, Ala., radio dealers and operators of WBRC.

The cost is defrayed and made several times over in added sales, good will and names of prospects. In localities where few stations come in well, broadcasting is a profitable dealer undertaking, this radio retailer has found.

plaint, but follows up each set after it is sold, with the thought that if every customer enjoying the use of a newly-purchased set is called upon in his home and such minor adjustments made as occasionally crop up, the visit will leave a favorable impression in his mind.

Incidentally, it frequently leads to the sale of accessories and even more frequently to the securing of "leads" who may later become prospects. These calls are made entirely without request on the customer's part and are repeated about once every six weeks. A man constantly in the field rendering this type of service will more than make his ex-

penses in accessory sales alone, Mr. Kitt has discovered.

This contact between customer and merchant leads to very pleasant personal relations and owners of sets take occasion to drop into the shop once in a while to report the performance of their equipment. If a prospect happens to be in the store at the time, the effect is excellent.

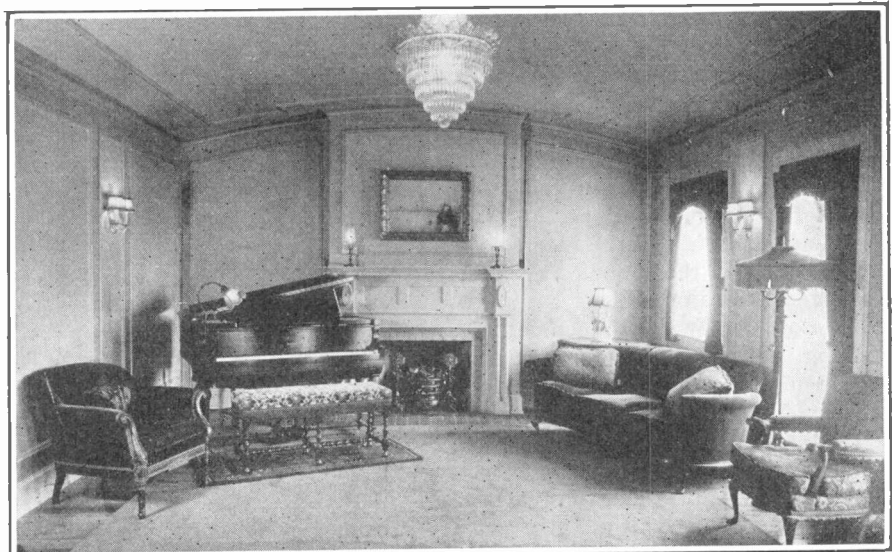
Acting on this same policy of "Make a personal friend of your customer," Mr. Kitt reverses it and makes customers of his friends. He belongs to the Rotary Club and maintains wide business acquaintanceship. These he reminds once in a while that he is in the radio business, by dropping them a letter in a friendly way, asking them to drop in when they are thinking of radio.

#### Another Radio Market— The Bachelor Boarder

J. L. Smith, manager of the Allerton on North Michigan Boulevard, Chicago, a club hotel for college graduates and business men, is responsible for the statement that there are 946 rooms in this bachelor hotel and that over three hundred of them contain radios.

Not every city and town can boast an "Allerton" but most places have, in proportion, just as many single men and women as Chicago. Find out where they live and follow up this lead.

#### Selling the Set in a "Home" Atmosphere



No, this is not a room in the Newport estate of Mrs. Asterbilt. It is the demonstration "salon" deluxe of a progressive music and radio house in Milwaukee, Wis. This 20 ft. by 40 ft. music room is located on the third floor of the Luebtow Music Com-

pany's establishment, 3807 North Ave., Milwaukee, Wis. It cost over five thousand dollars to build and furnish. Its acoustical properties are perfect. Nothing under \$500 radio sets are demonstrated here.

**Radioart  
Service Insurance  
Policy**

By this Service Policy the Radioart Corporation, 347 Geary Street, San Francisco, guarantees to the purchaser of this \_\_\_\_\_ No. \_\_\_\_\_

**I**

That this instrument is, to the best of our expert knowledge, free from all defects in material and workmanship.

That the Radioart Corporation will replace or repair, free of charge, any part or parts which our examination at our store, 347 Geary Street, San Francisco, shows to be defective.

This guarantee, however, does not apply to any instrument which our examination and expert judgment shows to have been subject to misuse or accident, nor to any instrument which has been subject to alterations or repairs (by ourselves) which in our judgment affect its stability or reliability.

**II**

That the Radioart Corporation will accept in full payment of one-half hour's service in accordance with the attached Policy No. \_\_\_\_\_ Not good for materials. Void if detached. Not valid after \_\_\_\_\_

That these coupons shall be accepted in full payment of one-half hour's service in accordance with the attached Policy No. \_\_\_\_\_ Not good for materials. Void if detached. Not valid after \_\_\_\_\_

**RADIO**

By \_\_\_\_\_

Service Policy No. \_\_\_\_\_

Issued to \_\_\_\_\_

[SEAL] Expires \_\_\_\_\_

**Radioart Corporation**

This coupon will be accepted in full payment of one-half hour's service in accordance with the attached Policy No. \_\_\_\_\_ Not good for materials. Void if detached. Not valid after \_\_\_\_\_

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*Back of All Sets Sold from This Pacific Coast Store Stands This*

# "Service Insurance Policy"

"Coupons for Every Call" Is the Novel Way This Dealer Has Evolved to Acquaint Customers With the Amount of Free Service They May Expect

By C. GRUNSKY

A NOVEL form of handling service, making it a tangible commodity which is sold to the customer along with the radio set, has been evolved by the Radioart Corporation of San Francisco.

"We handle standard radio equipment," says James B. Threlkeld, Jr., president of the company, "but so do most of the other dealers in town. We render service on the sets sold—every dealer in the community is advertising the same.

"We do not wish to compete by cutting prices. What we wanted was some distinctive service which we could offer above that of others in the field, a definite guarantee which would be understood and welcomed by the customer and at the same time would not involve us in unlimited repair work. We have solved the problem by our 'service insurance' policies."

The system is that of giving the purchaser of a radio set an insur-

ance policy, filled out in legal form and with the company's seal attached. This covers two separate services—first, the company guarantees that the set is free from defects in material and workmanship to the best of their knowledge and promises to replace or repair, free of charge, any part or parts which are defective. In order to protect the store the further clause is added:

"This guarantee, however, does not apply to any instrument which our examination and expert judgment shows to have been subject to misuse, neglect or accident, nor to any instrument which has been subject to alterations or repairs by anyone except ourselves which in our judgment affect its stability or reliability."

Inasmuch as only standard sets are carried and most of the manufacturers themselves replace defective parts, the expense of this guarantee to the store is not large.

The second feature of the policy

is a definite number of hours of service which the customer is promised free of charge. These are to be exclusive of any service which may be rendered under the first head. To cover this service, a number of coupons, each acceptable as payment for a half-hour's service are attached to the policy. Each of these gives the number of the policy, which can therefore be checked against the records in the company's office, and also the statement, "Not good for materials." In addition the date of the expiration of the "policy" is entered, both on the main instrument and on each coupon.

The policy allows for the exercise of its privileges only during a ninety-day period after the purchase, and the expiration date is therefore entered as three months after the time when the set is installed in the purchaser's home. This is done individually in each case, rather than being printed as "ninety days from

date," for the reason that it is not desired to fix the idea of a limited period in the customer's mind and it is felt that the writing in of the date of expiration is better from a psychological standpoint.

The coupons are printed after the fashion of bond coupons and are so arranged that sections of them may be detached before filling out the policy, so that a varying amount of service may be promised, depending on the price paid for the set. The customer, of course, is not aware that anything has been removed, but only that the policy used fits the particular set he is purchasing. Those purchasing sets priced under \$125 are allowed six coupons, or three hours' service. Sets from \$125 to \$250 carry twelve coupons and sets from \$250 up, eighteen coupons.

**Has Simplified Service "Problem"**

From the standpoint of the merchandising records of the store, this system has greatly simplified the service problem. It limits the free service to be rendered to a definite number of hours and to a definite period of time following the sale. This means that the overhead can be reckoned with reasonable accuracy. Under the old system of indefinite service, the merchant never knew how much profit he had made on a set because the cost to him might be increased by a service call at any time.

From the customer's standpoint, the whole thing has been crystallized and made understandable. "Service" has been talked on all sides, but its shades of meaning were so varied that the purchaser was not sure just what it meant. In consequence, he did not set much store by the term. Under the "service insurance" system, he knows just what he gets.

This insures satisfied customers. The bugbear of every radio dealer is the man who purchases a set and who does not get good results because of his own stupidity and starts to "tinker," more often than not breaking some connection. He hesitates to call for aid from the dealer, even if "service" has been promised—and so allows the set to remain idle or to work indifferently, with the result that all who hear it, or hear his remarks on the subject, are adversely affected. The coupon idea, Threlkeld feels, will bring these people into the store to ask for help and so eliminate the trouble before it spreads to the neighbors.

In addition, the insurance policy is a guarantee of permanence which is

**Clip the Coupons**

The privilege of clipping coupons was formerly confined to those lucky individuals who owned bonds. But now every radio set owner can perform the same feat. The Radioart Corporation of San Francisco has adopted the simple expedient of issuing a "Service Insurance Policy" with every receiver sold, and attached thereto, a certain number of coupons each entitling the purchaser to a half-hour of free service.

Thus the customer knows exactly how much free service he is going to get and the store knows exactly how much each set's free service will cost, at the maximum.

a matter of importance to every exclusively radio shop. The purchaser of radio equipment as a rule has a choice of buying from one of the local department stores, from music or furniture stores, from electric shops or from the radio dealer. In many cases, he turns to the older stores purely for the reason that they have been in existence for years and that he expects them to remain so. He feels sure that if anything

goes wrong with his purchase, he will have some redress.

As a matter of fact, Threlkeld says, the radio shop may have the greater investment in radio, the greater incentive to maintain its reputation and may be the more permanently established in the radio field. The prospect knows it as a recently established store, however, and lacks confidence in it. This handicap is overcome by the plan of service insurance, in Threlkeld's opinion. The purchaser knows that he will receive a definite amount of service—and that his set is guaranteed to be in first-class condition. That is really all he wants.

When a set is sold, it is installed and tested and the guarantee made out. The following day, the purchaser receives a letter from Mr. Thelkeld as president of the Radioart Corporation, thanking him for his patronage and assuring him of the company's desire that his receiver shall be satisfactory. About a week later the manager of the service department calls up to ask about the installation and from time to time following this the salesman who made the sale calls up or drops in to see the purchaser to check up on how the set is working and incidentally to pick up leads and make accessory sales. In this way, the customer feels that his interests are being fully protected, and also, any difficulty is at once located and remedied.

**A Last Year's Resolution That Is Still Good**

**OUR NEW YEAR RESOLUTION**

**I**N ACCORDANCE with our policy to cooperate 100% with our dealers, we are taking a large step forward in a matter every radio dealer is vitally interested in—**THE ELIMINATION OF PROMISCUOUS GRANTING OF DISCOUNTS TO THOSE NOT ENTITLED TO THEM.**

Starting January 1st, 1925, we will abolish all such discounts. Only established radio dealers, maintaining a stock of radio merchandise and offered at established prices, will be granted the dealers' discount. There will be no courtesy discounts.

This is for the benefit of the public and every radio dealer. We believe the merchandising of radio should be kept on a high plane with other merchandise.

We know the public will favor and patronize the real radio dealer and the dealer in turn will patronize the jobber who has the courage to declare himself against this common evil.

**The Reynolds Radio Company, Inc.**

1534 GLENARM PLACE.

DENVER, COLO.

Actively Engaged in Radio Since 1914

Wholesale and Retail

DEALERS WRITE FOR CATALOGUE

Last year, the Reynolds Radio Company, Denver, Col., jobbers, made this New Year's resolution: "Resolved, that we will not give discounts promiscuously to those not entitled to them. Only established radio dealers will get the dealers' discount. There will be no more courtesy discounts." December is here and it is time to think about next year's policies—time to make a few good merchandising resolutions and stick to them. Eliminating courtesy discounts is one. Stopping cut prices is another. Selling only at wholesale (if you are a jobber) is another, and putting forth an intensive effort to move radio in the slower months by specialty selling methods is another. But make it your biggest 1926 resolution to do your share in increasing the public's confidence in radio, both as an industry, and as an unequalled source of entertainment and education.



# Standardization Will Help Every Dealer

Uniformity in Size and Dimensions of Radio Parts Is Aim of Manufacturers' Group — Dealers Asked to Express Opinions on What Parts Should Be Standardized, and How

By A. J. CARTER

Chairman Standardization Committee, Radio Manufacturers' Association

**T**HE radio industry has grown with such rapidity and everyone connected with it has been so busy that too little attention has been paid to the desirability of designing parts so that their dimensions will conform to a pre-established standard of good engineering practice. Panels vary from one-eighth to three-eighths of an inch in thickness. Instrument shafts have been made in  $\frac{1}{4}$  and  $\frac{3}{8}$  inch dimensions for no apparent reason. One manufacturer's knob would not fit another's condenser, some dials read from left to right, others from right to left, and so it goes.

The dealer and the consumer have been seriously affected by this inconsistency of practice. Dealers have in many cases been compelled to carry twice the amount of stock in certain items due to the fact that sizes were different. Set builders and radio fans have been greatly inconvenienced by the fact that parts were not universally interchangeable. You who have been up against this problem realize the trouble and expense it has caused. I haven't the slightest doubt that everyone in the industry has longed for a radio Moses to lead us out of this wilderness of misfits.

Realizing this uneconomic and deplorable condition, the Radio Manufacturers' Association, at their recent meeting in Atlantic City, set up a Standards Committee of which I had the honor to be elected chairman. This committee is further divided into a number of sub-committees, each taking some particular phase of the industry with a view to determining recommendations for standard dimensions and practices to cover their particular subject. The names of these sub-committees and their chairman follow:

Wiring devices, P. C. Lenz, Jr., chairman, Runzel-Lenz Electrical Manufacturing Company; condensers and dials, H. A. Bremer, chairman, Bremer-Tully Manufacturing Company; rheostats, Charles Hardy, Amsco-Products, Inc.; transformers, J. A. Bennan, Jefferson Electrical Manufacturing Company; loud speakers, head sets and phonograph units, E. H. Clark, Jewett Radio & Phonograph Company; storage batteries, W. E. Holland, Philadelphia Storage Battery Company; dry batteries, W. A. Brennan, French Battery Company; plugs, jacks and switches, Godfrey Gort, L. S. Brach Manufacturing Company; sockets, Walter C. Huth, Walbert Manufacturing Company; receiving sets, A. A. Howard, Howard Radio Company, Inc.; symbols, George Lewis, Crosley Radio Corp.; test instruments, John Miller, Jewell Electrical Instrument Company; arrestors and aeriols, H. O. Larson, The Ekko Company; committee on co-ordination, L. E. Parker, Milton Alden, E. N. Rauland, E. W. Engle, A. J. Carter.

It is going to be quite a task, this problem of determining what standards are best for the industry and of getting these standards adopted and



At the head of the Standardization Committee of the Radio Manufacturers' Association is A. J. Carter, president of the Carter Radio Company, Chicago, Ill. Mr. Carter was one of the founders of the association and was previously its secretary and treasurer.

## Dealers—Write Your Answers to These Questions—

1. Should rheostats, condensers, etc., be of one-hole mounting type, or mounted by means of screws?

2. Should dials and condensers be so designed that the dials read from left to right, or from right to left?

3. Should all dials and knobs have the same size holes, and if so, what size do you recommend?

4. How far should condenser shafts project through the panel?

Letters may be addressed to A. J. Carter, 300 South Racine Street, Chicago, Ill., or to the editors of "Radio Retailing," Tenth Avenue and Thirty-sixth Street, New York City.

actually put into practice. Other industries have taken six to ten years to arrive at the standardization of parts. Our organization has been in existence a little more than a year but we are attacking this problem right at the start. The sooner we accomplish our aim the better it will be for all concerned, the dealer most of all. We have already made a good start and are receiving cooperation from all sides. Questionnaires have been sent to the leading manufacturers, radio authorities and editors of the country asking for their recommendations as to the proper size of dials, rheostat shafts and other parts which are at present manufactured in a number of styles and sizes. These replies will be tabulated and analyzed. They will serve as a basis for the work of the various committees.

Here are some of the things we have in mind that should be settled definitely:

1. Should rheostats, condensers, etc., be of the one-hole mounting type, or mounted by screws?

2. Should dials and condensers be so designed that when the dial is turned to the right the numbers on the dial increase, or should the numbers increase when the dial is turned to the left?

(Continued on Page 846)



Photo through the courtesy of Haynes-Griffin, Inc., and shows J. K. Cronin, store manager, conducting a class in condenser selling.

*Instruct Your Salesmen on How to*

## Sell the S.L.F. Condenser

Characteristics and Selling Points of the "Ultimate" in Condenser Design Explained in Terms the Dealer Can Understand—Answers to Common Customer Questions

By A. J. HAYNES\*

**P**ROBABLY the most discussed and least understood item in the radio retailer's stock this season is the straight line frequency condenser, commonly abbreviated S.L.F.

It seems to be generally understood by the public that this new type of condenser, which has made its appearance almost overnight, accomplishes something that the old condenser did not and that it has been brought out to meet an existing need.

A large part of the radio public knows vaguely that it improves the tuning of a set and has been developed to meet conditions which were

becoming almost intolerable, namely, the crowding of the stations in the lower part of the present broadcast range.

What does not seem to be generally understood, however, is the manner in which this is accomplished,—whether it may be applied to the present receivers and coils, or even if it is going to be a permanent thing. Both favorable and unfavorable criticisms are heard of this new instrument and a complete understanding of the situation seems to be lacking in the minds of the average radio salesman, as well as his customer.

Some of the questions that one commonly hears in a radio store today on this subject, are as fol-

lows: "How about these new straight line frequency condensers? Do they do everything that is claimed for them and is it worth while to replace my present condensers? Do you think they will work in my set without any other changes?"

"How soon will some other condenser be designed which will displace the straight line frequency condensers?"

"What S.L.F. condenser do you recommend as being the best and why, and how do I know it is an S.L.F. condenser? They say a lot of those that are supposed to be, are not truly straight line frequency," and so on.

The above are questions that are repeated by customer after customer.

\*Vice-president and technical head of the Haynes-Griffin Radio Service, Inc., New York and Chicago.

How many salesmen are there that can answer them intelligently in terms that the customer can understand? It has been the writer's experience that if a person knows his subject well, he can usually furnish an explanation which any novice can understand. On the other hand, if his own understanding of the subject is at all hazy, his explanation will invariably be unsatisfactory and confusing.

This question of wavelengths and frequencies sounds very intricate until one has received a thorough, simple explanation, after which it becomes ridiculously simple, the fundamentals having once been fixed in the mind.

Suppose we look at the above questions and see how they should be answered: In the first place, "Should I buy the new straight line frequency condensers and discard my old ones and will they work in my set?" The answer is "Yes" both times. If the present condensers are replaced with S.L.F. condensers, of the same capacity, practically the same wavelength range will be maintained. The older types of condensers should be discarded in favor of the new ones, because, with the present broadcast band, tuning is altogether too difficult with the former types. They do not give a logical tuning scale, devoting the larger part of their tuning range to a comparatively few of the high wavelength stations, whereas by far the larger number of stations, which are at present operating on

the lower end of the wavelength band, are crowded together in a comparatively few degrees on the dial.

The same criticism applies to both the straight line capacity and straight line wavelength condensers although the latter are not as bad offenders as the former, or semi-circular plate type. Their tuning curve lies between the very old S.L.C. and the new S.L.F. condensers.

If the broadcasting stations were separated equally in respect to their wavelengths, one station being placed every four meters, for instance, over the band, the S.L.W. condenser would be the logical one to use as it gives a proportionate change in wavelength for any given number of degrees of change on the tuning dial over the entire band.

The fallacy of such a system becomes evident at once when it is realized that the necessary separation of the broadcasting stations, to prevent interfering with one another, is not directly dependent upon their wavelengths but on their frequencies.

Let us take a practical example of this:—there is, theoretically, room for only one station between 530 and 550 meters. This one, long wave station, should occupy a 20-meter band all by itself if it is to be clear of interference.

If, for the purpose of contrast, we take the other extreme end of the wavelength band we find that in the twenty meters between 200 and

220 meters we can place seven broadcasting stations, figuring the same frequency separation which allowed only one between 530 and 550 meters.

This condition is caused by the fact that the frequency increases as the wavelength becomes shorter and the frequency multiplies much faster than the wavelength decreases.

### "Kilocycles" and Not "Wavelength" Should Be Used

It is really unfortunate that the layman ever became familiar with the term "wavelength" as it is going to be necessary for him to forget it and learn to think of his tuning in terms of "frequencies" expressed in "kilocycles."

From the above wavelength and frequency discussion it is seen that what is needed to give us an even separation of stations on a condenser dial is a condenser which will give us a proportionate change in "frequency" for any given variation of degrees on the condenser dial, whether it be at the top or bottom of the broadcasting band. Such a condenser is known as a "straight line frequency" condenser.

Let us continue with our questions:—"Do S.L.F. condensers cause the long wave stations to be crowded too close together?" The answer is "No." They certainly do place them nearer together on the tuning dial than the old types of condensers, but they do not place them any closer together than the short wave stations. They merely distribute the stations evenly over the entire condenser dial. In order to do this, it is, of course, necessary that the long wave stations, which formerly took up the major part of the tuning dial, should be placed somewhat closer together so that the remaining stations which were overcrowded can be equally spread out.

"Will some other new type of condenser be brought out which will displace the S.L.F. condensers?" As far as we can see, the S.L.F. condensers are the ultimate in condenser design, for they take into consideration the fundamental principles of radio, and regardless of how close together it is found practicable to place the broadcasting stations in the future, the separation between these stations is bound to be proportionately the same in regard to their frequencies, and it is upon this fact that the S.L.F. condenser is designed.

"How should I pick a S.L.F. condenser and how do I know it is truly

(Continued on page 850)

## Important S. L. F. Condenser Questions Customers Ask—and Their Answers

1. "Is it worth while replacing my present condensers and will the S. L. F. work without any other changes?"

*Yes. Because they make even spacing over the dial, spreading out the low wave stations and bringing together the high wave stations. No construction change is necessary.*

2. "How soon will some other condenser be designed which will replace the S. L. F. condenser?"

*So far as can be seen at present, this type is the final development in condenser design and should be*

*a permanent piece of merchandise.*

3. "Do S. L. F. condensers cause the high wave stations to be crowded too close together?"

*No. They place them nearer than the old style condensers but not near enough to cause interference.*

4. "How should I pick a S. L. F. condenser and how do I know it is a good one?"

*So long as the frequency curve is almost straight and a reliable manufacturer makes it, no one need hesitate to buy a S. L. F. condenser.*





## “Smith of Le Roy”

Prescription—Take One Blizzard, Fifty-Eight Snowed-In Farmers, Fifty-Eight Radio Sets, One Sleigh, Two Horses and “Smith of Le Roy”—  
Mix Well—Result, Sale of Fifty-Eight Radio Sets

WHO is “Smith” and where is “Le Roy?” There are thousands of Smiths, but only one Smith of Le Roy, Osceola County, Michigan, population, two hundred souls.

“Smith of Le Roy” came to Grand Rapids, Mich., to see a wholesale distributor of a popular make of radio and told his story of how cold the winters were; how deep the snow was in Osceola County, Mich.; how little flour and feed and cement was sold from his general store; all because the farmers could not get into town.

“But,” said Smith to the wholesaler, “I’ve got one of those little radio sets and believe me, on a cold winter night it is nice to listen to Ottawa, New York, Chicago, Davenport, or Schenectady or most anywhere else in this grand old country of ours. Certainly this is a pleasure which ought to be shared by the farms of Osceola County. Can I get into the business and what do I buy and how do I sell radio?”

The wholesaler’s business had been with city dealers and city folks but he said to Smith, “Surely there is a market on the farm for these radio sets but as for getting the orders, Mr. Smith, you will have to work out your own salvation. It won’t cost much to buy a dozen sets and the equipment. You had better stick around our service laboratory for a day or two and get the fundamentals of one model, and go home and tell your farmer friends you have the radio for them.”

A day later Smith took home a dozen sets. A week later he telegraphed for a dozen extra headphones. Three weeks later he telegraphed for a dozen complete sets all equipped with extra headphones.

Between Christmas and New Year’s, “Smith of Le Roy” called personally on his wholesaler and he told the following story, of how in nine weeks he had collected for fifty-eight radio sets from the farmers of Osceola County, Mich.

“You know, I took that first dozen radio sets home with me. I started out the next morning in my sleigh (I couldn’t use my Ford, the snow was too deep) and called on six farmers that day. There was not

one who would buy. Well, knowing the dull care I had driven away with my own set, I made up my mind that I wouldn’t let another day go by without an installation. Now, I am no super salesman. I am not even a good salesman, but I know that if I ever got a set in a home that it would never come out. So I decided on a plan I thought would result in sales. The next day I started out again. The first place I struck was Pete Jensen’s. You can guess his nationality. I knew Pete pretty well, so I said, ‘Hello Pete, I brought you your radio.’

Pete said, ‘I didn’t order a radio.’ Then I asked him, ‘Did you ever hear one.’

Pete says, ‘No, but I don’t want to buy one.’

“That is all right, Pete, I am going to put up the wire and I want you to listen to this one and I will be back in a few days,” I answered.

“I installed it and I went back in about three days and Pete met me at the door and asked me in.

‘Well, Pete, how does it work?’

‘Fine, but say Mr. Smith, Ma wants to listen-in all the time too. Haven’t you got another headpiece so she can hear?’

“Do you remember me telegraphing you for a dozen extra earphones? Well, I got the cue to what was necessary if I expected to sell the sets—both Ma and Pa wanted to listen-in. Pete paid me the money for the set right on the spot.

(Continued on Page 841)

### *Business Was Terrible*

for Mr. Smith, of Le Roy, Michigan, last winter. So he packed a dozen radio sets in a sleigh and installed them on as many farms in his county.

He let the radio germ percolate a while and went back for the sets. He didn’t get the sets but he got the money. So he telegraphed to his jobbers for a couple of dozen more sets, repeated the operation and is now eagerly awaiting the Winter and more blizzards.

# Interference Was Major Subject of Hoover Conference

No New Stations to Be Licensed—Radiating Receivers Condemned—Removal of Broadcasters From Congested Districts Recommended—Conference Outlines Measures Congress Will Be Asked to Make Into Law

**R**ADIO, full grown to its stature of a vital force in American life, has an opportunity of self-government within industry unique in the annals of the business world," declared Secretary of Commerce Hoover in addressing the Fourth Annual Radio Conference held last month in Washington.

More than 500 delegates representing listeners-in, broadcasters, manufacturers and the press were on hand to hear the Secretary's views, and to formulate with his department, principles upon which to base future handling of broadcasting and legislation.

From the viewpoint of the dealer, whose very livelihood is dependent upon the public's attitude towards broadcasting, no subject received more consideration than interference—interference of radiating sets, stations off assigned frequencies, harmonics and non-radio electrical interference.

In speaking of the major causes of interference, due to his department having to assign geographically as many as six stations to a given frequency, the Secretary declared that "in the broadcasting band there are only a certain number of paths

over which broadcast messages can travel from the station to the ears of the listener, and only one of these paths can be used by one station at a time, unless they are a long way apart. Some of these paths are used by our neighbors in Canada for Canadian stations, and ours have come to be an integral part of a single network. To speak in actual figures, for all the broadcasting in the United States, there are practically eighty-eight wave lengths which can be used at the present development of the art, and we now have nearly 600 broadcasting stations clamoring for their use.

## Aerial Highway Jammed

"The air today is overcrowded. And even worse, we are faced with the desires and demands of nearly 200 new broadcasters who wish to erect stations and to force their way into the already congested lengths. There are now more vehicles on the road than there is room for and more are crowding it. Unless something is done the whole air traffic will be jammed."

Committee No. 7 handling interference problems recommended that the elimination of radiation from

receivers already in use should preferably take the form of persuasion rather than coercion. It felt that one of the most effective means of eliminating such interference is to give publicity to methods of operating receivers in such a manner that they will not radiate. This committee also recommended that at some definite date, the manufacture and sale of all radiating receivers for broadcast reception be discontinued.

Powel Crosley, Jr., of the Crosley Radio Corporation, objected to the report claiming that it discriminated against regenerative receivers to the advantage of other types which also may radiate, due to inherent defects of design, frequently arising after the set gets into the hands of the owner. As a result of Mr. Crosley's remark, the report was modified as not being intended to discriminate against regenerative receivers as being the only type which radiates.

The maintenance of assigned frequencies within closer limits by means of frequent checking with properly calibrated instruments was recommended also by this committee. If this is done it is believed that the present separation of ten kilocycles between broadcasting stations will



Some of the 500 delegates at Washington Radio Conference photographed in the courtyard of the United States Chamber of Commerce Building, where the three-day session was held

not result in noticeable interference.

The establishment and maintenance of systematically and conservatively conducted radio clubs in all communities was endorsed for solving non-radio electrical interference, and other radio problems that have to do with the giving of the best possible radio service to the public. For example, the results obtained through the clubs in which observations have already been made, show that through papers, talks and interference committees such interference was stopped. (See page 822.)

The proposal that the broadcast range be widened to extend from 200 meters down to 150 meters met opposition from Hiram Percy Maxim, who represented the amateurs at the conference. Other opponents of the plan felt that the 5,000,000 sets now in use would be unable to receive in this range; and that it would take several years before such a reduction in range would offer any relief to the complex problem now confronting radio. No benefit proportionate to the certain damage could be found and consequently no recommendation for changing the present broadcasting wavebands was made. Further licenses will be withheld by the department pending action by Congress.

With characteristic directness, Secretary Hoover put the question of advertising up to the broadcasters present and asked them to consider a definition of "unobtrusive publicity." He pointed out "that advertising in the intrusive sense will dull the interest of the listener and will thus decrease the industry. Furthermore, it can bring disaster to the

## *Congress Will Have Last Word on Broadcasting Recommendations*

**Basis of all licenses to be the public interest as represented by service to the listener.**

**Additional licenses shall be withheld until number of stations has been substantially reduced.**

**On renewal of present licenses, stations shall be removed from congested areas and operated by remote control.**

**Prohibition of spark transmitters on amateur bands and reduction of interference by**

**telegraph and code stations. To prevent heterodyning, no further duplication of wave lengths by stations having greater power than 500 watts shall be permitted.**

**Discontinuance of the manufacture of radiating sets at some future date.**

**Restriction of direct sales service and objectionable publicity through stations.**

**Definition of a basis of settling copyright controversy.**

very purpose of advertising—if it creates resentment to the advertiser. If we can distinguish on one hand between unobtrusive publicity that is accompanied by a direct service engaging entertainment to the listener and unobtrusive advertising on the other, we may find a solution."

For convenience, the committee on advertising and publicity divided the issue into three classes:

1. Direct advertising.
2. Mixed advertising.
3. Indirect advertising.

It was the consensus of opinion that both direct and mixed advertising were objectionable to the listening public. In fact, indirect advertising could be made detrimental to the interest of both the public and

the owners of broadcasting stations. The following resolution was unanimously adopted by the committee for the guidance of all broadcasting stations:

Resolved: That it is the sense of this committee that the best interests of the listening public, of the radio industry, and of the broadcaster, are all served by that form of broadcasting which provides a meritorious program of entertainment and educational nature and which limits itself to the building of good will for the sponsor of the program whether he be the owner of the station or a subscriber utilizing its facilities.

Resolved: That the Conference deprecates the use of radio broadcasting for direct sales effort, and any form of special pleading for the broadcaster or his products, which forms are entirely appropriate when printed or through direct advertising mediums.

## *Secretary Hoover at the Radio Conference Last Month*

"I have no frozen views on radio—except that the public interest must dominate."

"There are more vehicles on the aerial roads than can get by, and if they continue to jam in, all will be stopped."

"There are two parties to freedom of speech for that matter. There is the speech maker and the listener. Certainly in radio I believe in freedom for the listener."

"The ether is a public medium and its use must be for public

benefit. The use of a radio channel is justified only if there is a public benefit."

"More division of time than at present will drive the best stations out of action and the public will be more poorly served."

"Increased power has meant a general rise in broadcasting efficiency so as to give improved all-year, all-hour service."

"Radio golf is not included in our conception of public service—that game is an exercise of skill and the efficiency of your set plus a gamble on the radio

weather. Near programs are best.

"Barring revolutionary discoveries the country must continue to be served with local stations and this is the pertinent fact in our set-up of control."

"Give each community a large voice in determining who are to occupy the wave lengths assigned to that district."

"Widening the broadcasting band to provide for more stations would invade the amateur band. No one wants to minimize the part of the youth in American life."



Resolved: That the Conference concurs in the suggestion of the Secretary of Commerce that the problems of radio publicity should be solved by the industry itself and not by Government compulsion or by legislation, and

Resolved: That the Conference urges upon all owners of radio broadcasting stations the importance of safeguarding their programs against the intrusion of that publicity which is objectionable to the listener and consequently detrimental to others in the industry, as well as to the reputation of the individual broadcasting station.

The committee on copyright relations to broadcasting, under the chairmanship of Wallace H. White,

held several stormy discussions in an effort to agree on terms and conditions of use of copyrights.

Paul D. Klugh, executive chairman of the National Association of Broadcasters, stated that the interests he represented were willing to pay a reasonable charge for copyrighted numbers used by them and that the increasing fees demanded by the American Society of Authors, Composers and Publishers had brought the situation to a crisis. E. C. Mills representing the American Society offered a plan of setting up a "stand-

ard station" based on factors such as power output, population within a given radius, location, etc., the license fees to be gaged according to the standard station. There was so much diversion of opinion between the two groups that the committee reached the conclusion that no good purpose would be served by making a recommendation upon disputed matters.

Secretary Hoover explained that the copyright discussion was outside the scope of the conference but that he hoped the delegates would avail themselves of the opportunity to discuss and find a solution for a problem of such tremendous significance.

The resolution adopted by committee No. 9 on copyright relations to broadcasting said, in effect, that the committee recognized the right of owners of copyrights to a just compensation for the use of their musical selections and urged Congress to enact legislation that will provide legal means of fair payment by broadcasting stations to composers of copyrighted songs.

In brief, the nine committee reports, all of which were adopted by the conference, embrace practically all the problems which have impeded broadcasting's progress. Although the recommendations are only advisory, to be passed along for congressional action, Secretary Hoover assured the delegates that his department would be guided by their findings, insofar as his present authority permits.

## WHY THEY SUCCEEDED



### *Matches the Set to the Customer's Purse*

**T**HE Campbell Electric Company, Palestine, Texas, attributes its success in selling radio to a policy of first ascertaining if a prospect can afford a set. "Find out if he has the money," says I. W. Campbell, "and if he has, sell him. If he hasn't, don't waste your time."—That's a sales philosophy that results in a minimum of returned sets. Campbell—

Employs three to five outside salesmen in the field during the winter season, and selects them for their sales ability rather than radio experience.

Has a habit of demonstrating at community meetings and picking out probable buyers.

Follows up public demonstrations with home demonstrations.

Sells for cash only unless he is sure the prospect "has the money."

Makes individual terms with each salesman, paying either salary or commission, or both, as he thinks best suited to make the salesman get results.

Attributes his success to "work, eternally looking up prospects and going after them."

### **Eliminating Interference Creates Good Will**

It happened this way — set users were complaining to Herbrick and Lawrence, Nashville, Tennessee, about local radio receiving disturbances. There are four possible sources of trouble in Nashville—the lighting company, the electric railway, the municipal street lighting plant and the telephone company. Of course, each disclaimed responsibility, so J. V. Roser, the radio man with Herbrick and Lawrence, set out to clear the air.

He constructed a receiver of the regenerative detector-and-two-stage-amplification type. It uses a small 18-inch loop because of its directional properties. The entire outfit weighs about twenty-five pounds and is enclosed in a sheet metal box. The panel board is of brass. The set has a wavelength of from 50 to 150 meters and has found every "leak."

# This Business of Ours

- ¶ *The Year in Retrospect—Improvements and Changes*
- ¶ *It'll be a Long Time from New Year's to Christmas*
- ¶ *Overproduction's Last Gasp Is at Hand*
- ¶ *A Housecleaning That Will Improve Matters*

A Monthly Department of Retail Radio Comment  
BY J. ANDREW WHITE

AND now we come to the end of the year. During the month of December the radio trade is at its peak—or should be, anyhow—and that carries the supposition that dealers have no time to read anything in trade papers but the advertisements.

Being a retailer myself, I know how that is; so this article is to be, quite literally, one of the passing-glance type.

But I mean that in the sense of retrospect. It is the things we have done, and left undone, that can best come under review at this particular moment.

January to December—a period initiated with high hopes and firm purposes! Which of these have been realized, and what remains. . . .

Y'know the story—the one about the old fellow with the twinkling eye who boarded the train at St. Paul and asked the conductor how far it was to Seattle. He was told that it was sixteen hundred and twenty miles. The next time the conductor came along the old man stopped him again, inquiring how far it was from Seattle to St. Paul. The train official showed impatience. "See here," said he, "it's sixteen hundred and twenty miles from St. Paul to Seattle, and it's sixteen hundred and twenty miles from Seattle to St. Paul; do you understand?"

"Mebbe so," said the little old man modestly. "But I wanted to be sure. You see, it's only seven days from Christmas to New Year's, but it's a long way from New Year's to Christmas."

So while our time is short for the assembly of good resolutions, back of us is an adequacy of things to determine what we are to be resolute about.

Let us agree, first off, cheerfully and wholeheartedly, that this most certainly has been a year of real accomplishment. Business could have been better; no doubt about that; but if the always difficult strain of setting aside the actual dollars and cents viewpoint can be accomplished, we have the paradox that business has been better.

Maybe that should read, "business has been bettered."

I hardly think anyone can successfully dispute that.

One signal accomplishment that strikes me offhand is the marked improvement in the type of advertising manufacturers are putting out. The coast-to-coast claim has practically disappeared, much to everybody's relief. It was about the best appellation of all the early offenses, for everyone, including the public, knew that on the rare occasions when cross-continent reception could be accomplished, the muck that the r. f. end of the set picked up, effectually

negated the entertainment value of the broadcasting.

And the technicalities—the laboratory door seems to have closed them in. The ease with which reception is achieved has become the spirit of the day, and that is a great step forward. What the user of the set will hear, and how well it will be heard, is the sound and sensible preaching which is certain to make many new friends for radio. Yes, there is a vast improvement in the radio industry's use of printer's ink, and while the retail field still lags a bit behind, the swing is away from exaggerated claims and more toward reliability and service. Price is so controlling a factor in retailing that the clean-up in advertising copy will necessarily be slower, but even at that it does appear that the saner merchants have come to a realization that no matter how black the type used and how loud the shouting, the fellow across the street can buy larger newspaper space and select more sizzling superlatives and it is a darn sight better to "sell" reliability at one price than hectic claims at a lower price.

## ***Business Has Been Bettered***

"While business has been better than it was in 1925," Major White says, "it has also been bettered. The housecleaning that is about to come will be overproduction's last gasp. When it is over, the stable, legitimate manufacturers will remain, stabilization will emerge and sound principles and conduct will react quickly on the present buying lethargy of the public mind."

WHICH reminds us—where is all the excitement about the gyp? Back last January, he was a menace and all this and that; well, maybe he still is, but there seems to be less of him, numerically, if nothing else. Aside from the plentitude of "For Rent" signs there are other happy evidences of departures to pastures new, and as a matter of fact he seems to have less certainty about his future prosperity than has been entertained by those who have most feared his competition. So, in that way too, business is bettered; recognition appears to be general now that the gyp

has lived by virtue of overproduction and the unwise moves of those with short bankrolls, that less of each are to be seen as the industry becomes more stabilized.

In spite of which, we have come to the end of the year still fearing the wallop, entertaining the uncomfortable feeling that, to quote one retailer, "This year's over-production will make last year's look like a shortage,"—and that the dumping which stopped business short in the past season would again demoralize things, and knock business even flatter. Now why have we been looking for this dumping? Let us bring this matter down to essentials. The primary reason is that there are something like 600 manufacturers of radio sets listed in the various trade lists, a ridiculously disproportionate number for the youth and size of the industry. So we have been expecting the unnecessary ones to unload. And they probably will.

And then what? Why, the market

will be flooded with unknown and orphaned stuff at prices representing raw material costs or less. Is that important? Annoying, I grant you, but that is about all. The public hasn't been buying in accustomed volume for so long that we have learned to grin and bear it, and it is a fair assumption that the last over-production gasp is at hand. A rapid exodus from the field of radio set manufacturing is on, and it will include hundreds of those who never knew what it was all about anyhow and who brought about, once, the condition of unstabilization that common sense assures us will not be repeated.

As I see it, the year will end better than it began, for the disappointments in volume of business will be compensated for by the clean-up of an unwholesome economic situation. When the field is left to those who legitimately belong in radio manufacturing, and intend to stick, better products, sounder distribution and protective policies in merchandising

will quickly react on the present buying lethargy of the public mind. Buyers will come trooping into the stores again seeking standard stuff at list prices, because confidence will be restored. And any way you look at it, that's the one thing our business needs right now more than anything else.

Of course, if those sets which are looked upon as standard are included in this season's dumping, that will be another story. Personally, I look for some unloading, but it can come only as a move of desperation from relatively few quarters. The production figures made public by some of the leaders early in the season certainly have not been held to; the experienced manufacturers are keen enough to know that retailing has been running at about half the volume of last year and it is a safe assumption that the grandiose plans of many have been shaved down as the season progressed. So the shadow of inventory may be of much thinner substance than even the most optimistic of us expect. Here and there a manufacturer will be

squeezed and price-cutting will break out in the retail field, but I feel somehow that the so-called standard makers of sets know too well the penalty of creating public uncertainty about the value of their product that this year they will turn to unloading only as the very last resort. It's a long, slow climb back along the road of lost prestige.

Other things, too, which this year of transition seems to have settled are of major importance. Overabundance in types and styles of receivers is less evident, and with it the dealer has made more sensible selections and tries nowadays to have one set representing each step in the price range instead of carrying a stock comprising every known and well advertised make in the universe. That this type of merchandising was virtually unknown when we turned the first leaf of the calendar certainly is no secret, and to it may be attributed the shaky feeling which led to many drastic reductions when the stock of this or that got too heavy, and along with it the necessity for the boys behind the counter having to change their "story" as to the best-set-on-the-market almost daily. Applying the same idea to the distributors, we find the jobbing end of the business doing things better, too, with concentration on fewer lines with the trend toward territorial protection and exclusive representation.

THEN this matter of selected dealers and the so-called franchise; that was merely being talked about as the year opened. It's real now, and growing.

In fact, radio is beginning to look like an industry. Another year like this one, and we'll be getting somewhere in the matter of trade practices. Meanwhile, certain it is that radio is no longer looked upon as anybody's playground.

On the selling side—what? Well, we had the familiar Summer Slump offsetting campaigns, and learned little, except confirmation of the belief that radio is a seasonable business, and one with a mighty short selling season, too. A lot of discussion also of the business awaiting the outside salesman who would take the set into the home of the prospective customer, with little actually done along this line, but sufficient to determine that here is a field with quite real possibilities. Then the truly intelligent attempt to reach the farmer market; successful, too, as I understand it, although I had no personal

East  
Twelfth  
Street  
at  
Walnut


The Newman-Stern Co

East  
Twelfth  
Street  
at  
Walnut

---

OHIO'S GREATEST SPORTING GOODS STORE

First  
in  
Radio



A SAFE  
Place  
to Buy

## Standard RADIO SETS

### ON OUR Easy PAYMENT PLAN

You certainly need no longer forgo the manifold pleasures of radio. A small down payment will place a set in your home and you can "listen in" while you are paying the balance on easy monthly terms. The sets listed below are standard. By paying at this Pioneer Radio Department you are getting the benefit of our long years of experience. Newman-Stern radio installations and the service that goes with them are as good as insurance on your purchase. We are very glad to answer questions.

Name and Model No.	Description	PRICE CASH	PRICE- INSTALL- COMPLETE	DOWN PAYMENT
Radiola 25	6-Tube Superheterodyne, loop operated, dry cells throughout....	\$160.00	\$191.60	\$38.80
Radiola 28	6-Tube Superheterodyne, loop operated, dry cells throughout....	260.00	287.95	57.60
Radiola Special	Completely self contained Super-heterodyne Console.....	255.15	269.50	50.00
Radiola VIII	Completely self contained Super-heterodyne High-Boy.....	340.00	353.15	71.60
Radiola III	2-Tube set, a remarkable little long distance getter.....	15.00	36.15	7.50
Radiola III A	4-Tube set, regenerative, dry cell operation.....	35.00	64.25	12.80
Six-Seventy-One	6-Tube, one control, tuned Radio Frequency set.....	70.00	127.00	25.80
Freshman 5F2	5-Tube tuned Radio Frequency set.....	39.50	92.75	18.50
Freshman 5F4	2-Tube De Luxe model, tuned Radio Frequency.....	49.50	102.75	20.00
Freshman 5F5	5-Tube model with built-in loud speaker.....	60.00	100.25	20.00
Freshman Concer	5-Tube De Luxe model with built-in loud speaker.....	75.00	114.25	22.80
Freshman 5F6	5-Tube Table Console with built-in loud speaker.....	82.50	121.75	24.50
Freshman Franklin	The Famous Franklin Console, 5 tube set.....	115.00	154.25	30.00
DeForest F5M	The new 5-tube set with built-in loud speaker.....	110.00	149.25	30.00
Grimes BG	A 3-tube reflex set operating on dry cells.....	59.50	94.05	18.50
Grimes 4DL	A beautiful 3-tube reflex set.....	100.00	139.20	28.00
Atwater Kent	The 5-tube compact or repair model.....	80.00	131.75	26.00
Atwater Kent	The 5-Tube compact dry-cell operated model.....	80.00	117.95	23.00
Brunswick 60	Combination Phonograph and Superheterodyne.....	400.00	408.80	80.00

\*Prices in this column include all necessary accessories, erection of aerial, if required, installation in your home, instructions on operation and thirty days' free service.  
 †IF RADIO LA LOUD SPEAKER IS DESIRED ADD \$5.50 TO THIS PRICE. REGULARLY SUPPLIED WITH MAJESTIC LOUD SPEAKERS.

Freshman "B" Eliminator on  
 Pay \$22.50 deposit, try it on your set 3 days and if  
 not entirely satisfactory return it to us for full credit.

## FREE TRIAL

This is an excellent example of a time payment ad, giving the customer full information about the payments on a number of receivers. Carrying out the idea one column further, the amount of each monthly payment could also be listed.



experience with the campaign itself.

The universal acceptance of time payments is cause for congratulation also, although this was forecast with the early recognition that radio had set itself up in competition with home recreation devices, all of which are sold that way. The companion practice of accepting trade-ins does not seem to have made equal progress, but it is remarkably well established at that, considering the short space of time and the fact that a vast majority of dealers were all set to resist this policy as long as possible.

To me, these steps are all progressive. I will agree with many that all are not universally approved, but something had to be done to determine on what basis the industry was to conduct itself, and that at least has been settled; which helps a lot, for the thoughtful merchant can set his house in order and lay out definite future plans if he knows what the trade practices are to be. We know that much now, anyhow.

THE year's changes in merchandise are not startling exactly, but they are marked. It is difficult to realize without reflection that the one-dial and two-dial control so long awaited has thoroughly established itself, and only by comparison can it

be appreciated how great has been the new receivers' improvement in quality. These two features unerringly point the way for future design and thus settle the important matter of the bugaboo of "revolutionary" changes being whispered about and unsettling the public's normal desire to buy—ending the waiting until the "new" thing eventually makes its appearance. It looks, too, as if oscillating receivers are to be legislated out of existence. Fine!

In the loudspeaker field, horns were going strong last January; that, too, is hard to realize with the present tendency all toward cabinet and concealed types and cones, with a consequent general improvement in quality that makes the passing of the unsightly horn cause for no regrets.

And don't forget, we now have the devices we talked about for so long—battery eliminators that work! Here is an item that live dealers are going to cash in on; they can be sold to old customers and new ones, and if handled intelligently will bring many a dollar to the cash register after the height of the season rush has died away.

Finally, the matter of tubes. Remember how great was our concern about those of bootleg variety? Only a year ago, really; it does seem

longer I know, but it isn't. That one-time problem seems to have taken pretty good care of itself, but better than that, the raids of the buccaneers must have been in a measure responsible for bringing out the new types which have helped accessory sales and given us something to talk about in a dull season when the refurbishing of sets has represented a volume of business about equal to the sales of new receivers.

BUT if I should be asked to point out the one unmixed blessing—one thing about which enthusiasm should be unbounded—it is the improvement in programs. After all, as a steady advocate of "It is the program that sells the sets" slogan, congratulations certainly are due the broadcasters for the stability they have given to their end of the game. The year literally opened with a storm of protest from the theatrical interests; the Victor program had emptied the theatres on New Year's night, normally one of the best in the year. Broadcasting was to be banned; prohibitive clauses were rushed into artists' contracts and there was the devil to pay all around. See what has happened! The concert managers have capitulated; bitterest

(Continued on Page 842)

### How a Five and Ten Cent Store Displays Radio Parts



Here is one of the many radio departments maintained by the Kresge Company in its chain of five and ten cent stores. The radio dealer can get many good tips by studying

the merchandising methods of merchants in other lines. A big factor in the success of the Kresge radio departments is the way in which radio products are displayed. Note

the glass cases, conspicuous prices, the display of individual parts against a black background, and the row of electric lights to bring the parts into prominence.

# Bringing Women Into the Store

Laube of Rochester, N. Y., Has an Excellent Way of Getting Club Women Interested in Radio—Pays Club Treasury Fifty Cents for Every Woman Who Attends His Radio Concerts

WHO EVER heard of a radio merchant paying a group of women the equivalent of half a dollar apiece for visiting his store and listening to an education and musical program which he had arranged? It sounds like foolish merchandising but that is precisely what G. Fred Laube of Rochester, N. Y., is doing twice every week in an effort to educate the woman buyer to the usefulness and desirability of radio. And he is obtaining great results!

## Woman Has Final Decision in Home Furnishings

Laube appreciates the persuading force of the woman in the home and realizes that in the final analysis, it is the woman who determines what the furnishings of her home shall be. He has recognized radio as a distinctly home instrument and for these reasons is appealing to the woman. Laube's store carries no parts, manufactured receivers comprising his entire stock. Consequently, he has changed the exclusively masculine trade which characterizes the parts business and is catering to a fairly equally divided class.

He first used the 50-cent payment idea in connection with his electrical business, of which the radio department is a part and consequently was able to apply to radio merchandising all the experience he had gained in the other branch of his business. His idea is simple. He or his store manager telephones the secretary of a woman's club or church aid society of the city and invites her organization to attend a program of talks and entertainment which he has prepared. He adds that in return for their time he will turn into the club's treasury 50 cents for each member who attends. He stipulates that at least 25 must attend. So great has been the response that over 2,000 women have visited his store in this manner and his semi-weekly dates are booked many weeks in advance.

The hour is set at two-thirty in the afternoon, a time when the average woman is most likely to be at leisure. The room in which the women are entertained is one of the regular electrical fixture show rooms and is fitted up in model living-room style which creates an atmosphere of homeliness and comfort that is very appealing. A short talk by Mr.

Laube or his store manager on the growth of the company usually opens the program. At one meeting samples of radio apparatus purchased from the five-and-ten-cent store were exhibited and compared with that found in the receivers he carried. The talk which accompanies the demonstration is, of course, purely non-technical and merely tries to drive home the message of quality and reliability. The latter part of the meeting is given over to a concert given from the local station.

## Women Always Linger to Look at Displays

Interest is found to be very keen and many intelligent questions are asked. The meeting is kept on a highly dignified plane, no selling talk being injected. The women do not rush out of the store immediately after the meeting, but seem desirous of looking over the stock and asking more questions. This interest leads to eventual purchases and thereby proves the scheme to be a highly efficient form of advertising.

This is the sort of an afternoon the women will not soon forget and perhaps months after they have at-

## A Practical Application of an Idea—

On October First, *Radio Retailing* presented to the trade, an idea to interest women in radio, which consisted merely of broadcasting a weekly hour by members of prominent women's organizations, at which time other club members and interested women might hold "radio teas" to hear the programs, and which programs, also, dealers might use as demonstration periods.

On November 17th, Station WRNY, the Hotel Roosevelt-Radio News Station in New York City, gave a "radio reception" at the Hotel Roosevelt for members of the City and State Federations of Women's Clubs and it is estimated that in addition to the large number of women present, at least 400,000 women's club members listened-

in via radio. Also, the New York City Federation of Women's Clubs has passed a resolution to broadcast a weekly "Women's Club Hour" through Station WRNY, and has appointed Mrs. Edgar Cecil Mellede as chairman.

In addition to the list of stations co-operating in this movement, which appeared in *Radio Retailing* for November, the following stations stand ready to help: KGO, the General Electric Company, Oakland, Cal., which is already sending out programs by the National Federation of Women's Clubs; KGW, The Oregonian, Portland, Ore., of which Richard V. Haller is director; KFDJ Oregon State Agricultural College, Corvallis, Ore., W. L. Kadderly,

director, and KUSD, University of South Dakota, Vermilion, S. D., B. B. Brackett, director.

Now this dealer, G. Fred Laube, of Rochester, N. Y., has been using, for some time, the members of the various women's clubs of Rochester as good prospects. He has been paying into the club treasuries, 50 cents for every member who attends one of his store radio talks and demonstrations. If the programs used as the basis of the demonstrations, were broadcast by members of the same club whose other members were listening at Laube's, it is a pretty safe assumption that radio sales to those club members would be just about one hundred per cent greater, faster and easier.

### "Radio Teas" in Westchester County

Throughout Westchester County, New York, about 35 branches of the League of Women Voters plan to hold "radio teas" at 3.40 p.m., Friday, December 11, to hear part of a program from WGBS, New York City, given under the auspices of the New York League of Women Voters. The particular number on the program which the League members desire to hear is an address by Professor Charles Hodges of New York University, on "The World Court."

tended this meeting the information they obtained there will bear fruit. Certainly after such instruction in what is to be desired in radio, no wife would be satisfied with a radio unless she helped her husband choose it. And she would naturally choose according to the information she obtained at Laube's with the result that Laube's would be the store most likely to get her business.

#### Exercised Great Care in Selecting Stock

This novel idea in radio merchandising is indicative of the resourcefulness and progressiveness of Mr. Laube and, in a way, reveals why the Laube Electrical Corporation is Rochester's only electrical department store. He started in business fifteen years ago and started selling radio only two years ago. Mr. Laube said: "We were very careful about going into radio for we knew it was a new field and new fields always merit careful investigation. We realized that there were all kinds of receivers on the market together with all kinds of parts. We began by stocking a line of what we considered the most reliable parts and took on the product of the largest radio establishment in the country hoping in that way to pick the most satisfactory and reliable. For we realized that the fine reputation and prestige we had built up must not be jeopardized by this new development. As a result we enjoyed reasonable success.

"Then, last year, we took on a line

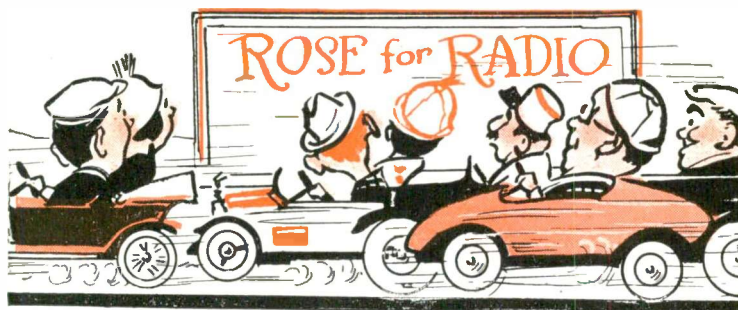
of five-tube receivers manufactured by a nationally known company."

Another sales method which Laube uses and which is gaining in favor at present is marking the price of the receiver complete with all necessary accessories on the price tags. This scheme, he says, creates good will because the customer does not feel he is being fooled by the comparatively low price of the receiver itself. He has also found that more sales are made through the use of older salesmen than with younger fellows. He believes the public have

more confidence in older men and feel that whatever the older men says is tempered by experience, and unexaggerated by youthful enthusiasm.

Laube's slogan is, "Quality with Service," and his guiding principle states that every merchant should give the customer an incentive for coming into his store. The afternoon lectures and entertainments are doing much to create this incentive, but in addition he is keeping his store constantly before the public through liberal use of billboard and newspaper advertising.

### WHY THEY SUCCEEDED



### Billboard Advertising Keeps Name Before the Public

**D**IRECT-BY-MAIL solicitation to a list of selected prospects is the reason underlying the success of the Rose Radio and Electric Supply Company, New Orleans, La. Rose succeeded because he—

Uses billboard, newspaper and direct-mail advertising, stressing a personal invitation to come to the store.

Gets names of prospects by sending letters to those who have bought sets, asking for names and addresses of friends.

Gets more names by printing return coupons in his newspaper advertisements.

Gets more names by taking space at radio exhibits and giving away inexpensive souvenirs, for which the recipient must sign his name and address.

Got into radio early and built up a reputation for service and results.

Sells a complete line of parts as well as sets, and sells only sets that give good distance reception.

Makes demonstrations in the prospect's home.

Installs sets and makes a charge for it, based on time and material.

Gives free service for sixty days, but charges for all calls after that.

Accepts time payment contracts, getting 20 to 30 per cent down and the balance in ten to twelve months.



# Indianapolis Broadcast Listeners Solve Own Local "Interference" Troubles

Organization of Laymen Numbers 1,500.—Traces Radio Disturbances—Maintains Paid Trouble-Shooters—Arranges Meetings for Education of Set-Users to Eliminate Radiation

*"The most effective step to eliminate radio reception interferences is to educate broadcast listeners in methods of locating the source of interference and in its prevention, or to take the necessary co-operative steps to have the interference eliminated.*

*"This education of and action by the listening public can be brought about . . . through the formation of local broadcast listeners' clubs."*

THE above passage is quoted from the resolution on radio interference adopted by the Hoover Radio Conference which has just completed its labors at Washington, and points out a practical way for the solution of local interference problems through the co-operation of the broadcast listeners themselves—a plan which has been carried out with markedly successful results by the Broadcast Listeners' Association of Indianapolis, Indiana.

The Indianapolis body was formed by local broadcast listeners in February of this year, to rid the neighboring ether of persistent interference which was disturbing radio reception. Starting with thirty-three members, the enrollment has now grown to a total membership of 1,500 in Indianapolis itself, besides branches in nearby Indiana towns. An initiation fee of 50 cents (and later \$1) per member has been charged, and within the last thirty days, regular association dues of \$6 per year have been applied, this money going to pay for the services of two hired "trouble-shooters" whose duty it is to respond to telephone calls and to locate and eradicate trouble.

Membership in the Indianapolis Broadcast Listeners' Association is thoroughly representative of the local radio listening public. The president, H. A. Luckey, is an insurance man and radio amateur who has given tremendously of his time and effort to make the body a suc-

cess. The vice-presidents are respectively the auditor for a local printing concern, and a motor-car executive. The treasurer is a sales manager and the secretary is a newspaper man. Among the members of the association are lawyers, bankers, physicians, ministers, merchants and business men, all co-operating with an intense and unselfish interest in radio and the improvement of radio reception conditions.

## City Divided into 80 "Interference Districts"

More than one thousand cases of interference have been investigated and solved or reported on, since the formation of the association. One of the first steps taken by the new body was to divide the city of Indianapolis into some 80 "interference districts," with a member of the association to act as "chairman"

of each district. Broadcast listeners in these districts were instructed to report their troubles to their respective district chairmen, who themselves undertook to locate the trouble or to call in special technical help from the association headquarters.

Meanwhile several "trouble-finding" loop outfits had been developed by members technically inclined, and with these sensitive loops carried in members' automobiles, directions of interference waves could be quickly mapped, and the source itself located by noting the intersection of the lines on the map.

Sources of bad interference which have been traced down by the trouble squads include: Sparking brushes on motors and vacuum sweepers; violet-ray and X-ray machines; leaking insulators and transformer bushings; broken street-car rails; railroad block signals; high-tension wires rubbing against trees; and spark sets in the hands of boys.

A gratifying aspect of the interference district chairman's work, however, has been the prompt and friendly co-operation of all owners of the apparatus causing the trouble, and their willingness to help in any way to eliminate the trouble. In no case has the attitude of the owner been other than helpful when told that the Indianapolis Broadcast Listeners' Association men had traced trouble to his particular piece of electrical apparatus.

"Would you mind coming over and listening-in on this radio set a minute?" is the usual form of polite approach to the owner or operator of offending equipment. Then, after he has listened for himself, the owner or operator is told: "You see, old man, we have traced that noise to your machine. It's causing disturbance like that to radio listeners all over this part of town. Would you mind letting us see if we can eliminate this trouble, without interfering with the operation of your equipment?"

Invariably the unwitting inter-

### **How Radio Dealers Can Form and Help a Local Listeners' Club**

1. First interest three or four popular fans in idea of a listeners' club.
2. Show them this article, describing Indianapolis experience.
3. Keep in background, but join and have salesmen join and boost.
4. Distribute membership applications to all store visitors.
5. Give \$1 membership with each set sold.
6. Help with interference-finding equipment.
7. Help plan meetings and get out-of-town radio men as speakers.
8. Display listeners' club notices in store and in newspaper ads.

ferer becomes apologetic, explains that he "had no idea he was causing all that disturbance," and tells the trouble crew to go ahead. Some owners have themselves gone to considerable expense to replace or rearrange equipment that was giving trouble. The local power companies and other utilities have been particularly quick to co-operate in eliminating trouble-creating apparatus from their systems.

While the plan of volunteer district chairmen proved satisfactory in the early days of the association, with the growth of the body it has been found possible to have paid trouble-shooters as already explained, who relieve members of responding to trouble calls. All reports of interference are received at the association's downtown headquarters, and from here the trouble men are dispatched by automobile. The trouble inspectors receive \$1 per hour for the time they work.

Monthly meetings of members and the public interested in radio, also serve to eliminate interference by instructing users in the proper operation of their sets. Demonstrations of sets oscillating and sets properly tuned are made before audiences numbering 300 to 400—audiences, by the way, composed almost wholly of adults and including many of the city's well-known business men. These monthly meetings have also been addressed by representatives of radio set manufacturers, battery firms and local utility companies. The meeting-place for these sessions has been donated without charge by the Hotel Severin.

### How a Listeners' Club Helps Local Radio Dealers

1. Clears ether of local sources of interference.
2. Maintains paid troublemen, ready on call.
3. Resulting good reception reduces dealers' service calls and returned sets.
4. Keeps radio before local public through newspapers.
5. Provides forum for instructing set-users and perpetuating interest.
6. Serves as clearing-house for local radio activities.
7. May supervise and improve local broadcasting.

Full support and co-operation has been given the Broadcast Listeners' Association by the radio dealers and jobbers of the city. Practically every firm handling radio is represented by two or more members of the association. Certain retail dealers have also contributed to the work of the association and benefited their customers by offering with each radio set sold, a membership in the radio listeners' association. Other dealers have included in their own newspaper advertisements copy of the association's form of membership application. The Indianapolis newspapers, have also co-operated with liberal publicity regarding the association's meetings, and interference-finding activities.

Under the auspices of the Listeners' Association a radio show was held at the Cadel Auditorium, Indianapolis, September 21 to 26. This very successful and creditable exposition was participated in by seventy-one exhibitors. The show paid its way, except for a small deficit due the exposition manager, who was the only paid official. All officers of the Broadcast Listeners' Association worked wholly without pay.

The Listeners' Association has also had under consideration the taking over of local broadcasting entertainment. With the increasing demands of the Society of Authors, Composers, and Publishers through local attorneys, and the imposition of heavy license fees for copyrighted music when broadcasted over a public station, the point has been made that if the Listeners' Association operated the station for their own entertainment, or if it were conducted under their "auspices," such operation no longer becomes operation for profit but a private entertainment for the benefit of the members themselves located throughout the city. The association's attorneys feel that under such circumstances, no exorbitant "public performance" claims could be made by owners of copyright compositions.

Members of the Indianapolis Association have plans under way to extend the present scope of operation to other cities. Branches of the Indianapolis body are now in operation in nearby towns, with memberships as follows: Fort Wayne, 500; Terre Haute, 500; Portland, 200; Decatur, 100; Greencastle, 100.

## Application for Membership in Broadcast Listeners' Association, and Form of Interference Report Card

**Application For Membership**  
In the  
**Broadcast Listeners' Association of Indianapolis**

I, the undersigned, owner or operator of a radio receiver, am in sympathy with the determination of the Broadcast Listeners' Association of Indianapolis, to "clear up the air" for the promotion of better radio reception through the elimination of avoidable causes of interference, and desiring to co-operate with other broadcast listeners in this general effort, I do hereby apply for membership in the said Association and agree to pay Fifty (50) cents with this application as my initiation fee. (Please give information requested below.)

Name William L. Stevenson  
Residence Address 3447 N. Illinois St. Phone Tr. 8643  
Business Connection Lawyer Business Phone Wash. 4874  
Make of Receiver Supradet Type of Circuit \_\_\_\_\_  
Regenerative of Non. Reg. No. Number of tubes 6  
Dry Cell or Storage "A" battery Dry cell Aerial or Loop loop

**Broadcast Listeners Association of Indianapolis**

Name George Lambert (Res. Phone No.) North 4637  
Res. Address 346 W. Wash. (Type and Number of Tubes) 31 Reflex

Date	Hour	Station*	Remarks
11-21-25	9:35 pm	WGN	Persistent howling to north east of set.

\* Tune to several stations and put down the station where interference comes in the loudest. † Loop sets give compass line of greatest intensity.  
Mail to Bailey Fesler, 2126 Central Ave., Indianapolis, Ind.

Indianapolis is estimated to have a total of 20,000 owners of radio sets and already a complete census of the equipment of the 1,500 who are members of the Listeners' Association is available through these membership application cards, in filling out which, the applicant is required to list and

describe his home radio equipment. The initiation fee of the Association, previously 50 cents, was recently raised to \$1. These cards are distributed to all members of the Association, to be filled out and mailed into the Listeners' Association headquarters, in reporting cases of persistent

radio disturbance. Similar cards are given out at the regular monthly meetings of radio fans. With a number of such cards in hand, all relating to the same source of trouble, the cause can often be conjectured and located, even without test, and eventually eliminated altogether.

*from strength to strength*



WORLD'S LARGEST  
MAKERS OF  
Neutrodyne Radio

**FREED-**





*advancing!*

Freed-Eisemann sales from June, 1925, to the present are *more than double* those for the same period last year.

*Satisfied Dealers  
and Users Did It!*

*Freed-Eisemann Radio Corporation*  
MANHATTAN BRIDGE PLAZA, BROOKLYN, N. Y.

**EISEMANN**



*Here Is a Department-Store Radio-Department That Holds*

## No Cut Price Sales

**Hale Brothers of San Francisco, for a Long Time Operators of Broadcasting Station KPO, Open a Retail Radio Section That Proves Department Stores Can Merchandise Radio on a Quality Basis**

**S**TARTING on a policy of no price reductions and no special favors, frankly stated and featured in the advertising, with the reputation of the store and the recognized value of standard equipment as the sole inducements to buy, Hale Brothers of San Francisco recently opened a radio department under the supervision of Major Nathan Levinson.

The set-up of the radio department is an attractive one. It is located on the sixth floor of the store, centering about the Pompeian Court, which was formerly occupied by the lunch room and is a familiar and popular feature with the public. This afforded a space already decorated with an outlook over the roof garden and with a central fountain capable of special illumination and many picturesque treatments.

Another attraction is the broadcasting station, KPO, known to all who are interested in Pacific Coast radio. The excellent record of this station has long associated the idea of quality in radio with Hale Brothers—and the reputation of the radio sales department was in reality well

established long before its existence, because of the widespread interest in the store created by the station.

The broadcasting equipment and studio are housed in glass-walled compartments at one end of the floor, so that the interior is visible to those in the shop. As broadcasting is carried on from 10:30 a.m. until 10:30 p.m. there is a continuous entertainment provided. This attracts many customers from other departments of the store and creates a steady traffic past the radio display, equivalent to the passers-by in front of a store on the street level.

### Each Make of Receiver Has Separate Alcove

The stock has been divided off into sections of related materials, each arranged as a separate display, so the effect of the department as a whole is that of a small exposition. This is enhanced by the signs on the valences over each alcove, giving the name of the make of equipment featured in that section. All the care and attention which goes into the making of an attractive display at an exposition has been put into these

groupings, with rugs, drapes, flowers and similar decorations.

The individual treatment of the various makes of sets is carried further and one salesman placed in special charge of each of these features. Major Levinson believes in divided and specialized responsibility and has assigned the various duties of the shop each to a separate salesman. All salesmen sell from any department, but it is the duty of the man in charge of radio parts, for instance, to see to it that the stock is kept up and that orders are placed as required. Each day he records the sales made in his division, the present condition of the stock and what should be renewed or purchased. These items are also noted by the stockroom and a separate report made which also goes to Major Levinson and serves as a check on the salesman's work.

This division of work is carried further, the sales force not undertaking any part of the outside work. They deal with the customer in the store, but after the set is once sold, the installation, servicing—in fact, all further relations with the cus-

tomers are in the hands of the service department.

No home demonstrations are given. Three soundproof booths are provided for store demonstrating and here all makes of sets and loud speakers can be tried out in any combination. Major Levinson believes that this, combined with careful installation by the company in the customer's home, will give complete satisfaction—and will eliminate much of the grief in radio selling. More salesmen would be required to handle the same turnover in sets if home demonstrating were adopted as a policy, and fully double the investment in stock.

No trade-ins are allowed. In this connection, Major Levinson has studied the history of the automobile industry and believes this would now be a great deal better off if the practice of accepting the old car as part payment for the new had not been originally adopted. The net result to the customer, in his opinion, is a higher price on the new article to cover the losses which must be suffered in accepting old articles for which there is no market value. There are regular channels through which second hand materials can be sold—and the customer should undertake his own sale, in Major Levinson's opinion, and not burden the store with the extra expense.

No cut price sales are indulged in. This assures the customer that the set he buys now will not later be sold at a reduction and so, in a measure discredited a month later. The advantage of radio, Levinson

**Department Stores  
Need Not Cut  
Prices**

in the opinion of the radio manager of Hale Brothers, San Francisco's great department store. Department stores can sell radio as quality merchandise and receive full prices, the owners of broadcasting station KPO have found.

Quality merchandise at full prices, well advertised and well displayed, is the entire selling scheme of this Pacific Coast dealer.

believes, is that it is an article which is bought, not as an item of economy, but frankly as a luxury—and he does not propose to rob it of its position of advantage by emphasizing the price element. If the quality and service are there, the customer is willing to pay whatever is a fair price for the article, as has been demonstrated in other lines of merchandise. The radio industry, he says, has itself to blame if it makes itself into a field for bargain hunters. In consequence, no "sales" will ever be staged from the Hale radio department.

There is no "unlimited free service." A definite service policy has been adopted and is thoroughly understood by all salesmen—that is, that three service calls will be given at any time within the first thirty

days after the set is sold and after that time a charge will be made for any service given. This insures that the set shall be in good working order in the customer's home—and then leaves the responsibility up to the purchaser. Also, it means that it is possible to calculate the sales and service expense and the profit made on a set, within thirty days' time, without leaving an indefinite drain upon the service department for the future.

So much for what is not done. What is done is to place the full reputation of the store behind the department. Only quality goods are sold and the "satisfied customers" policy is carried out to the extent that sets are not sold unless the store can make the installation. For this reason, out of town business is not greatly encouraged.

With the Statewide advertising resulting from the broadcasting station, there is a certain amount of business which comes in through the mail and through visitors in town. Where this is a simple matter to handle or comes from a district not adequately served by local dealers, every effort is made to give satisfaction, but in many cases, the prospective purchaser is urged to buy locally in order to secure local service.

On the basis that a department store is supposed to carry everything, a full line of parts is kept on hand. These are not featured, however, and the investment in them is not allowed to rise above 15 per cent of the total investment.

## New Radio Books to Read and to Recommend

### 1925-6 Radio Advertisers' Data Book

*Compiled and published by Arthur Rosenberg Company, Inc., New York City. 56 pages. Price, \$1.*

The contents of this booklet, designed for the information of radio manufacturers who advertise, include advertising rates, circulation and other data regarding radio consumer and trade publications, as well as of all the periodicals of the allied trades, including automotive, electrical, hardware, music, talking machine and sporting goods. The radio dealer and jobber sales situation, and the radio manufacturer's merchandising and advertising problems are treated both editorially and graphically. Several of the more thorough radio trade surveys are summarized, and a picture of the industry's present development and estimated future growth is presented. The United States, Canada and the foreign mar-

kets are covered. In the newspaper section, over three hundred papers are listed, giving the circulation and radio rates.

### Economics of the Radio Industry

*By Hiram L. Jome, Professor of Economics, Denison University. A. W. Shaw Company, Chicago, Ill. 332 pages. Price, \$5.00.*

The aim of this book is to show how the radio industry is working out its problems of business organization, marketing, finance, and relations with the public. The function of the radio, so the book says, is to render a distinct service of communication, and the author compares it with other recognized agencies of communication. Some of the subjects treated include the development and present extent of the radio industry, a consideration of the most effective ways of making this

service available to the people, and a discussion of marketing and retailing radio receivers.

### Effective Direct Advertising

*By Robert E. Ramsay. D. Appleton and Company. New York City. \$5.00.*

This book will prove valuable to any radio manufacturer, wholesaler or dealer who wishes to stimulate sales through the use of circular letters, booklets, broadsides, catalogs, house organs or any other form of direct advertising.

Mr. Ramsay gives facts and figures that will help in the planning and producing of all forms of circular matter. Writing the copy, determining the appeal, selecting the physical form, choosing illustrations and paper, getting proper printing, compiling the lists—these are just a few of the subjects covered in this handbook. It will prove valuable to anyone who advertises.



# What the Electrical Inspector Asks of Radio Installations

## The Requirements of the National Electrical Code Concerning Antenna and Ground Construction and Wiring for Receiving Sets

By VICTOR H. TOUSLEY

Chief of Electrical Inspection, City of Chicago,  
Member of Electrical (Code) Committee, N. F. P. A.

RADIO first appeared in the National Electrical Code for 1911, under the heading of "Wireless Telegraph Apparatus." The rules thus applying were rather brief and, while not differentiating between receiving and sending stations, were apparently based on the idea that these two stations would usually be combined in one. The aerial was required to be grounded at all times when the station was not in use, by "not smaller than a No. 4 gage copper wire." A 100-amp. knife switch was also required to join the aerial to the ground connection!

These rules remained practically unchanged in the Code, until the 1918 edition, when they were expanded. The size of ground wire was reduced from No. 4 to No. 6. A section was added requiring that "transformers, voltage reducers, or similar devices must be of approved type," as well as the 100-amp. knife switch and lightning arresters.

The 1920 Code, however, began to recognize stations for "receiving only," and the requirement of a grounding switch was modified in this case to permit the use of a grounded short-gap vacuum type lightning arrester which must be mounted five inches from the building wall. Where the aerial was grounded, however, a knife-switch the blade of which had a periphery of not less than  $\frac{3}{4}$  inch and a break-separation of at least five inches, was required. Slate was not approved for the base of the switch.

With the 1923 edition of the Code, radio was given a complete section by itself. The rules were greatly expanded to cover both receiving stations and transmitting stations and most of the general details of radio installation were regulated. Aerial conductors were now called

antenna, and their separation from high-tension and trolley wires was required. Such antenna, while not prohibited near low-tension wires, were required to be of such proper durable construction as to avoid a cross with these wires.

Devices for replacing the antenna with lighting-circuit connections were also now recognized in the following: "The preceding paragraph 9 b and c shall not apply to light and power circuits used as receiving antenna, but the devices used to connect the light and power wires to radio receiving sets shall be of approved type."

### Lightning Arrester Then Required

Development in the method of bringing antenna into the building was also recognized and the previously required lead-in wire of  $\frac{3}{4}$ -inch periphery was substituted by a No. 14 copper wire or a No. 17 copper-clad steel wire with no separation from the building required. Ordinary porcelain tubes for the lead-in wire were also accepted. Protective requirements for the antenna were also reduced and a lightning arrester which would operate at a voltage of 500 volts or less was accepted.

The requirements for the grounding conductor were also reduced and a No. 14 copper, or No. 17 copper-clad steel wire accepted. It could be run either inside or outside the building. It was also made permissible to ground the system on any convenient ground, except gas piping. This allowed the use of a steel-building frame, steam pipe, or other available ground.

The specifications for transmitting stations were also materially modified but, of course, made much more

strict than for receiving stations. The five-inch separation from the building was retained and the insulation of this wire and its grounding switch stipulated.

The latest, or 1925, edition of the Code retains generally the form and requirements of the 1923 Code. There are some changes, however. The porcelain tube through which the lead-in wire passes may be substituted for "by means of an approved device designed to give equivalent protection."

Probably the most important change in the 1925 Code is indicated by the new rule 3702 O which reads: "Storage-battery leads shall consist of conductors having approved rubber insulation. *The circuits from storage batteries shall be properly protected by fuses or circuit-breakers rated at not more than fifteen amperes and located preferably at or near the battery.*"

It will be noted that this rule requires fuses for *all* storage batteries both A batteries and B batteries.

Under transmitting stations, a modification has been made for stations having continuous-wave sets of 1,000 watts or less input to transmitter. The separation of the switch from the building and the creepage and air-gap distance of insulators and entrance tubes is cut down from five inches to three inches. The capacity of condensers used for the protection of supply systems is cut down from  $\frac{1}{2}$  microfarad to  $\frac{1}{4}$  microfarad capacity.

With the present very general use of radio sets, the necessity for providing connections for radio in the construction of new buildings is becoming more evident. It is now quite common practice to provide antenna and ground connections for each apartment in new apartment buildings. While this construction

is far from becoming standardized, one method now in quite common use may be of interest.

In a three-story, six-apartment building, for instance, a bare copper wire is supported on porcelain cleats or knobs and run on the upper side of the top floor ceiling joists. This brings the antenna wires inside the building in the space between the ceiling of the top floor and the flat, sloping roof. There is generally sufficient room to get a proper length of antenna with some separation between the several antenna wires.

No. 14 rubber-covered wires are run from this antenna down through the partitions to an outlet in each room. These wires are insulated by knobs and tubes. A No. 8 rubber-covered wire is carried common to each apartment and grounded to a water pipe. In some cases two single-contact receptacles, and in other cases a double-contact receptacle, is attached to the wall. The usual type of iron box is not, of course, used but where a box is desired it can be constructed of "transite" board or some similar material.

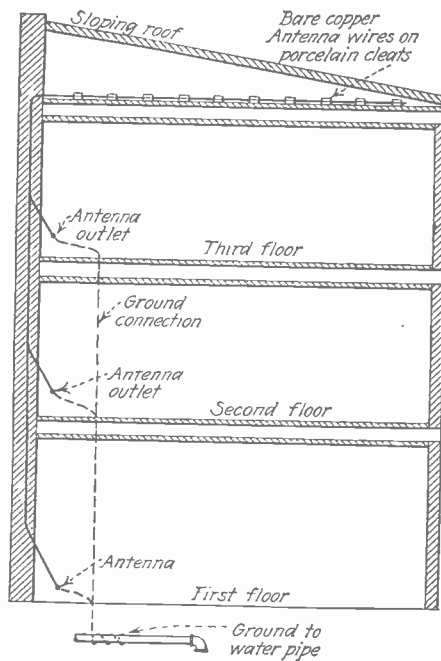
This construction is considered as complying with the Code. Lightning arresters may, or may not, be provided.

**Lightning Hazard Overstated**

Many arguments, pro and con, have been put forth to prove and disprove that the aerial is a lightning hazard. With the use of aeri- als daily increasing in numbers by leaps and bounds, inspection departments charged with the responsibility of protecting the lives and property of citizens from loss by electricity and lightning, were placed in a more or less undesirable position. While the inspection department is charged with the protection of the citizens it did not wish to place any unnecessary hardship on the development of this new industry which provides so much in the way of entertainment and education.

It will be interesting, therefore, to note the following record of a two years' investigation intended to determine the lightning hazards of aeri- als. Record was kept of all cases where the city fire department had been called and the cause of the fire or the turning in of the alarm was given as lightning. From this study the following facts are drawn:

Number of cases where lightning struck .....	34
Number of aeri- als on buildings.....	12



Antenna for a three-story apartment house. The bare-copper antenna wires are carried on porcelain cleats or knobs on the upper side of the ceiling rafters, in the open space beneath the sloping roof. This construction requires no lightning arrester.

Number of aeri- als on buildings with arresters, struck .....	3
Number of aeri- als with ground switches closed .....	0
Number of cases where aerial wires carried current .....	4

It may be safely assumed, from the foregoing investigation, that the presence of an aerial on a building does not increase the probability of the building being struck by lightning.

It is possible that in case a building is struck by lightning, current may enter the building over the aerial and that this current might cause damage that would not have

occurred if the aerial had not been on the building. However, in the four cases cited there was no damage except to the radio set or aerial.

Lightning arresters are not a protection against a direct hit by lightning and are not, of course, so considered by the makers. In the investigations above referred to there were three cases where static entering an aerial jumped across the condenser blades to ground and in one case destroyed the tubes. Lightning arresters of an approved type properly installed generally protect a set from damage from slight static discharges.

A reading of the successive issues of the National Electrical Code will show that the rules have developed very evidently along lines of protection against lightning. But with the millions of receiving sets now in use it has been shown that the lightning hazard is not as serious as it was at first supposed to be.

But with the constant and rapid development in the construction of receiving sets entirely new hazards are encountered.

One of these hazards is clearly indicated by the new rule on the fusing of storage batteries; but, like many other features of radio development, even the storage battery itself may become obsolete.

As the radio industry more completely finds itself and settles down to a standard, whatever hazards now exist will gradually disappear. Inspection departments who are charged with the safety of the public will insist more and more on the use of approved devices known to be safe from a fire and life standpoint.

(To be concluded in January issue)

**What Is the National Electrical Code?**

The National Electrical Code is the report of a committee of the National Fire Protection Association (the organization of the fire underwriters and insurance interests), which report, revised every two years, becomes the guide of local electrical inspectors in enforcing safe electrical construction in their own communities. While the responsibility for local rules and enforcement rests in each case

with the local inspector or inspection department having jurisdiction (whether municipal or underwriters' inspectors), the Code's provisions are in general closely followed by these inspection authorities, the Code being regarded as a legal standard for electrical construction, particularly now that its requirements (including its radio provisions), have been approved as an American Engineering Standard.

# Your Editors Have

## "How's Business?" It's 14 Per Cent Better Than Last Year

SPURRED by rumors of excesses of various kinds—*inflation of manufacturers' credit, over-production, price cutting, robber jobbers, courtesy discounts; in other words, that radio is heading for the bow-wows—Radio Retailing*, during the latter part of November made an extensive survey among 500 dealers in all parts of the country in an effort to secure the "low-down" on the sales jam. Mahogany-top authorities of the desk variety (not of the counter type) pointed out that radio stock quotations reflected the public's lack of interest in radio.

To be frank, the questionnaires sent out to the dealers were looking for trouble and weaknesses. But they "came back smiling."

Dealers everywhere reported radio sales as being excellent. As we go to press, the tabulated reports sent in by dealers themselves show an increase in business of 14 per cent over last year. "Spotty" conditions were reported in only four or five instances, and these in metropolitan areas. Agricultural districts in some cases, report 200 per cent gains. Most urban areas are on a higher level of winter employment and are buying accordingly.

The optimism reflected in the return letters eclipsed the original quest for dealer's grievances. They prove that the radio business is now thinking straight and acting right. It is sound economically because the product is right—it "belongs."

Summing up the comments from dealers—which serve a useful purpose, for they show the trade-winds—we find cheer in the fact that there is uniform thinking on the following problems:

Outlets have reached the saturation point necessary for a product as revolutionary as radio. The unfit and opportunist will fall in the weeding-out process now under way. Manufacturers are now considering a definition of "dealer" on the basis of store set-up, sales ability, service and community obligation.

Manufacturing to be permanent and profitable will experience a closing up of ranks. Former excesses will give way to foresight and sound judgment, the rewards of which will be measured in bigger terms than that of profit—that of dealer and public confidence.

Price cutting, broadly speaking, is an acute condition brought on in many cases by over-production. Dealers can rely on the excellence of their service to combat it. Manufacturers and jobbers, if they are earnest in their intentions, can stamp it out by withholding goods from the slasher.

Jobbers who sell at wholesale to the public, give courtesy discounts to friends and "friends' friends" or fail to make a physical separation of their wholesale and retail departments are a menace to distribution. Also in forcing the expansion of outlets, regardless of the dealer's ability to give customer satisfaction, the jobber is encouraging another form of abuse and waste.

Better merchandising methods must be adopted by retailers if a satisfactory profit is to be realized on sales. Specialty selling methods and appropriate side lines offer ways of overcoming the seasonal slump. Others point out that more aggressiveness in tying up with broadcasting features is needed.

## Selling Brings in the Customers But Service Brings Them Back

WHEN you come to analyze any business—retail or wholesale, radio or anything else—doesn't it invariably divide up into two main departments which the boss must watch out for?

Sales and service.

Selling brings in the customers. But service *holds them*. Service keeps them coming back again and again. Sales are important. But if either sales or service must be sacrificed, sales after all can be the one to let go. For no business can continue to exist unless it gives service.

Sales cleverness cannot replace service excellence. But service, on the other hand, has a sales value in itself. People have a way of telling their friends *where* they got service satisfaction.

## There Is No "Easy Money" in Radio

PROBABLY no industry in history secured as much free and universal publicity in so short a time as radio. This misled many. It attracted the attention of the speculative. It looked like "easy money" and in flocked the adventurers of business. Many are still with us—to the detriment of radio. Radio is a *business*, not a speculation. There is no room in it for the manufacturer who offers an inferior article at a fictitious price, nor for the dealer who makes exaggerated claims or gives guarantees he cannot fulfill. The one secure foundation of any business is public confidence. This can only be secured and retained through fair dealing. This means the observance of business ethics. The producer assumes the obligation of an honest, dependable product. The retailer assumes an obligation of giving value received. Quickly depreciated merchandise should be paid for in quickly depreciated currency. It is "good business" to keep faith with the public.

## Those Who Want Lamp-Socket Radios

JUST how strong is the desire on the part of the average radio buyer for a set that can be plugged into the electric-light socket, seems yet hardly recognized by most dealers. Troublesome battery connections, and the supply of renewals have turned the public's interest toward that increasing group of radio outfits that can be set going as easily as plugging in an electric fan.

The light-socket radio is here and is bound to play an increasing rôle in the radio picture. It has a ready market already among customers willing to pay the price. It represents a movement in radio to be encouraged by the dealer, for it opens up a deluxe class of prospects. Its future will require also a sympathetic enthusiasm,—and a chance to demonstrate its own merits.



# This to Say—

## **"Silent Nights" Will Sell Better Sets**

SPREADING from Chicago, where the issue of a "silent night" on local broadcasting stations became a veritable "listeners' strike" against stations that continued operating, the question of reserving an evening a week for "distance listeners" is now being threshed out in other broadcast centers.

In Chicago, the broadcast listeners seem greatly pleased with their Monday evenings when the ether confusion of Cook County is stilled, and the set owner turns to distant programs with attendant thrills. Once more, through this means, the early joys of "ether-fishing" are brought back to the radio fan. And this reaching out for distant stations, Chicago dealers tell us, is again bringing the question of "DX reception ability" into sales in Chicago radio shops. One silent night a week in any community is bound to "show up" radio outfits suitable for local listening only, and to shape a demand for distance listening through better equipment.

## **The Farmer Will Buy Quality Sets for Cash**

ACCORDING to the census figures, 48.6 per cent of the entire population of these United States is classified as "rural,"—i.e., lives in rural communities or on farms. *Radio Retailing* is convinced that this part of the public will shortly absorb a very large portion of all the radio apparatus manufactured in this country, because of these four facts:

1. The farmer needs radio in order to efficiently carry on the modern business of agriculture.
2. The farmer wants radio because his family demand the pulse of world life it brings to them.
3. The farmer has the money to buy quality sets for cash.
4. Receiving conditions on the farm are ideal.

## **What a Policy Will Do**

A DECLARATION of principle is always a confidence-creating factor. When we find conditions such as have existed and still obtain in the radio industry, the formulating and diffusing of definite policies is a necessity.

It matters not if some of these policies contain flaws. The fact that standards have been set and that the manufacturer, jobber or dealer is ready to raise his hand and say "This is Where I Stand," is of inestimable benefit to the situation. Clean-cut policies will go far toward regulating the "gyp." They will make it difficult for the fly-by-night manufacturer to obtain a hearing. And they will tremendously strengthen the public's regard for the stability of radio.

From the experience of *Radio Retailing's* editors in personally interviewing hundreds of radio dealers, we are led to believe that the necessity for *consumer contact after the sale has been consummated*, presents probably the greatest unrealized opportunity for constructive

advancement in the art of building up a sound, profitable radio retailing business.

For in radio, more perhaps than in any other retail development, the manner in which the service problem is solved will measure the advancement or retardation of radio reception in the public favor.

## **Stock Up Empty Shelves by Telegraph and Express**

FROM now until the night before Christmas the biggest job in the radio store is that of watching the condition of stock. It is more important than waiting on customers, preparing displays or writing advertisements—it's a task for the boss himself. So as not to be caught with empty shelves during the climax of the year's greatest opportunity, check over the number of sets and supplies on hand several times each day. When stocks get low use the telegraph for ordering and say "ship by express." The American Railway Express this year has placed unusual facilities at the disposal of the radio industry and is geared to make overnight deliveries to points hundreds of miles distant.

## **Life's Essentials Are Sold on Installments**

THROUGHOUT the radio selling field there appears to exist an unaccountable prejudice and objection to installment or "easy-payment" selling. The reasons presented run all the way from the practical difficulties of collections, to "moral" objections to the plan. Yet it is a fact that ninety per cent of the phonographs sold have been moved on easy payments. Five automobiles out of six are bought on installments. Nearly every man who buys a home, pays for it in installments through his mortgages. Life insurance, when analyzed, is nothing but the installment payment, through premiums, of a capital sum for protection.

There is sound precedent for installment selling. The man who would attack it as improper, must also attack the plan by which those two essential bulwarks of our living, homes and insurance, are sold today. Installment selling moves merchandise in quantities. It will also move radio sets to the hesitant but eager market of potential buyers.

## **Window Displays that Kindle the Desire to Possess**

IF "eyes are the windows of the soul,"—then certainly windows are the eyes of the store. And what is the impression upon the passer-by—the prospective purchaser that every passer-by is—that your store "eyes" see?

Is it a kindling of the desire to possess, an appreciation of an unusual display, the pause that is a tribute to your ingenuity?

Or is it a lack of impression. Or, worse still, an unfavorable impression caused by faulty window display? Have you, yourself, never been halted on the very threshold of a purchase by such a display?



# What's New in Radio and

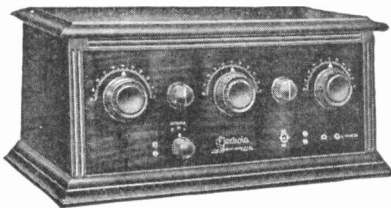
*This editorial section is prepared purely as a news service, to keep readers of "Radio Retailing" informed of new products on the market.*



### A.C. Operated Receiver

*Radio Retailing, December, 1925*

A, B and C battery voltage is taken from the lighting circuit in the radio receiver being manufactured by the Los Angeles Sales Company, Incorporated, 1211 West Sixth Street, Los Angeles, Cal. The receiver has two tubes in the radio circuit and one in the exterior of the power unit, which acts as a rectifier. It is said that the hum is cut down to a minimum and not at any time objectionable. Dictagraph speaker units are used in the above company's own reflector type horns. The volume is controlled by means of rheostats and good distance is claimed for this receiver which was designed primarily for local reception. The floor console type has overall dimensions of 30 in. x 36 in. x 12 in. and an intended retail price of \$115. The table console type has overall dimensions of 15 in. and an intended retail price of \$96.50.



### Five-Tube Receiver

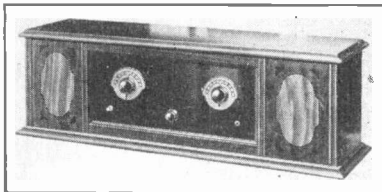
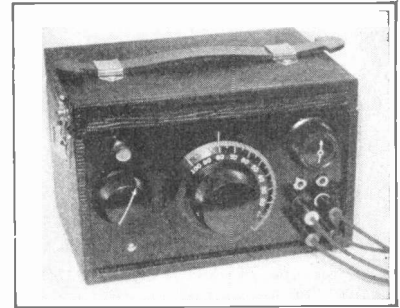
*Radio Retailing, December, 1925*

The American Specialty Company, Bridgeport, Conn., manufacturers of Kelford radio parts and Electrola receiving sets, announce two new models in their No. 24 and No. 18. The feature of the former model is that it has a variable antenna tuning switch, which assures efficient operation with either long or short antenna. This model has an intended retail price of \$59.50. The other model is a compact receiver, designed for those who prefer external batteries and reproducer. This model has an intended retail price of \$80. The tuned radio frequency circuit used in these receivers is balanced without the use of neutralizing condensers, potentiometers, or other devices to prevent oscillation.

### Three-Tube Receiver

*Radio Retailing, December, 1925*

Recently placed on the market is a three-tube, straight regenerative circuit, portable radio receiver, manufactured by The Buell Manufacturing Company, 1610 South Michigan Boulevard, Chicago, Ill. It is said that this set is extremely selective and has a wave length range of from 140 to 550 meters. The case is of imitation leather and has overall dimensions of 5 in. x 5 in. x 7 1/4 in. The total weight is 3 1/2 lb. A containing case to hold the batteries, set and a small loud speaker would measure approximately 13 in. x 8 in. x 6 in. It is recommended that about 25 ft. of wire be used for an antenna. The intended retail price of the set, without the tubes, is \$37.50.



### Five-Tube Receiver

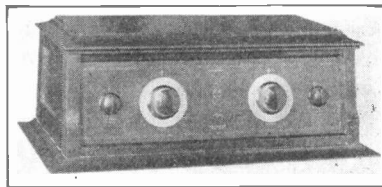
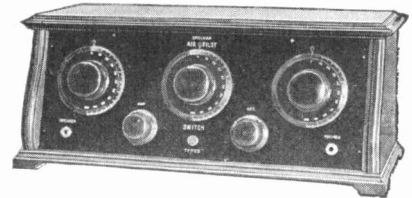
*Radio Retailing, December, 1925*

The All-American Radio Corporation, 4205 Belmont Avenue, Chicago, Ill., is in production on a "Model R" radio receiver. These receivers embody multi-stage control through two 360 degree dials without gears. The new Rauland-Lyric transformers are used to give the true tone qualities claimed of this receiver. Only a small number of these receivers will be produced this fall. The intended retail price is \$90.

### Five-Tube Receiver

*Radio Retailing, December, 1925*

Spielman Electric Company, Incorporated, 311 West Fifty-ninth Street, New York, is the manufacturer of the "Air Pilot" receiver. Three major tuning controls are used on this receiver, which utilizes storage battery tubes. The circuit incorporates two stages of radio frequency amplification, detector and two stages of audio frequency amplification. Overall dimensions are 21 in. x 10 in. x 11 in. and the weight is 15 pounds. Intended retail price is \$55.



### Five-Tube Receiver

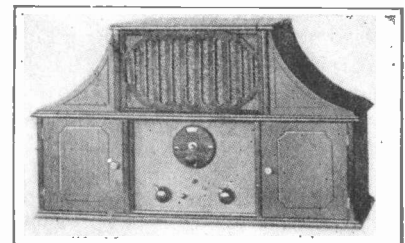
*Radio Retailing, December, 1925*

The "Goldfinch" is a five-tube tuned radio receiver, being manufactured by the Guthrie Company, Grafton, O. This receiver uses two main tuning controls, operates on either dry cell or storage battery tubes and has overall dimensions of 21 1/2 in. x 12 1/2 in. x 9 1/4 in. It is recommended to be used on either inside or outside aerials and has an intended retail price of \$75.

### Five-Tube Receiver

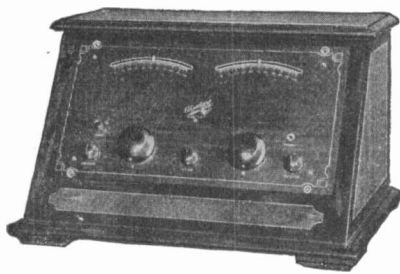
*Radio Retailing, December, 1925*

Model 2-N is a five-tube tuned radio frequency consolette receiver being manufactured by the Cardinola Radio Corporation, Indianapolis, Ind. It is furnished in solid walnut of two-tone design. Ample space is provided for all batteries. A special one-dial control is used, actuated by a Mar-co vernier dial. The intended retail price without accessories is \$135.



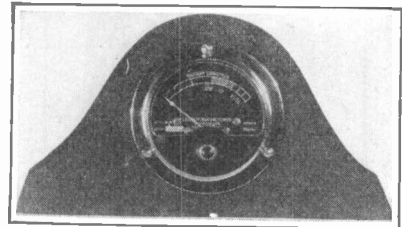
# Where to Buy It *News of Latest Products Gathered by the Editors*

*It should be noted that all announcements appearing on these pages are published without advertising considerations of any kind whatsoever.*



### Five-Tube Receiver

*Radio Retailing, December, 1925*  
A five-tube receiver with two-dial control is found in the Akrodyne Model No. 90, made by the Sunbeam Radio Corporation, 350 West Thirty-first Street, New York City. Two stages of tuned radio frequency are used and the wave span ranges from 200 to 600 meters. Stations that are 10 meters apart may be separated and it is said there is no distortion. The overall dimensions are 14 in. x 22 in. x 16 in. The cabinet is finished in two-tone mahogany, has a bakelite panel front, behind which are mounted Hammerlund variable condensers. Shipping weight is 42 pounds and the intended retail price is \$90.

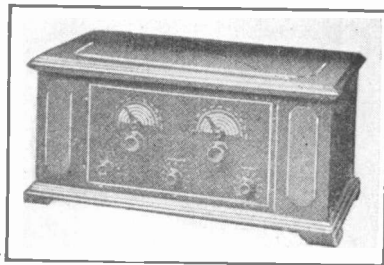


### Meter Indicates Storage Battery Condition

*Radio Retailing, December, 1925*  
In improving the "Cello-meter" recently produced by the Cellokay Manufacturing Corporation, room 1705, Flatiron Building, New York City, a device, which may well be used as a Christmas gift has been made. Connected permanently across the storage battery, and by pressing a button located in the face of the dial, this instrument will give a true indication as to whether the storage battery is low, half-charged, or full, and to what degree. The illustration shows how it is neatly mounted in the form of a mantle clock with overall dimensions of 6 in. x 3 1/2 in. x 1 1/2 in. This instrument eliminates the use of a hydrometer and the discomforts which follow from spilling the acid. Complete directions accompany each instrument, which is fully guaranteed, and it should be noted that the connections should be made with heavy wire such as No. 10. The intended retail price is \$7.50.

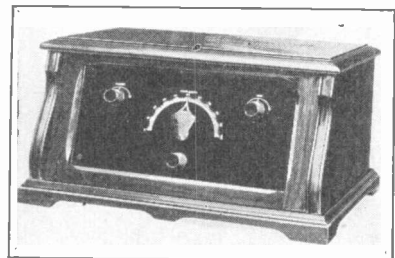
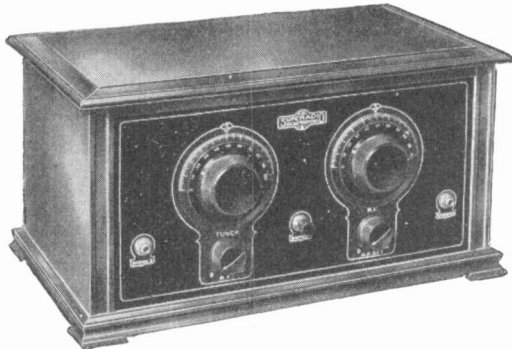
### Five-Tube Receiver

*Radio Retailing, December, 1925*  
"Model Five B" is five-tube receiver using one stage of tuned radio frequency now being made by David Grimes, Incorporated, 1571 Broadway, New York City. This model is designed to use standard 1/4 amp. tubes and also the new UX tube, in the last audio stage. Using two dial control its range of operation covers wave lengths from 165 meters to 600 meters. Intended retail price, \$59.50. Model Five D is also a new type using two stages of tuned radio frequency. This set utilizes three tuning dials and is also designed to use standard size tubes. Intended retail price, \$85.



### Five-Tube Receiver

*Radio Retailing, December, 1925*  
"Superadio" receiver, model 5, is being made by the DeWitt-La France Company, Incorporated, 54 Washburn Avenue, Cambridge, Mass. This is a five-tube, two dial control receiver, utilizing 1 stage of radio frequency amplification, detector, and 3 stages of straight audio frequency amplification. The cabinet is of solid walnut, while the front panel is of bakelite. Low loss, straight line frequency condensers are provided. The range is from 200 to 600 meters. Intended retail price is \$56.

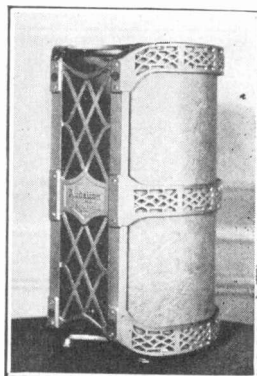


### Three-Tube Receiver

*Radio Retailing, December, 1925*  
"R 3" is a three-tube, three circuit regenerative receiver which is being manufactured by the Echophone Radio Incorporated, 1120 North Ashland Avenue, Chicago, Ill. Incorporating single dial control, the receiver is said to cover a wave range of from 150 to 550 meters. This receiver is also claimed to be non-radiating. The intended retail price, without tubes or batteries, is \$48.

### Reproducer

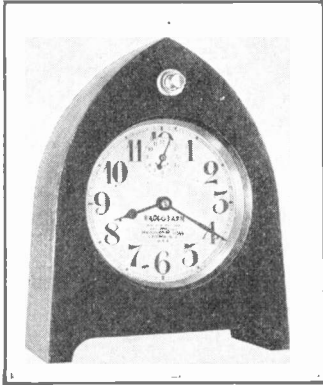
*Radio Retailing, December, 1925*  
The "Audalion" is a reproducer employing the entirely new principle of sound reproduction recently patented by Dr. Lee de Forest. It is manufactured by Audalion Company Incorporated, 318 East Forty-eighth Street, New York City whose general sales office is at 333 State Street, Detroit, Mich. Sound waves are created by the rolling action of the outer membrane which results in ample volume and greater carrying power without intensity nearby. It reproduces with extreme clarity and naturalness without adding qualities of its own, such as resonance and pitch. The membrane floats in the aluminum frame and is therefore self-adjusting for atmospheric changes. Both the frame and membrane are attractively finished in Oriental green and antique gold. The "Audalion" may be placed in a vertical or horizontal position, on the table, floor or wall. It is 18 in. high and 10 in. in diameter. The intended retail price is \$40.



### Six-Tube Receiver

*Radio Retailing, December, 1925*  
A six-tube receiver known as the "Dialless" is being manufactured by the Dialless Radio Corporation, 115 Federal Street, Boston, Mass. Tuning is done by means of a horizontal lever on the face of the set. The set may be operated on either outside or inside antenna, or a loop. The cabinet is of solid mahogany. Good tone quality, power, and selectivity are claimed for this receiver which has an intended retail price of \$150.

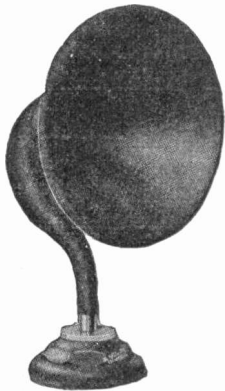
## What's New in Radio and Where to Buy It—News



### Time Clock Switch

*Radio Retailing, December, 1925*

The illustration shows an improved model time clock switch made by Herbert M. Hill, 117 Highwood Avenue, Leonia, N. J. If it is desired to turn a radio set on at any predetermined time, the clock is set for that time in a similar manner to the setting of an alarm clock. Previous to this, of course, the clock is wired in the filament circuit. The clock may also be set in such a manner that if it is desired to go to bed listening to the music broadcast by some station, the set will automatically be turned off at some predetermined time. In addition to the described features there is an alarm bell which may be used or not, according to the wishes of the operator. The intended retail price of this model is \$9.



### Horn Type Reproducer

*Radio Retailing, December, 1925*

Top quality, volume, sensitivity, and beauty of finish, are all said to be embodied in the reproducer which the Selector Company, Seattle, Wash., is making. It has a non-resonant all-aluminum gooseneck type horn with a black crystalline finish and stands 22½ in. high with a 14 in. bell. Before leaving the factory it is adjusted, tested and checked. Complete with a 5-ft. cord, the intended retail price is \$36. The same unit for phonograph attachment, finished in a nickel case and equipped with 12-ft. cord has an intended retail price of \$20.

### Rheostat Wire

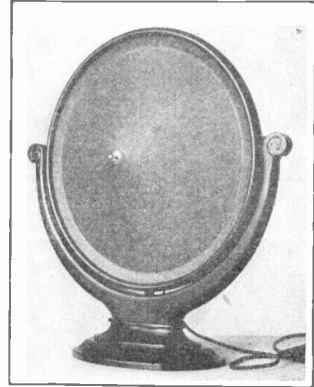
*Radio Retailing, December, 1925*

"Novar" resistance wire is an alloy of copper and nickel being manufactured by the Standard Alloy Wire Company, Elizabeth, N. J. It is particularly valuable for apparatus requiring absolute accuracy and permanency and is for this finding favor in radio apparatus. Its temperature coefficient is practically nil, and its electrical resistance is 296 ohms per circular mil foot.

### Cone Type Reproducer

*Radio Retailing, December, 1925*

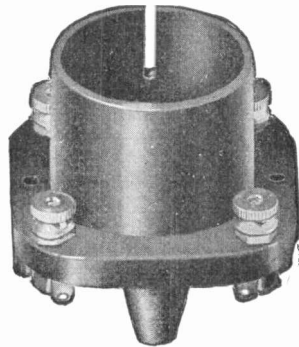
The Timmons Cone Talker, a product of Timmons Radio Products Corporation, Germantown, Philadelphia, Pa., has made its appearance among the ranks of cone reproducers. A special patented feature about this instrument is the joining of the cone to the tapered edges of the laminated wooden rim. This is said to greatly improve the vibrating efficiency of the cone and prevent injury to its fibrous material in handling. It also renders it immune to the usual effects of atmospheric changes. The unit which actuates the cone is of the armature and lever type. It is of rugged construction and includes a very strong electro magnet weighing 1½ pounds. The cone is approximately 14 in. in diameter. Intended retail price \$25.



### Socket

*Radio Retailing, December, 1925*

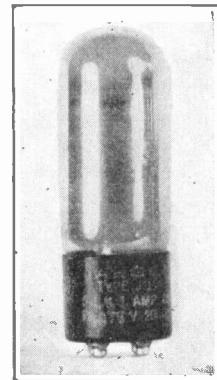
No. 118 socket will accommodate the large base UX and WX, also the old type tubes and is made by the Hoosick Falls Radio Parts Manufacturing Company, Incorporated, Hoosick Falls, N. Y. This socket is made of molded bakelite upholding the same high quality of construction as has always been shown by the makers of Hoosick products. When the tube is inserted each prong is gripped individually by high spring tension clips, assuring positive, permanent contact. Only slight pressure is required for inserting or removing tubes from these sockets.



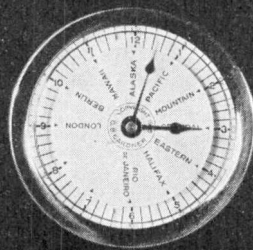
### Tube

*Radio Retailing, December, 1925*

Tubes of the standard type are being manufactured by the Jaeger Research Laboratories, Incorporated, 280-300 Park Avenue, Weehawken, N. J. Special glass insulations support the grid, plate and filament, keeping them in perfect alignment—which also prevents the elements from touching through rough handling, or shipping. These tubes are guaranteed against imperfect workmanship providing the filament is not broken. The intended retail price is \$2.50. Also made by the above concern is the J-UX 112 tube which consumes ½ amp., is equipped with a long thin base and adapted for the last stages of audio frequency amplification. The intended retail price of this tube is \$6.50.



### Radio World Time



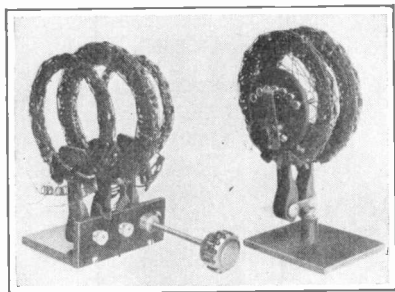
### Radio Clock

*Radio Retailing, December, 1925*

A clock that shows the correct time in all the time zones throughout the world is being made by G. B. Gardner, 923 Hutchison Court, Brooklyn, N. Y. This clock is designed for radio receiving sets so that the operator may follow the various broadcasting stations in whatever zone they are located. It may be mounted either on the panel of the set or used as an accessory. The center dial, which can be seen in the illustration, rotates with the hour hand. The hour hand is set at the factory to indicate local time in whatever time zone the clock is to be used in. The intended retail price is \$3.50.



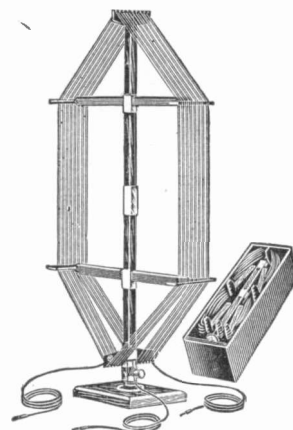
## of Latest Products Gathered by the Editors



### Coils

*Radio Retailing, December, 1925*

Especially designed for use in the Roberts circuit are the coils manufactured by the Defiance Radio & Electric Company, 1021 South Twelfth & Kay Streets, Tacoma, Wash. They are mounted on molded hard rubber with adjustable standards allowing full adjustment to the coils. An aerial switch is mounted in the coil as shown in the cut. These come in a set of 5 coils all mounted and ready to put in the receiver. They are bound with green silk covered wire and every one is tested before shipping. The intended retail price per set is \$8.



### Loop Antenna

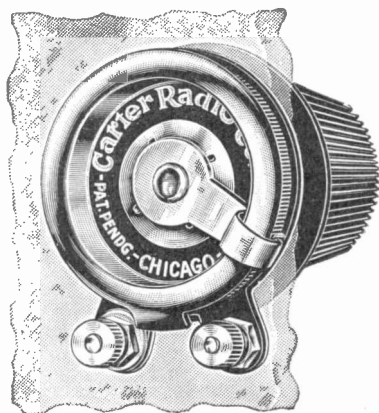
*Radio Retailing, December, 1925*

The Mathiessen-Sandberg Company, 5249 Ravenswood Avenue, Chicago, Ill., is the manufacturer of several different styles of loop antennas. These loops are constructed in such a way as to keep the wire always taut. The arms are made from mahogany and are furnished with nickle trimmings. Bakelite is used for insulation. Four different styles and sizes are made, which have intended retail prices of \$12.50 each.

### Rheostat

*Radio Retailing, December, 1925*

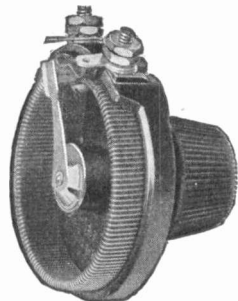
The "Imp" Rheostat is made by the Carter Radio Company, 300 South Racine Avenue, Chicago, Ill. This is said to be the smallest rheostat made as it projects from the panel less than  $\frac{3}{8}$  of an inch and is only  $1\frac{1}{2}$  in. in diameter. It is mounted by means of one screw and all other exposed parts are nickle plated. The contact arm is designed to maintain constant pressure on more than one resistance wire at a time. The illustration shows the rheostat in full size. It is made in both a 6 ohm and 25 ohm size, and the intended retail price, complete with knob, is \$1.



### Rheostat

*Radio Retailing, December, 1925*

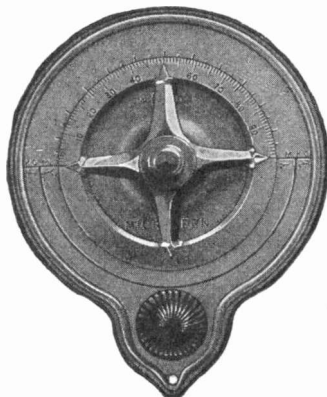
The Kellogg Switchboard & Supply Company, Chicago, Ill., is manufacturing a rheostat which is claimed to be noiseless in operation. It is made of a brown porcelain in the popular flat disk, compact type. Mounting is accomplished by means of one screw, and the instrument is equipped with a standard Kellogg knob attached without screws. The base of the wiper arm is riveted to the shaft so that it can't slip, and the special shape of the other end of the wiper makes smooth quiet operating and positive contact. Furnished in sizes of 3, 6 and 25 ohms, each type has an intended retail price of 75c.



### Dial

*Radio Retailing, December, 1925*

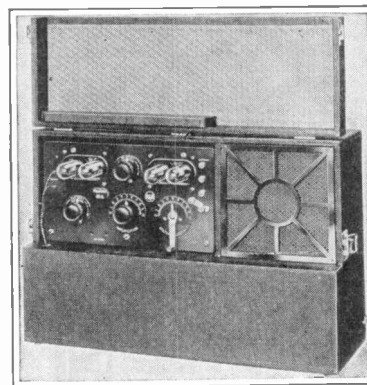
The "Microvern" is a vernier dial being manufactured by the Pacent Electric Company, 91 Seventh Avenue, New York. This dial produces a reduction of 5 to 1 without the use of gears. The mechanism is controlled by a rolling friction arrangement which consists of two discs, which clutch the main dial along its edges and turn it without slipping. It is designed to operate any type of condenser. The illustration shows the face assembly and the control knob at the bottom of the dial. Intended retail price is \$2.



### Case for Portable Receiver

*Radio Retailing, December, 1925*

The Berg Auto Trunk and Specialty Company, Incorporated, Long Island City, N. Y., is manufacturing a case designed to house a Radiola III-A and also has accommodations for a built-in reproducer as shown in the illustration. The over-all dimensions of the black cobra grain fabrikoid case are  $20\frac{1}{2}$  in. x  $13\frac{1}{2}$  x 8 in. Complete with batteries, the total weight is approximately 35 pounds. This model is known as No. 89 and is but one of the various types of cases made by this company.

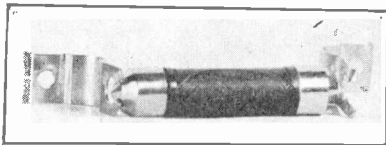


### Magnetic Sound Recorder

*Radio Retailing, December, 1925*

The "Record-O-Phone" is a recording device manufactured by the Record-O-Phone Company, Incorporated, 219 Southern Building, Washington, D. C. It operates on an electro-magnetic principle and registers the incoming signal in steel. The records are permanent, clear, and distinct and may be repeated thousands of times, with the last reproduction said to be as good as the first. If it is desired, the old records may be erased automatically while new records are being made. With the use of this instrument, any important event sent over the radio may be registered and kept for future use, to be reproduced at will.

# What's New in Radio and Where to Buy It—News



## Grid Leak and Condenser

*Radio Retailing, December, 1925*

A very unique device which combines in a most attractive form the grid leak and grid condenser is being made by the Daven Radio Corporation, 158 Summer Street, Newark, N. J. It consists of a hollow Bakelite tube within which a Daven grid leak is suspended. Each end is threaded and fits into a nickel-plated cap. Around the outside of the spool and connected with the end cap is the grid condenser which is formed by two separate insulated wires wound parallel in a single layer. One wire connects to one terminal and the other to the other, each wire of course having one open end. It is similar in size and shape to the ordinary grid leak and may be mounted in the same manner. These are made in values of 1, 2, 4, 5 or 7 megohms.

## Battery Cable

*Radio Retailing, December, 1925*

A five-wire coded cable, anchored to an insulated block, is being made by Howard B. Jones, 614-18 South Canal Street, Chicago, Ill. The cable ends project from the block, serving as terminals for the set lead. The block is to be permanently mounted on the panel or sub-panel, allowing the set builder to complete his wiring arrangement and leaving nothing to connect at the battery end. In addition to the color code each cable is furnished with a fiber marker, properly coded, so that it is impossible to hook up the cable wrong. The intended retail price for 4-ft. cable is \$1, while that of an 8-ft. cable is \$1.25.



## Resistors

*Radio Retailing, December, 1925*

The Allen-Bradley Company, 286 Greenfield Avenue, Milwaukee, Wis., has perfected a fixed resistor of the molded composition type which is said to be unaffected by moisture or atmospheric changes and does not deteriorate with age or service. The silver-plated contacts on each end are molded in place, and are provided with holes for soldering. These resistors are guaranteed to be within 5 per cent of the rated resistance. They are furnished in sets of 6 which have the correct rating for resistance coupled amplifiers.

## Rectifying Tube

*Radio Retailing, December, 1925*

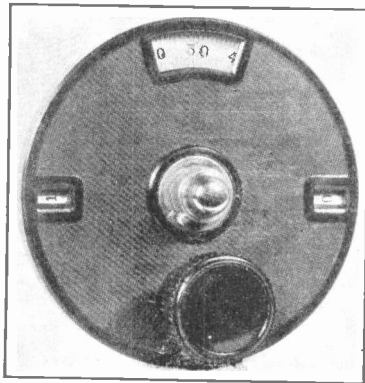
The "Raytheon" rectifying tube for B-battery eliminators, is made by the Raytheon Manufacturing Company (formerly the American Appliance Company) of Cambridge, Mass. This is a no-flament tube that gives full-wave rectification. Not only is the tube of greater power than those heretofore used in B-eliminators, but its life is said to be from two to ten times that of other rectifiers. The tube is of a very rugged construction and uses a standard socket. Full instructions are found in each carton. It will furnish enough power to run a 10-tube set. The intended retail price is \$6.



## Vernier Dial

*Radio Retailing, December, 1925*

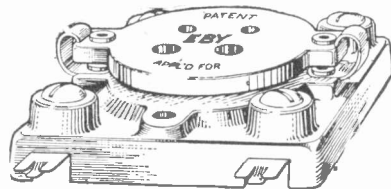
The "Mar-co" Vernier Dial is manufactured by the Martin-Copeland Company, Providence, R. I. This dial, which is 4 in. in diameter and made of bakelite, has an extremely good vernier action which is proving very popular. Two windows are provided on each side of the dial, as is seen in the illustration, in order that station letters may be written in. The window at the top of the dial shows the scale which is subdivided into twentieths. The intended retail price of this dial with the metal parts nickel plated is \$2.50. With the metal parts gold plated the intended retail price is \$3. Dials for either clockwise or counter-clockwise action may be obtained.



## Socket

*Radio Retailing, December, 1925*

The H. H. Eby Manufacturing Company, 4710 Stenton Avenue, Philadelphia, has announced a new type of cushion socket that insures a positive contact at all times. This ingenious socket grips each of the four tube prongs their entire length with three-jawed Phosphor Bronze spring clips. Each spring clip is securely riveted to the Bakelite base assuring a good electrical joint and permitting the tube to "float" when in service. This shock-absorbing feature eliminates microphonic noises and is a guarantee against tube damage. The intended retail price is 60c.



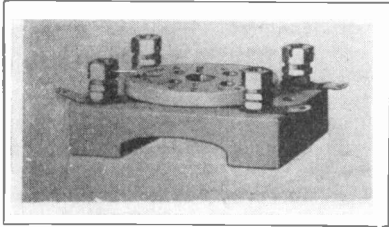
## Horn Type Reproducer

*Radio Retailing, December, 1925*

Known as the "Velvet" is the horn type reproducer being made by the Borkman Radio Corporation, 310 Tribune Building, Salt Lake City, Utah. This instrument is claimed to be of indestructible construction, having an all bakelite bell and base. A choice of several colors may be had, in order that the reproducer shall harmonize with any color scheme of hangings or furniture. The unit in the base is hermetically sealed, which is to prevent corrosion of metal parts through moisture. It is also equipped with a pneumatic cushion. Terminals of cords are accessible without opening base and are held tight with lock-nuts, which prevent loose connections so often found in units. The intended retail price is \$25.



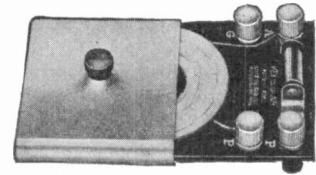
## of Latest Products Gathered by the Editors



### Socket

*Radio Retailing, December, 1925*

The Pacent Electric Company, 91 Seventh Avenue, New York, has recently developed a new socket, designed for the UX tubes, made out of isolantite. This material has been found practically ideal at radio frequencies with negligible dielectric loss, which, coupled with the small amount of metal required in the contacting devices of the socket reduces the capacity effect between grid and plate, thus making the radio frequency circuits far more stable in operation than has been the case with the older type of tubes.



### Crystal Receiver

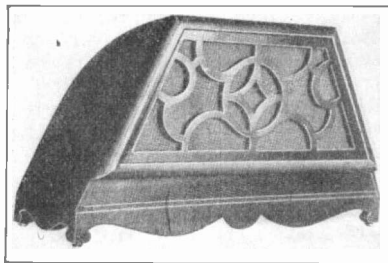
*Radio Retailing, December, 1925*

The Stafford Radio Company, Medford Hillside, Mass., is manufacturing a crystal radio receiver, equipped with a permanent detect r. It also has a spiral bank wound low loss coil, Pyradiolin panel and Westinghouse type binding posts. Tuning is done by a special absorption method, which is accomplished by sliding the metal plate over the coil as shown in the illustration. The intended retail price is \$2.00.

### Reproducer

*Radio Retailing, December, 1925*

The "Strad-O-Vox" baby grand cabinet type reproducer is the latest product of the Sterling Cabinet Works, Incorporated, Winfield, Long Island, N. Y. This reproducer is built of resonant violin wood, which is said to give perfect reproduction. It is artistically designed, as can be seen from the illustration, and has an intended retail price of \$17.50.



### Flat Plug

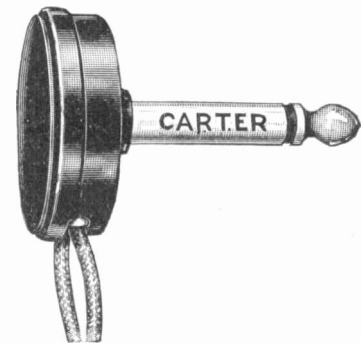
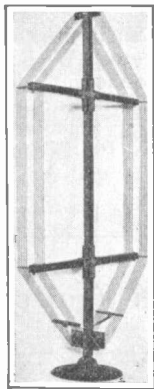
*Radio Retailing, December, 1925*

The illustration shows, full size, the new flat plug made by the Carter Radio Company, 300 South Racine Avenue, Chicago, Ill. The cord tips are completely concealed when inserted and there are no triggers, push buttons, etc., to be used in connection with them. The cords hang down from the bottom of the jack while the base of it projects less than 1/2 an inch from the panel. The intended retail price is 75c.

### Loop Antenna

*Radio Retailing, December, 1925*

The Banker Windshield Company, 5722 Ellsworth Avenue, Pittsburgh, Pa., is making a loop antenna which is an improvement in design over their older model. The frame is made of wood finished in mahogany, the metal parts being black enamel with nickle trimming. The loop is wound with 100 ft. of Belden wire made of 60 fine strands of copper twisted with 5 strands phosphor bronze wire with maroon covering. Three fahnestock spring binding posts insure good connections. Mounted on a cast base with swivel connections it may be readily swung in any direction. The overall dimensions are 44 in. x 20 1/2 in. and the intended retail price is \$12.



### Reproducer

*Radio Retailing, December, 1925*

The Manhattan Electrical Supply Company, Incorporated, 17 Park Place, New York, is marketing a new "Symphonic" reproducer. It has four horns or different sizes which are said to give correct amplification, making the reproducer non-directional. The exterior is of mahogany finished in the antique manner so that the natural graining of the wood is developed.



### Cone Reproducer

*Radio Retailing, December, 1925*

The Farrand Manufacturing Company, Incorporated, Thompson Avenue at Court Street, Long Island City, N. Y., is manufacturing a new Farrand, Jr., speaker. It is said to be responsive to both high and low notes, and to give non-directional reproduction of an excellent quality. This smaller type embodies all the good qualities of the larger type, and has an intended retail price of \$16.50.

### Cone Reproducer

*Radio Retailing, December, 1925*

The Acme Apparatus Company, 37 Osborn Street, Cambridge 39, Mass., is making a double free edge cone reproducer. The cones are made of Japanese linen paper, which is not affected by dampness or sun. The case is metal and it is finished to harmonize with any set and its surroundings. An adjustment is provided which when once set for the amount of plate current used needs no further attention. A cabinet model in finished mahogany is also made. The intended retail price for the former type is \$25, while that of the latter is \$35.

### Socket

*Radio Retailing, December, 1925*

The Benjamin Electric Manufacturing Company, 247 West Seventeenth Street, Chicago, Ill., is manufacturing a "push" type socket to accommodate the new UX tubes. This socket will also accommodate all tubes of the old style with standard bases. The intended retail price is 75c. each.

### Aerial Window Lead-in

*Radio Retailing, December, 1925*

The Rodale Manufacturing Company, 492 Broome Street, New York, has brought out an aerial window lead-in device designed so the windows may be closed tightly. This is done by means of a soft copper strip covered with high-grade cotton sleeving. Intended retail price, 20c.

# What the Trade Is Talking About

## A. M. E. S. Radio Section to Have Conference

The Radio Apparatus Section of the Associated Manufacturers of Electrical Supplies will have its 1925 Fall conference at the Waldorf-Astoria Hotel, New York City, December 7 to 10.

The schedule of meetings follows: Monday, December 7, 10 a.m., transformer committee; 11 a.m., dry batteries committee; 2 p.m., aural devices committee; 3.30 p.m., parts and statistical committees; 6 p.m., executive and dinner committees; 8 p.m., storage battery committee.

Tuesday, December 8, 10 a.m., vacuum tube and publicity committees; 11 a.m., entertainment and antenna committees; 2 p.m., power supply and broadcasting committees; 3.30 p.m., shows and exhibits committee; 7.30 p.m., technical committee.

Wednesday, December 9, 10 a.m., transmitting and receiving set committees; 2 p.m., merchandising committee. Thursday, December 10 at 10 a.m., a general meeting of the entire radio apparatus section will take place.

## Two Hundred Exhibits at Chicago Show

Chicago's Fourth Annual Radio Show attracted a record attendance of over 160,000 paid admissions. Interest on

the part of dealers and the general public was, at all times, acute. More than 200 exhibitors filled the Coliseum and its annex buildings. Forty-five per cent of the booths were occupied by set manufacturers. Approximately seventy per cent of these represented eastern concerns, the balance were located in Chicago or came from western points. Fifty-five per cent of the exhibitors were producers of parts, accessories or represented allied industries.

The demand for better tonal quality was reflected in improved audio transformers and by refinements in resistance and impedance-coupled amplifiers. New designs in opposed field inductances, three-tube sets of diminutive proportions, improvements over the early type of toroidal coils, the revival of the practice of complete shielding—these will serve to indicate the degree of new developments as shown by the exhibits at this mid-western show.

## Plans for "Radio Week" Progressing

More than fifteen countries will cooperate in the coming international radio broadcasting tests which will be a feature of International Radio Week, January 24 to 30. American broadcasting stations will put on programs of the greatest excellence during the hours up to eleven p.m., Eastern Standard Time, as during these hours the over-

seas stations will be silent so their listeners may hear our programs. Between eleven and twelve each night, Eastern Standard Time, the American broadcasting stations will remain silent so that American listeners may try to log overseas programs.

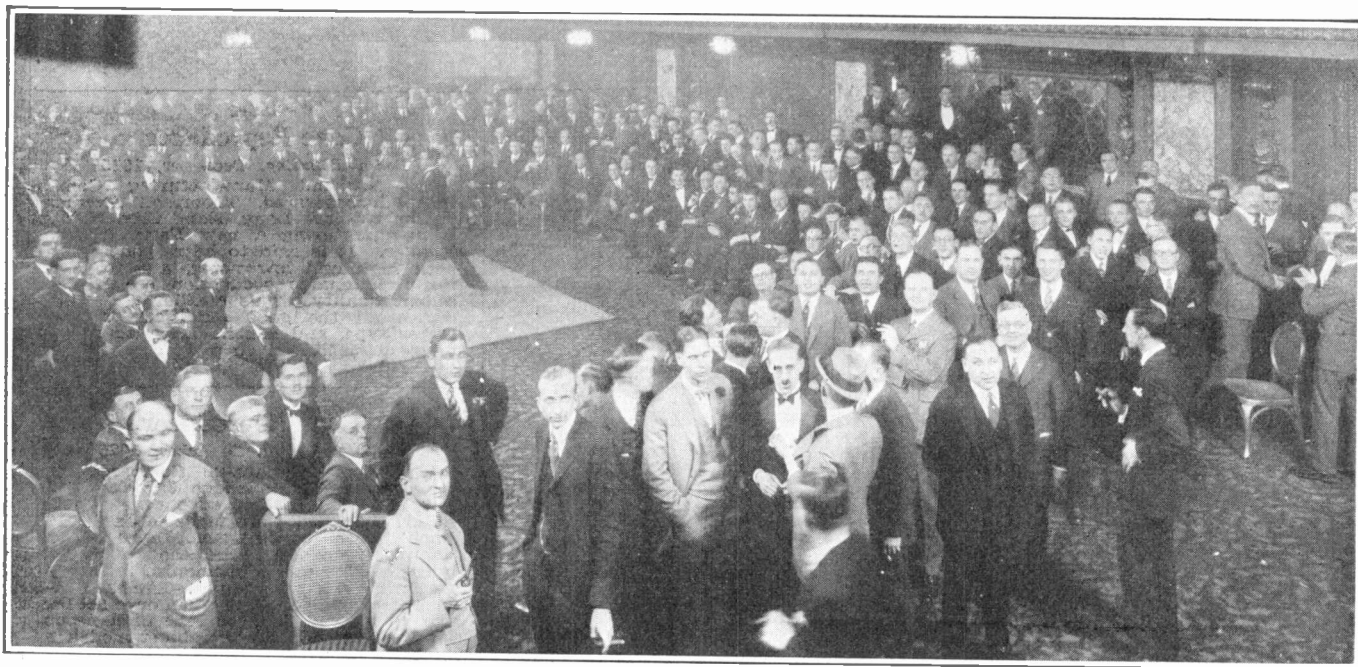
In the tests last year more than 15,000 American listeners reported overseas reception while this year it is expected that more than three times that number will be successful.

## Canton, Ohio, Dealers Form Organization

The radio dealers of Canton, Ohio, held a meeting in November and the outcome was the formation of a radio dealers' association. Regular meetings will be held, and a constitution and by-laws drawn up. Officers were elected at the first meeting.

The officers are: George C. Wille, president; A. R. MacConnell, vice-president; Harrison B. Fisher, secretary and treasurer. The board of directors includes the officers and Henry L. Ley and A. W. Holgate. Others who attended the inaugural meeting were: O. J. Metzger, M. B. Fisher, J. C. Holgate, J. B. Catterall, W. R. Ellis, B. M. Grove, J. E. Spencer, J. D. Broomall, Howard M. Dine, W. S. Custer, Don Mellett, Louis E. Dueble, Leonard T. Pohner, George P. Freeman, W. E. Pyle, C. A. Miller and A. S. Koenreich.

## Radio Manufacturers' Association Entertains Visitors at "Midnight Frolic" Show



No wonder these manufacturers and dealers are in a jovial mood. As guests of the Radio Manufacturers' Association at their "Midnight Frolic," they are

celebrating the pronounced success of the Fourth Annual Chicago Radio Show, acclaimed by those in a position to know as "the greatest ever." This is the Gold

Room of the Congress Hotel. The second annual stag buffet and entertainment started at 11 p.m., Thursday, November 19, and ran until "the wee hours."





Laurence Gardner, the "Gar" of Garod—manufacturer of Garod Neutrodynes, in case you didn't know—is here shown on the steps of his home at Montclair, N. J. The article behind him is a golf bag, Mr. Gardner having just staggered home from a strenuous game and gotten as far as the front porch before collapsing.

### Battery Ratings to Be Prominently Displayed

To prevent fraudulent merchandising of storage batteries, the National Better Business Bureau has succeeded in having over 85 per cent of such manufacturers pledge themselves to rate and mark their products. Recently, small batteries have been put in large cases and sold as large batteries.

The recommendations made to, and adopted by, the majority of storage battery manufacturers, are:

- (1) Make sure that every battery made is appropriately and correctly rated.
- (2) Brand each battery with the correct rating figure, or with the maker's name and type of symbol number from which the rating may be determined. Preferably this branding should be on the box itself, at least on the name plate, or other exposed part.
- (3) In each catalog or piece of advertising matter, advise dealers of the rating method employed and what any type or symbol numbers used may mean.
- (4) Decline to misbrand batteries made for others or to deliver batteries in oversized boxes, unmarked with correct capacity ratings.

### New Broadcasting Stations

A number of new broadcasting stations have been licensed, according to the latest Radio Service Bulletin issued by the U. S. Department of Commerce. One thousand watt stations are: WRVA, Larus and Brother Company, Richmond, Va., 256 meters; WSM, National Life and Accident Insurance Company,

Nashville, Tenn., 282.8 meters, and KPSN, Star-News Publishing Company, Pasadena, Cal., 315.6 meters.

Nine 500 watt stations were also licensed: KFRU, Columbia, Mo.; KQP, Portland, Ore.; KSO, Clarinda, Ia.; KTNT, Muscatine, Ia.; KUT, Austin, Tex.; KVOO, Bristow, Okla.; WAIU, Columbus, Ohio; WGHB, Clearwater, Fla.; WTAG, Worcester, Mass.

During the same period, fourteen stations of lesser power were licensed, and 22 were deleted.

The Brunswick Panatope, a new type of talking machine which reproduces the record through audio frequency amplifying tubes, and is manufactured by the Brunswick-Balke-Colender Company, had its premier showing in New York last month. The records are made electrically, through a microphone and vacuum tubes, the sound waves being changed into electrical vibrations, actuating a beam of light, which, in turn, actuates the recording needle. In reproducing, the instrument takes the vibrations from the record by means of a sensitive needle and amplifies them through audio frequency stages by means of radio vacuum tubes, the current supply for which is taken from the house current. The speaker is of the cone, instead of the usual phonograph horn type.

Neufeldt and Kuhnke, German manufacturers of the N. and K. radio products, have established a direct factory branch at 46 East Houston Street, New York City. Sales and executive offices are at 15 William Street, New York, where the N. and K. Company will handle its own affairs, supplanting the Th. Goldschmidt Corporation. F. O. Willhofft is technical supervisor and J. B. Price, sales and advertising manager.

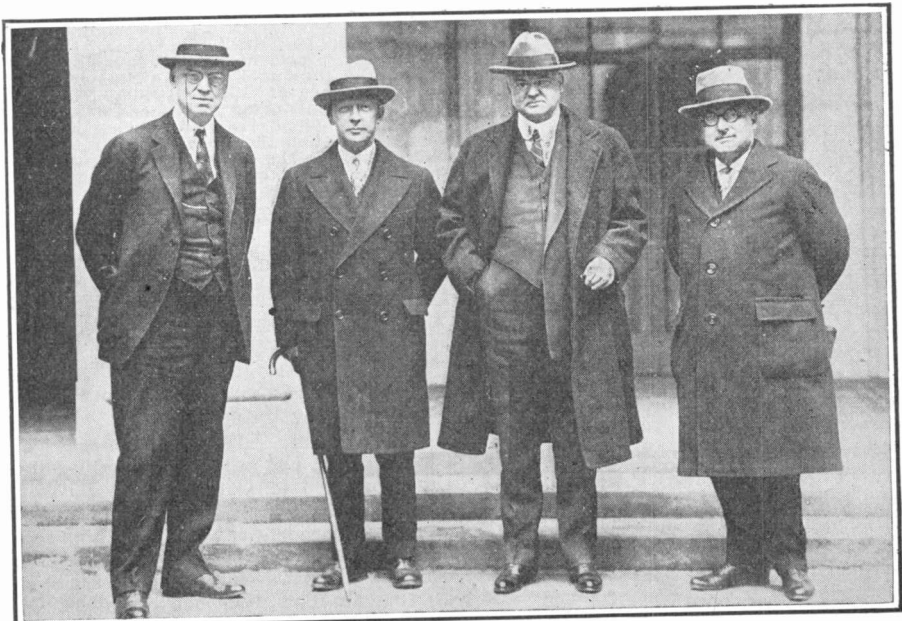
The Fifth National Radio Exposition will be held next year in Grand Central Palace, New York City, the dates having been set as September 10 to 17. The American Radio Exposition Company, 1560 Broadway, New York City, is sponsoring the show.

The Marathon Radio Company, San Francisco, Cal., is conducting a radio service school at its factory, 133 First Street. The school is not confined to Marathon dealers, but may be utilized by any dealer who cares to send members of his organization for training in radio and service work. A three weeks' course is provided, meeting on Tuesday and Thursday evenings under the supervision of Mr. Borsch, engineer of the Marathon Company. For out of town dealers, the course may be condensed to a week, meeting every night.

The Consolidated Equipment Corporation, Montclair, N. J., and New York City, has been formed as a sales organization handling the products of the Heyer Products Company, Montclair, N. J., and the Weber Auto Accessory Company, Newark, N. J. The corporation is owned by those two companies and August T. Brandmeier, Fred Brandmeier and Philip Brandmeier. The officers are: Benjamin F. W. Heyer, president; William P. Weber, vice-president and secretary; George H. Weber, treasurer; and directors: Benjamin Heyer, William P. Weber and August T. Brandmeier. The Heyer Company manufactures a line of battery charging and testing equipment.

The Mohawk Corporation of Illinois, Chicago, Ill., has appointed H. L. Kraus, Bush Terminal Building, New York City, as export manager.

### Hoover Advocates "Self-Government Within Industry"



Herbert Hoover, Secretary of Commerce, is opposed to lowering the broadcast wavebands, he told the Fourth National Radio Conference, held last month in Washington, D. C., and suggested Federal radio traffic regulation as a remedy for the present congested condition of the ether. The Con-

ference voted to submit recommendations to Congress giving the Secretary of Commerce power to use discretionary methods. In the photo, left to right, are: W. E. Harkness of the American Tel. and Tel. Company; A. Atwater Kent, Mr. Hoover and Congressman Arthur Free, of California.

## Manufacturers Ask Trade Associations to Communicate

All district and local radio trade associations in the United States are urgently requested to communicate at once with the Radio Manufacturers' Association, 123 West Madison Street, Chicago, Ill.

The purpose of this request is to get the correct address and the names of the officers of the various organizations so that they can be informed of legislative and other matters vitally important to every manufacturer, jobber and dealer. A prompt response will be greatly appreciated by the officers of the Radio Manufacturers' Association.

**The Raytheon Manufacturing Company** is the new name of the corporation making the Raytheon radio tubes. This company formerly operated under the name of the American Appliance Company, and has headquarters in the Suffolk Building, Cambridge, Mass.

**Russell H. Hopkins**, formerly advertising manager of the Silver-Marshall Radio Company, Chicago, Ill., has been appointed editor of *On the Air*, a Chicago publication.

**The Metropolitan Engineering Service Company**, Boston, Mass., manufacturer of the Veriphone neodyne receivers, announces that the Radio Sales Distributing Company, Los Angeles, Cal., has been appointed exclusive Pacific Coast distributor, covering the states of California, Oregon and Washington.

**The American International Trading Company**, manufacturers of Empire-Trons, and Empire loudspeakers and loud speaker units, has occupied its new factory at 132-134 Greene Street, New York City. Space of 4,000 square feet is provided for manufacturing operations in the new plant.

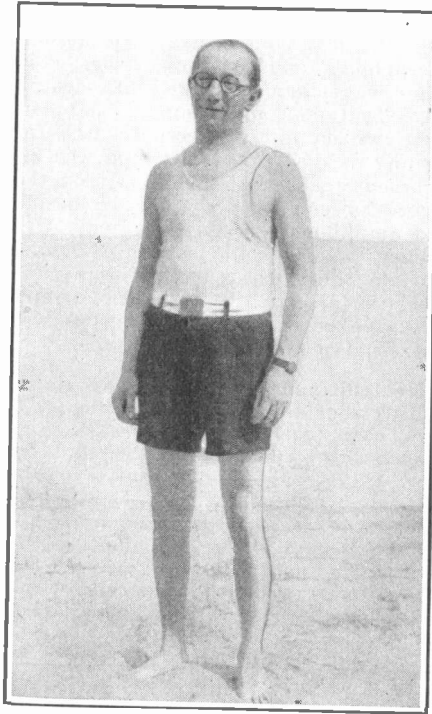
**The R. E. Thompson Manufacturing Company**, New York City, has acquired the services of **Walter A. Heppner**, formerly of the Western Electric Company, to take charge of the laboratory forces as first assistant to **Doctor L. F. Fuller**, vice-president and chief engineer. For some time past he has been supervising important work with the U. S. Army Signal Corps at Camp Alfred Vail in New Jersey.

**The Mohawk Corporation of Illinois**, Chicago, Ill., announces that the following Chicago concerns have been added to its list of jobbers: **Marshall Field & Company**, **Henry Paulson & Company**, **Englewood Electrical Supply Company**, **Amber Electrical Supply**.

**The Perryman Electric Company**, 33 West Sixtieth Street, New York City, has been formed to manufacture a full line of radio receiving vacuum tubes. **George H. Perryman**, formerly with the Western Electric, Westinghouse and Connewey Laboratories is at the head of the company. Laboratories at North Bergen, N. J., have a daily output of 5,000 tubes. Prices and territorial protection will be given to its authorized distributors and a large assortment of dealer help material is being prepared.

**The Driver-Harris Company** of Harrison, N. J., has purchased the works and properties of the Electrical Alloy Company at Morristown, N. J. The Morristown plant will be operated as the Electrical Alloy Division of the Driver-Harris Company and the main executive offices and sales department will be concentrated at Harrison.

**The Federal Radio Corporation**, Division of the Federal Telephone and Telegraph Company, Buffalo, N. Y., announces the appointment of **Lester E. Noble** as vice-president and general manager. **A. C. Stearns, Jr.**, has been appointed advertising manager, coming from the Globe Electric Company of Milwaukee.



A radio manufacturer certainly leads a hard life—Atlantic City in the summer and Florida in the winter. Here's **Charles Freshman**, president of the company that makes the famous Freshman Masterpieces, as frequenters of Miami Beach, Fla., see him any time during the blizzard months. Our Scotch blood rises to the surface far enough to offer the hope that Mr. Freshman removed the wrist watch before entrusting himself to the warming waters of the Gulf Stream.

**Revivo Batteries** are to have a new home in Passaic, N. J., where the old factory of the defunct Smith Tire and Rubber Company has been purchased. **William W. Huselton**, 43 Cedar Street, New York City, is vice-president and treasurer of the company manufacturing the Revivo Batteries.

**The Dongan Electric Company of Canada, Ltd.**, has been organized by the Dongan Electric Company of Detroit, Mich., makers of transformers and ammeters. The company's Canadian factory and offices are at Walkerville, Ontario. The Canadian representatives of the Dongan line are: **William F. Kelly**, Toronto; **I. D. Livinson**, Montreal, and **T. W. MacKay**, Winnipeg.

**The Sonora Phonograph Company**, New York City, has secured an injunction against the Sonora Tube Company of Chicago, prohibiting the latter from using the name "Sonora."

## European Stations Adopt American Plan

The International Radio Conference held at Geneva on July 6 and 7, and attended by representatives from Great Britain, France, Germany, Italy, Sweden, Switzerland and Czecho-Slovakia, sought a solution of the same problem that has been troubling operators of American broadcasting stations, viz., the interference resulting from two or more stations using approximately the same wavelengths.

Experimental broadcasting by all stations concerned on wavelengths between 200 and 600 meters, and with differences in frequency of 10,000, resulted in no appreciable interference, although more marked differences would have to be assigned between "super-power" stations, or stations lying less than 1,500 kilometers apart. The new wavelength assignments are in general very satisfactory, but they will probably not be definitely adopted until after further tests in December. An interesting bit of knowledge is that there are 106 broadcasting stations in Europe, and 24 additional ones are contemplated. Thus far there has been no discussion of regulating commercial competition, either at the International Radio Conference or the International Union of Radio Telephony, held also at Geneva on July 8 and 9.

**The Zenith Radio Corporation**, Chicago, Ill., has obtained the services of **E. Warren K. Howe** as musical director of Broadcasting Station WJAZ. Mr. Howe is well known in musical circles, having studied in Paris, and also having conducted such orchestras as the New York Symphony, the Chicago Symphony, the St. Louis Symphony and the Minneapolis Symphony.

**The Fourth Annual Official Detroit Radio Show** was held with outstanding success November 3 to 8 at the Arena Gardens, Detroit, Mich., under the auspices of the Radio Trade Association of Michigan. The officers of the association for next year, recently elected are: **William Leingang**, president; **H. E. Haggerty**, first vice-president; **R. H. Stewart**, second vice-president; **Merle Duston**, third vice-president; **C. H. Schmidt**, fourth vice-president; **A. M. Edwards**, secretary; **H. J. Van Baalen**, treasurer, and **H. J. Trombo**, director.

**The Federal Telegraph Company**, manufacturer of the "Kolster" radio receivers, has opened four new divisional sales offices, in Boston, Washington, D. C., Chicago and San Francisco. The Boston office, located in the Rice Building, is in charge of **W. A. Hendricksen**. **W. A. Eaton** has charge of the Washington office, in the Munsey Building. **H. F. Tideman** is the Chicago representative, with headquarters at 33 South Clinton Street. **G. L. Stannard** is manager of the San Francisco office, located in the Hobart Building, which is also the home office of the Federal Telegraph Company. New York City and vicinity will be covered from the company's sales office in the Woolworth Building.

## "Smith of Le Roy"

(Continued from page 813)

"After that I never made a direct effort to sell. I have made fifty-eight installations and without exception I put them in with the story that I wanted them to hear what was going on in the outside world, also that I would be back in a week either for the money or the set. I haven't had to take a single set out. I collected from the fifty-eight farmers in Osceola County. They may be snowed-in but they hear the heartbeats of the nation. Before spring I hope to make three hundred more farmers happy in my territory. I know I have contributed to their happiness and incidently I have made a profit equal to three thousand barrels of flour. You know it is pretty fine when you can make money for yourself and make other people happy at the same time.

"Wrap me up another dozen and don't forget the extra headphones."



Morris Metcalf, treasurer of the American Bosch Magneto Corporation, is one of General Pershing's most ardent admirers. So when the General sailed down to South America to settle the Arica dispute, Morris trotted along too, to see what it was the General had to settle. Morris heard there might be a fight and wherever a fight is, so is Morris, even if he has to go to South America to see it. Anyway, here he is, resting up after the first round, sitting calmly enough with Mrs. Metcalf on the steps of the Cathedral at Arica, Peru. Personally, we had always thought Arica was some kind of a liniment, but maybe we're wrong.

## Wisconsin Radio Exposition Notable Success

The Auditorium at Milwaukee, Wis., witnessed capacity crowds each day of the five-day radio exposition and trade convention held under the management of the Wisconsin Radio Trade Association, November 11-15, and was directed by the business manager, N. C. Beerend.

Among the many constructive features of this affair were the dealer meetings, held Friday and Saturday

mornings. "Brass tack" business talks to put the Wisconsin radio dealer on his toes and in touch with the rapidly-changing trade conditions characterized these addresses. "Organization," "Formulate a Policy—Then Stick to It" (by Ray V. Sutcliffe, Chicago editor of *Radio Retailing*) "Radio Advertising," "Time Payment Financing Plans," "The Radio Dealer and His Banker," "Radio Service and Profits," "Salesmanship"—these were the pertinent subjects presented and discussed.

The Wisconsin Radio Trade Association is said to be the oldest radio dealer

organization in the country. It is planning a definite activity for every month in the year. For January, a \$500 prize for the best report of DX reception during "International Radio Week"; in February, a worth while prize for the best slogan which shall cover the idea, "Radio Is Good Every Month in the Year."

## G. Y. Allen Killed in Accident

George Young Allen, who was among those killed in a railroad accident, November 12, 1925, was one of the rising figures of the radio industry. As technical assistant to the manager of the Radio Department of the Westinghouse Electric and Manufacturing Company he was directly concerned with many of the technical developments and commercial applications of radio.

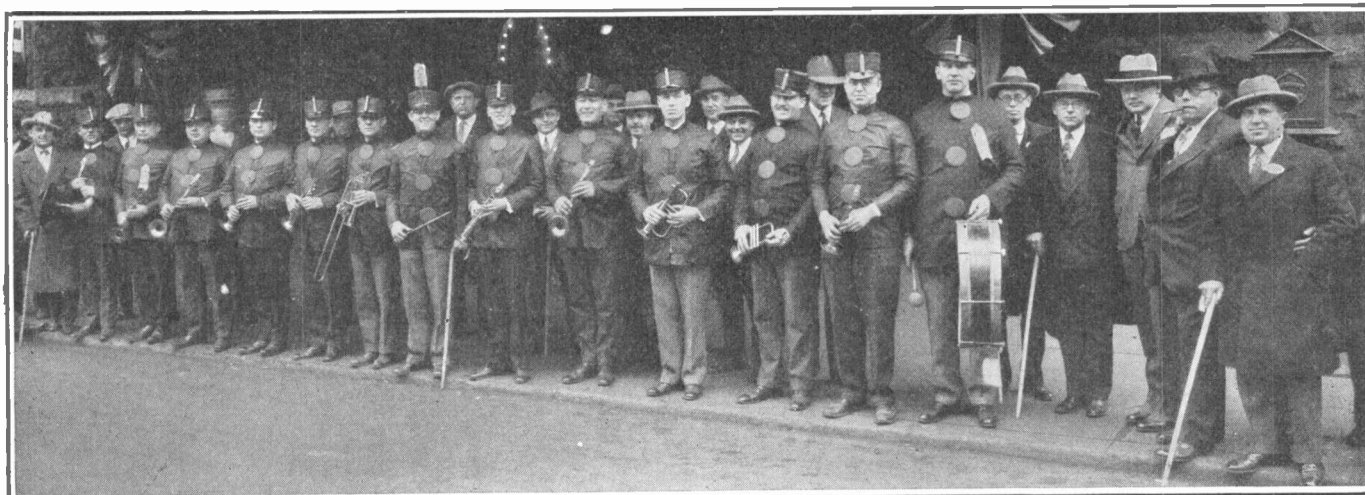
Mr. Allen was born in Bernardsville, N. J., in 1893, and graduated from Stevens Institute of Technology, Hoboken, in 1915 with a degree of M. E. He was engaged in research work for the Western Electric Company after graduation and at the outbreak of the war was made radio aide to the U. S. Navy Engineering Bureau. He entered the Radio Department of the Westinghouse Company in 1919.

When he met his death, he was returning from the Fourth Annual Radio Conference called at Washington by Secretary Hoover.

Among the fatalities in the wreck were four employees of the General Electric Company who were also returning home from the Fourth Radio Conference which had just been concluded in Washington, D. C.

The four who lost their lives were M. A. Atnesta, Arthur W. Gross, John C. Horstmann and R. D. Reed.

## As Musicians, These Boys Are Good Radio Dealers



How many radio trade associations can boast a band? Here is as competent an aggregation of radio dealer-musicians as ever puckered a lip. The Leather Medal Band of the Northwest Radio Trade Association, Minneapolis and St. Paul, in front of the Coliseum, Chicago, during the

recent radio exposition, the success of which was probably due to the band's efforts.

A delegation of over fifty dealers (including the band) went down from the Twin Cities to give this show the "once-over."

Reading from left to right: Roy Cohen, Tom Hoy, Vern Kufus. **Harry P. Smith,**

Jack Helsfer, I. J. Gallery, Jim Coles, Jack Hedquist (leader) Fred Hill, "Al" Neureuauter, H. B. Barry, Jack Heiman, Don DeCosta, Guy Kowfeldt, H. H. Cory (secretary), George H. Reibeth (president), Clayton Irwin (show promoter), "Happy" Jack Redell and Jules Dryfuss.

# Unsettled Trade Conditions Responsible for Drop in Radio Shares

Mild Weather and Falling Off in Public Demand for Radio  
Said to Be Causes of Decline in Radio Stocks

ONE of the disappointing developments of the financial markets in the last month has been the steady decline of radio stocks. If the price trend of stocks is to be taken as a guide, the period has been unsatisfactory for manufacturers and probably for retailers of radio sets.

A glance at the market at the end of November revealed that securities of many of the country's most prominent manufacturers of radio supplies were selling around the lowest levels of the year. Moreover, stocks of virtually every manufacturer whose securities were introduced to the public a year ago were far below the original subscription prices.

It cannot be denied that unsatisfactory trade developments have been largely reflected in prices of radio stocks. Full-page advertisements in the daily papers announcing cut-price sales indicate clearly that producers are willing to make concessions to obtain cash and to reduce inventories.

Wall Street does not ignore these developments, and it learns of unsettled conditions long before the general public does. It is said in the financial district the weather has been too mild to create a large demand for radios and that the public has shown a tendency to "wait until after the holidays" before placing orders.

## Public Out of "Radios"

What impresses one most forcibly, however, in considering the market for these stocks, is the change that has taken place in a year. In 1924, radio shares went into the final month booming, record high levels being reached in December and January. It seemed the public demand for this class of security could not be filled.

Many manufacturers took advantage of the situation to raise additional capital through new stock issues. As might have been expected, a scarcity of radio stocks was followed by an overabundance and the market was flooded with shares of a score of producers. Many concerns rapidly over-expanded. Instead of being compelled to grow slowly through the use of earnings to finance expansion, these companies doubled and tripled output almost overnight in a rush to supply a temporarily abundant demand.

Many manufacturers foresaw the inevitable result and restricted operations in time to avoid trouble, but others continued to expand until the output greatly surpassed demand and dumped on the market great numbers of sets which had to be disposed of at cut rates.

It was an unhealthy development, of course, but not altogether unexpected. The financial district watched the course of events with interest, for it had seen just these conditions develop and cor-

rect themselves in other industries. Reports are current now in financial circles that several capital readjustments in this field will be necessary in the not distant future. One hears suggestions of mergers and plans for re-financing.

While these reports may be based on nothing more than commission house gossip, they would seem to have some foundation in trade developments. Producers who manufactured and stored large quantities of goods in anticipation of record-breaking autumn sales have recently found themselves pressed for cash. Earnings doubtless will be disappointing in many instances.

With these facts before them, speculators have shown a tendency to avoid radio shares in the last month.

Moreover, pool operators neglected radio stocks this year, because they knew the public would remain unresponsive. Bankers and investment houses which brought out radio stock issues a year ago are not boasting of their record. Many made money at the time in the general advance and a few extended their commitments too far, but it is doubtful whether last winter's public financing in this industry really benefitted either manufacturers or bankers. Certainly the public which supplied the funds gained little except additional experience.

## This Business of Ours

(Continued from Page 819)

opponents of all from the inception of air entertainment, they are all competing now to get their stars in front of a microphone. Brunswick and Victor and Steinway, the Wolfsohn Bureau—all mighty names in music—they're with us, and that means that things are set for radio fans to hear the very best there is in music. And in the field of the theatre, even the powerful Shuberts have made a graceful entering gesture. Yes, it must be handed to the broadcasters; they have done their job this year one hundred per cent. Whether skill or money had the most to do with accomplishing the result doesn't matter; the public benefits, and it has made it just that much more desirable to own a radio set.

## 1925 a Milestone of Progress

And with the Hoover Conference doing a perfect job in defining how progress is to be made toward fewer stations and better programs, the radio retailer certainly has no kick coming as to 1925 marking a real milestone of progress in bringing order out of the chaos of fundamental policies which so badly needed settling so that radio could proceed toward its destiny of becoming in fact, as well as in name, an industry.

Stock	1924		1925		Current Market Nov. 23
	High	Low	High	Low	
American Bosch Mag.	37 <sup>3</sup> / <sub>8</sub>	22 <sup>1</sup> / <sub>4</sub>	54 <sup>1</sup> / <sub>2</sub>	26 <sup>1</sup> / <sub>8</sub>	27 <sup>1</sup> / <sub>2</sub>
Apco Manufacturing Co., A	...	...	26 <sup>3</sup> / <sub>8</sub>	21	21
Brunswick-Balke Col. Co.	50 <sup>1</sup> / <sub>4</sub>	48 <sup>1</sup> / <sub>8</sub>	49 <sup>3</sup> / <sub>8</sub>	24	29
De Forest Radio	28 <sup>3</sup> / <sub>8</sub>	21	34	16	15 <sup>1</sup> / <sub>2</sub>
Dubilier Condenser	33 <sup>7</sup> / <sub>8</sub>	32 <sup>1</sup> / <sub>2</sub>	35 <sup>1</sup> / <sub>4</sub>	9	9 <sup>1</sup> / <sub>4</sub>
Duplex Condenser	12 <sup>3</sup> / <sub>8</sub>	11	17	2 <sup>1</sup> / <sub>2</sub>	3
Freed-Eisemann	33 <sup>1</sup> / <sub>2</sub>	27	33 <sup>3</sup> / <sub>4</sub>	7	9
Freshman Co., Chas.	23 <sup>1</sup> / <sub>8</sub>	21 <sup>1</sup> / <sub>2</sub>	28	9 <sup>1</sup> / <sub>2</sub>	20
Garod Radio	...	...	17 <sup>3</sup> / <sub>4</sub>	2	7 <sup>1</sup> / <sub>2</sub>
General Electric, Comm.	322	193 <sup>1</sup> / <sub>2</sub>	337 <sup>1</sup> / <sub>4</sub>	227 <sup>1</sup> / <sub>4</sub>	303
Grimes Co.	...	...	27	4	4
Hazeltine Corp.	48 <sup>1</sup> / <sub>4</sub>	13	51 <sup>3</sup> / <sub>4</sub>	14 <sup>1</sup> / <sub>2</sub>	16
Inter Ocean Radio	16 <sup>3</sup> / <sub>8</sub>	6 <sup>3</sup> / <sub>4</sub>	14	1 <sup>1</sup> / <sub>2</sub>	1 <sup>1</sup> / <sub>2</sub>
Jones, Jos. W. Co.	.95	.15	9	1	1 <sup>1</sup> / <sub>4</sub>
Liberty Radio	8	5 <sup>3</sup> / <sub>8</sub>	10 <sup>1</sup> / <sub>2</sub>	4	5 <sup>1</sup> / <sub>2</sub>
Manhattan Electric Supply	49 <sup>3</sup> / <sub>4</sub>	33 <sup>1</sup> / <sub>4</sub>	82	42 <sup>1</sup> / <sub>4</sub>	82
Mu-Rad Radio	...	...	6 <sup>1</sup> / <sub>4</sub>	4	3 <sup>7</sup> / <sub>8</sub>
Music Master	...	...	21	8 <sup>1</sup> / <sub>8</sub>	7
Pathe Co., A.	49 <sup>3</sup> / <sub>4</sub>	38 <sup>3</sup> / <sub>4</sub>	92	42 <sup>1</sup> / <sub>4</sub>	74 <sup>3</sup> / <sub>4</sub>
Radio Corp. Comm.	66 <sup>7</sup> / <sub>8</sub>	19	77 <sup>7</sup> / <sub>8</sub>	39 <sup>1</sup> / <sub>4</sub>	40 <sup>3</sup> / <sub>8</sub>
Rova Radio	18	9 <sup>1</sup> / <sub>8</sub>	14 <sup>1</sup> / <sub>4</sub>	1 <sup>5</sup> / <sub>8</sub>	2 <sup>3</sup> / <sub>8</sub>
Sleeper Radio	17	15	19 <sup>3</sup> / <sub>4</sub>	4 <sup>3</sup> / <sub>2</sub>	5 <sup>3</sup> / <sub>8</sub>
Stewart-Warner	100 <sup>7</sup> / <sub>8</sub>	48 <sup>1</sup> / <sub>2</sub>	84 <sup>7</sup> / <sub>8</sub>	55	74 <sup>3</sup> / <sub>4</sub>
Thermiodyne Co.	19 <sup>1</sup> / <sub>2</sub>	12	22 <sup>1</sup> / <sub>4</sub>	2 <sup>1</sup> / <sub>2</sub>	4 <sup>3</sup> / <sub>8</sub>
Thompson Radio	21	7	25	6	8
Tower Manufacturing Co.	28 <sup>7</sup> / <sub>8</sub>	18 <sup>1</sup> / <sub>2</sub>	24 <sup>1</sup> / <sub>2</sub>	5	12 <sup>3</sup> / <sub>4</sub>
Victor Talking Machine Co.	...	...	117	65	100
Ware Radio	39 <sup>1</sup> / <sub>2</sub>	13 <sup>3</sup> / <sub>4</sub>	40 <sup>1</sup> / <sub>4</sub>	7 <sup>1</sup> / <sub>4</sub>	8
Weston, A.	...	...	28 <sup>1</sup> / <sub>2</sub>	19 <sup>5</sup> / <sub>8</sub>	28



# "Radio Retailing's" Complete Specifications of Variable Condensers—Season 1925-1926

Specifications of radio products, with the name and address of the manufacturer, together with complete information concerning each product is a monthly feature of *Radio Retailing*. This service is wholly for the benefit of readers and is without charge of any kind whatsoever to the manufacturers listed. It is *Radio Retailing's* desire to make these pages a representative directory of radio products, so that, by keeping and filing them each month,

the dealer will always have at hand the information he wants to know about any radio set, reproducer or accessory. Manufacturers are invited to send specifications of their products for representation in these tables, which will be revised, brought up-to-date and published from time to time. For battery chargers, battery eliminators and power units, see the next (January) issue. For batteries, see October issue, pages 521-526. For speakers,

head sets and phonograph units see September issue, pages 291-294. For radio receivers, season 1925-1926, see August issue, pages 160-165, with supplement in the September issue, page 317. For makers of knock-down sets in kit form, see June issue, pages 545-546. For portable receivers and loop antennas, see May issue, pages 448-451. Complete listings of all radio manufacturers and products appear in the McGraw-Hill Radio Trade Directory.

Name and Address of Manufacturer	Trade Name and Model Number	List Price	Capacity in Microfarads		No. of Plates per Unit	Type	Is Vernier Built-in	Method of Mounting	Diameter of Shaft in Inches	Overall Dimensions at Min. Cap. in Inches	Material of Plates	No. of Units on Shaft	
			Max.	Min.									
Acme Apparatus Co., 37 Osborne St., Cambridge.	Acme Acme	\$5.50	.0005	.000016	15	SLW	Yes	Panel and Table	1/4	4x4 1/4	Brass Silver Plated	1	
		5.50	.0001	.00001	7	SLW	Yes					1	
Air Way Electrical App. Corp'n, Toledo, Ohio	Air Way-R 772	4.50	.00035	.000005	17	SLW	No	3 hole	1/2	3 1/2	Al. and Brass	1	
Alden Manufacturing Co., 52 Willow St., Springfield, Mass.	Na-Ald No. 113	3.50	.00028	.000015	13	SLW		3 hole	1/4	3 1/2 x 3 1/2	Duralum inum	1, 2 or 3	
		3.75	.00035	.000016	17	SLW		3 hole	1/4	3 1/2 x 3 1/2	Duralum inum	1, 2 or 3	
		123	3.90	.0005	.0000165	23	SLW		3 hole	1/4	3 1/2 x 3 1/2	Duralum inum	1, 2 or 3
		143	4.70	.001	.000018	43	SLW		3 hole	1/4	3 1/2 x 3 1/2	Duralum inum	1
		217	3.00	.00035	.000012	17	SLW		1 hole or sub panel mounting	1/4	3x3 1/2	Duralum inum and brass	1
Allen Bradley Co., Milwaukee, Wis.	Bradleydenser	4.50	.00025	.000008	13		No	2 hole	1/4	3 1/2 x 3 1/2 x 1 1/2	Brass	1	
		4.75	.00035	.000009	17		No	2 hole	1/4	3 1/2 x 3 1/2 x 1 1/2	Brass	1	
		5.00	.0005	.000015	25		No	2 hole	1/4	3 1/2 x 3 1/2 x 2 1/2	Brass	1	
		6.00	.001	.000020	45		No	2 hole	1/4	3 1/2 x 3 1/2 x 3 1/2	Brass	1	
Ambassador Sales Co., Inc., 108 Greenwich St., New York City	Ambassador	4.50	.0005	.000046	35	SLF		1 hole					
Amsco Products, Inc., 416 Broome St., New York City	Amsco Allocating	1213	3.50	.0003	.00001	13	SLF	No	3 hole	1/4	4 1/2 x 1 1/2	Brass	1
		1217	3.75	.00035	.00001	17	SLF	No	3 hole	1/4	4 1/2 x 1 1/2	Brass	1
		1223	4.25	.0005	.00001	23	SLF	No	3 hole	1/4	4 1/2 x 1 1/2	Brass	1
		(Siamese)											
		1226	7.00	.0003	.00001	13	SLF	No	3 hole	1/4	4 1/2 x 1 1/2	Brass	2
		1234	7.50	.00035	.00001	17	SLF	No	3 hole	1/4	4 1/2 x 1 1/2	Brass	2
1246	8.50	.0005	.00001	23	SLF	No	3 hole	1/4	4 1/2 x 1 1/2	Brass	2		
Andrea, Inc., F. A. D., New York, N. Y.	142 A	3.00	.0003	.000008	15	SLC	No	3 hole	1/4	3 1/2 x 2	Al.	1	
		3.50	.0005	.000013	23	SLC	No	3 hole	1/4	3 1/2 x 2	Al.	1	
Barrett & Paden, 1314 Sedgwick St., Chicago, Ill.	S VS V	6.00	.0005	.000008	21	SLC	Yes	2 hole	Spec. Own Dial Used	3 1/2 x 2 1/2 x 3 1/2	Al.	1	
		6.00	.00035	.0000078	21	SLW	Yes	2 hole					
		6.00	.00025	.000007	21	SLW	Yes	2 hole					
Benjamin Electric Mfg. Co., 120-128 So. Sangamon St., Chicago, Ill.	Benjamin 8662 Benjamin 8661 Benjamin 8660	5.00	.00051	.000012	25	SLW	No	3 hole	1/4	2 1/2 x 2 1/2 x 2 1/2	{ Brass }	1	
		4.75	.00035	.00001	17	SLW	No	3 hole	1/4	2 1/2 x 2 1/2 x 2	{ Silver }	1	
		4.50	.00025	.00001	13	SLW	No	3 hole	1/4	2 1/2 x 2 1/2 x 1 1/2	{ Plated }	1	
Bockin Electric Mfg. Co., Inc., Freeport, L. I., N. Y.	Bockin Electric	2.00	.00025		11	SLW		3 hole	1/4	3x3 1/2	{ Brass }	1	
		2.25	.00033		15	SLW		3 hole	1/4	3x3 1/2	{ Silver }	1	
		2.50	.00037		17	SLW		3 hole	1/4	3x3 1/2	{ Plated }	1	
		3.00	.0005										
Bremer-Tully Mfg. Co., 520-536 S. Canal St., Chicago, Ill.	L-7 L-13 L-17 L-23 L-35 SLF-13 SLF-17 SLF-23 LD-13 LD-17 (With dial) V-17 V-23 V-43 Plain P-3 P-5 P-11 P-23 P-43 Mikro-Mike	4.25	.000128	.000007	7	SLW	No	1 hole or Combination	1/4	3 1/2 x 3 x 2 1/2	Al.	1	
		4.50	.000254	.000009	13	SLW	No		1/4	3 1/2 x 3 x 2 1/2	Al.	1	
		4.75	.000350	.000011	17	SLW	No		1/4	3 1/2 x 3 x 2 1/2	Al.	1	
		5.00	.000500	.000013	23	SLW	No		1/4	3 1/2 x 3 x 3	Al.	1	
		6.00	.000750	.000016	35	SLW	No		1/4	3 1/2 x 3 x 3 1/2	Al.	1	
		5.50	.000250	.000009	13	SLF	No		1/4	5 1/2 x 2 1/2 x 2 1/2	Al.	1	
		5.75	.000350	.000011	17	SLF	No		1/4	5 1/2 x 2 1/2 x 2 1/2	Al.	1	
		5.75	.000500	.000014	23	SLF	No		1/4	5 1/2 x 2 1/2 x 2 1/2	Al.	1	
		9.00	.000260	.000014	13	SLW	No		1/4	4 1/2 x 3 x 3 1/2	Al.	2	
		9.50	.000350	.000015	17	SLW	No		1/4	4 1/2 x 3 x 4 1/2	Al.	2	
		4.50	.000260	.000011	16	MSLC	Yes		3 hole	1/4	3 1/2 x 3 1/2 x 2 1/2	Al.	1
		5.00	.000480	.000013	23	MSLC	Yes		3 hole	1/4	3 1/2 x 3 x 2 1/2	Al.	1
		6.00	.000920	.000019	43	MSLC	Yes		3 hole	1/4	3 1/2 x 3 x 3 1/2	Al.	1
		1.50	.00035	.000003	3	SLC	No		3 hole	1/4	3 1/2 x 3 x 1	Al.	1
		1.90	.00080	.000006	5	SLC	No		3 hole	1/4	3 1/2 x 3 x 1	Al.	1
		2.40	.00200	.000008	11	SLC	No		3 hole	1/4	3 1/2 x 3 x 1 1/2	Al.	1
		3.00	.000450	.0000012	23	SLC	No		3 hole	1/4	3 1/2 x 3 x 2 1/2	Al.	1
		3.50	.000850	.0000018	43	SLC	No		3 hole	1/4	3 1/2 x 3 x 3 1/2	Al.	1
		.90	.00030	.0000005	2	SLF				1/4	1 1/2 x 2 1/2	Brass	
		Camfield Radio Mfg. Co., 807 Harrison Street, Oakland, Cal.	Camfield—888	6.50	.0005	.000004	32		SLW		3 hole	1/4	3 1/2 x 2 1/2
887	6.00			.00035	.000003	28	SLW		3 hole	1/4	3 1/2 x 2 1/2	Brass	1
886	6.00			.00025	.000003	20	SLW		3 hole	1/4	3 1/2 x 2	Brass	1
Cardwell Mfg. Corp., Allen D., 81 Prospect St., Bklyn., N. Y.	New Type C	191C-R	3.75	.000045	.000005	3	SSLF		3 hole	1/4	4x4x4	Al.	
		191C-L	3.75	.000045	.000005	3	SSLF		3 hole	1/4	4x4x4	Al.	
		167C-R	4.00	.00009	.000006	5	SSLF		3 hole	1/4	4x4x4	Al.	
		167C-L	4.00	.00009	.000006	5	SSLF		3 hole	1/4	4x4x4	Al.	
		168C-R	4.00	.00013	.000006	7	SSLF		3 hole	1/4	4x4x4	Al.	
		168C-L	4.00	.00013	.000006	7	SSLF		3 hole	1/4	4x4x4	Al.	
		169C-R	4.00	.00022	.000008	11	SSLF		3 hole	1/4	4x4x4	Al.	
		169C-L	4.00	.00022	.000008	11	SSLF		3 hole	1/4	4x4x4	Al.	
		170C-R	4.25	.00025	.000008	13	SSLF		3 hole	1/4	4x4x4	Al.	
		170C-L	4.25	.00025	.000008	13	SSLF		3 hole	1/4	4x4x4	Al.	
		192C-R	4.25	.0003	.0000008	15	SSLF		3 hole	1/4	4x4x4	Al.	

Variable Condensers—Continued

Name and Address of Manufacturer	Trade Name and Model Number	List Price	Capacity in Microfarads		No. of Plates per Unit	Type	Is Vernier Built-in	Method of Mounting	Diameter of Shaft in Inches	Overall Dimensions at Min. Cap. in Inches	Material of Plates	No. of Units on Shaft	
			Max.	Min.									
Cardwell Mfg. Corp. (Continued)	192C-L	\$4.25	.0003	.0000085	15	SSLF		3 hole	$\frac{1}{8}$	4x4x4	Al.		
	171C-R	4.50	.00034	.000012	17	SSLF		3 hole	$\frac{1}{8}$	4x4x4	Al.		
	171C-L	4.50	.00034	.000012	17	SSLF		3 hole	$\frac{1}{8}$	4x4x4	Al.		
	172C-R	4.75	.000425	.000015	21	SSLF		3 hole	$\frac{1}{8}$	4x4x4	Al.		
	172C-L	4.75	.000425	.000015	21	SSLF		3 hole	$\frac{1}{8}$	4x4x4	Al.		
	173C-R	5.00	.0005	.000015	25	SSLF		3 hole	$\frac{1}{8}$	4x4x4	Al.		
	173C-L	5.00	.0005	.000015	25	SSLF		3 hole	$\frac{1}{8}$	4x4x4	Al.		
	174C-R	5.50	.0007	.000018	33	SSLF		3 hole	$\frac{1}{8}$	4x4x4	Al.		
	174C-L	5.50	.0007	.000018	33	SSLF		3 hole	$\frac{1}{8}$	4x4x4	Al.		
	175C-R	7.75	.001	.000025	47	SSLF		3 hole	$\frac{1}{8}$	4x4x4	Al.		
	175C-L	7.75	.001	.000025	47	SSLF		3 hole	$\frac{1}{8}$	4x4x4	Al.		
	176C-R	14.75	.0015	.000032	71	SSLF		3 hole	$\frac{1}{8}$	4x4x4	Al.		
	176C-L	14.75	.0015	.000032	71	SSLF		3 hole	$\frac{1}{8}$	4x4x4	Al.		
	Standard Type												
		141-B	4.25	.0025	.000012	11	SLC		3 hole	$\frac{1}{8}$	4x4x4	Al.	
		153-B	4.50	.003	.000018	15	SLC		3 hole	$\frac{1}{8}$	4x4x4	Al.	
		152-B	4.75	.0035	.000020	17	SLC		3 hole	$\frac{1}{8}$	4x4x4	Al.	
		123-B	5.00	.005	.000022	21	SLC		3 hole	$\frac{1}{8}$	4x4x4	Al.	
		137-B	6.00	.001	.000025	41	SLC		3 hole	$\frac{1}{8}$	4x4x4	Al.	
	Special Type												
		159-B	4.00	.00005	.000002	3	SLC		3 hole	$\frac{1}{8}$	4x4x4	Al.	
		154-B	4.00	.00015	.000003	7	SLC		3 hole	$\frac{1}{8}$	4x4x4	Al.	
		155-B	4.00	.000043	.000003	7	SLC		3 hole	$\frac{1}{8}$	4x4x4	Al.	
		141-B	4.25	.00025	.000012	11	SLC		3 hole	$\frac{1}{8}$	4x4x4	Al.	
		153-B	4.50	.00030	.000018	15	SLC		3 hole	$\frac{1}{8}$	4x4x4	Al.	
		152-B	4.75	.000350	.000020	17	SLC		3 hole	$\frac{1}{8}$	4x4x4	Al.	
		123-B	5.00	.000500	.000022	21	SLC		3 hole	$\frac{1}{8}$	4x4x4	Al.	
		137-B	6.00	.001	.000025	41	SLC		3 hole	$\frac{1}{8}$	4x4x4	Al.	
		211-B	7.00	.00025	.000007	11	SLC		3 hole	$\frac{1}{8}$	4x4x4	Al.	
		215-B	7.50	.0003	.000008	15	SLC		3 hole	$\frac{1}{8}$	4x4x4	Al.	
		217-B	8.00	.00035	.000009	17	SLC		3 hole	$\frac{1}{8}$	4x4x4	Al.	2
		221-B	8.50	.0005	.000015	21	SLC		3 hole	$\frac{1}{8}$	4x4x4	Al.	2
		164-B†	10.00	.00025	.000018	21	SLC		3 hole	$\frac{1}{8}$	4x4x4	Al.	2
		317-B	12.00	.00035	.000018	17	SLC		3 hole	$\frac{1}{8}$	4x4x4	Al.	3
		147-B†	15.00	.00045	.000027	43	SLC		3 hole	$\frac{1}{8}$	4x4x4	Al.	
	157-B†	16.50	.0002	.000015	21	SLC		3 hole	$\frac{1}{8}$	4x4x4	Al.		
†Transmitting Condensers.													
Duplex Condenser & Radio Corp., 36 Flatbush Ave., Extension, Brooklyn, N. Y.	Junior	1.00	.00005	.00001	3	SLC	No	3 hole	$\frac{1}{8}$	3½x3½x1 $\frac{1}{16}$	Al.	1	
	DR-3	2.00	.00024	.00001	11	SLC	No	3 hole	$\frac{1}{8}$	3½x3½x1 $\frac{1}{16}$	Al.	1	
	DR-11	2.50	.00029	.00001	14	SLC	Yes	3 hole	$\frac{1}{8}$	3½x3½x1 $\frac{1}{16}$	Al.	1	
	DR-13	2.25	.00029	.00001	13	SLC	No	3 hole	$\frac{1}{8}$	3½x3½x1 $\frac{1}{16}$	Al.	1	
	DR-13V	3.00	.00034	.00001	16	SLC	Yes	3 hole	$\frac{1}{8}$	3½x3½x1 $\frac{1}{16}$	Al.	1	
	DR-17	2.35	.00040	.00001	17	SLC	No	3 hole	$\frac{1}{8}$	3½x3½x1 $\frac{1}{16}$	Al.	1	
	DR-17V	3.25	.00044	.00001	20	SLC	Yes	3 hole	$\frac{1}{8}$	3½x3½x2 $\frac{1}{16}$	Al.	1	
	DR-23	2.50	.00055	.00001	23	SLC	No	3 hole	$\frac{1}{8}$	3½x3½x2 $\frac{1}{16}$	Al.	1	
	DR-23V	3.50	.00060	.00001	26	SLC	Yes	3 hole	$\frac{1}{8}$	3½x3½x2 $\frac{1}{16}$	Al.	1	
	DR-43	3.50	.00103	.00002	43	SLC	No	3 hole	$\frac{1}{8}$	3½x3½x3 $\frac{1}{16}$	Al.	1	
	DR-43V	4.00	.00115	.00002	46	SLC	Yes	3 hole	$\frac{1}{8}$	3½x3½x3 $\frac{1}{16}$	Al.	1	
	DRF	2.00	.00025			SLF	No	3 hole	$\frac{1}{8}$	3½x3½	Al.	1	
	DRF	2.25	.0003			SLF	No	3 hole	$\frac{1}{8}$	3½x3½	Al.	1	
	DRF	2.35	.00035			SLF	No	3 hole	$\frac{1}{8}$	3½x3½	Al.	1	
	DRF	2.50	.0005			SLF	No	3 hole	$\frac{1}{8}$	3½x3½	Al.	1	
	Standard												
		FR-11	4.25	.000258	.000008	11	SLC	No	3 hole	$\frac{1}{8}$	4x3½x2 $\frac{1}{16}$	Al.	1
		FR-11V	5.50	.000309	.000008	14	SLC	Yes	3 hole	$\frac{1}{8}$	4x3½x2 $\frac{1}{16}$	Al.	1
		FR-15	4.50	.000362	.000006	15	SLC	No	3 hole	$\frac{1}{8}$	4x3½x2 $\frac{1}{16}$	Al.	1
		FR-15V	5.50	.000395	.000006	18	SLC	Yes	3 hole	$\frac{1}{8}$	4x3½x2 $\frac{1}{16}$	Al.	1
		FR-21	5.00	.000507	.000012	21	SLC	No	3 hole	$\frac{1}{8}$	4x3½x2 $\frac{1}{16}$	Al.	1
	FR-21V	6.00	.00055	.000013	24	SLC	Yes	3 hole	$\frac{1}{8}$	4x3½x3 $\frac{1}{16}$	Al.	1	
	FR-41	6.00	.001	.000022	41	SLC	No	3 hole	$\frac{1}{8}$	4x3½x3 $\frac{1}{16}$	Al.	1	
	FR-41V	7.00	.001035	.000025	44	SLC	Yes	3 hole	$\frac{1}{8}$	4x3½x4 $\frac{1}{16}$	Al.	1	
	FRF	4.25	.00025			SLF	No	3 hole	$\frac{1}{8}$	4x3½	Al.	1	
	FRF	4.50	.00035			SLF	No	3 hole	$\frac{1}{8}$	4x3½	Al.	1	
	FRF	5.00	.0005			SLF	No	3 hole	$\frac{1}{8}$	4x3½	Al.	1	
Electrical Products Mfg. Co., 69 Sprague St., Providence R. I.	Dymac	3.00	.00035		13	Plain	No	3 hole	$\frac{1}{8}$	4x4x2½	Al.	1	
	Dymac	3.50	.0005		17	Plain	No	3 hole	$\frac{1}{8}$	4x4x3	Al.	1	
	Dymac	3.50	.00035		15	S.L.F.	No	3 hole	$\frac{1}{8}$	4x4x2½	Al.	1	
Electrical Research Lab., 2500 Cottage Grove Chicago, Ill.	Erla-Equispace	2.75	.000365	.000010	15	SLW to 60° SLC 10° to 100°	No	1 hole or 1 hole and boss	$\frac{1}{8}$	3½x3½x2½	Brass	1	
Elgin Radio Corporation, 67-69 N. State St., Elgin, Ill.	Elraco 25	2.75	.00025	.000017	11	MSLF	No	3 hole	$\frac{1}{8}$	2½	Al.	1	
	35	2.85	.00035	.000018	17	MSLF	No	3 hole	$\frac{1}{8}$	2½	Al.	1	
	50	3.00	.0005	.000019	23	MSLF	No	3 hole	$\frac{1}{8}$	2½	Al.	1	
Fett & Kimmel Co., Bluffton, Ohio	Craftsman	5.00	.00053	.0001	25	SLW		1	$\frac{1}{8}$	3½x4½x1½	Al.	1	
	Craftsman	4.50	.00035	.0001	19	SLW		or 3 hole	$\frac{1}{8}$	3½x3½x1½	Al.	1	
	Craftsman	4.00	.00025	.0001	15	SLW		hole	$\frac{1}{8}$	3½x3½x1½	Al.	1	
Freshman Co., Inc., Chas., 240-48 W. 40th St., N.Y.C.	Freshman	2.50	.00035	.000015	15	SLC	No	Panel or Base	$\frac{1}{8}$	3½x3½	Brass	1	
	Freshman		.00036	.000014	15	SLW	Yes		$\frac{1}{8}$	3½x3½	Brass	1	
Furnell Mfg. Corp., 24 Scott St., Newark, N. J.	Furnell	5.50	.00025	.000008	2	SLF	No	3 hole	$\frac{1}{8}$	3x4	Brass	1, 2 & 3	
	With 4-in. dial	5.75	.00035	.000010	2	SLF	No	3 hole	$\frac{1}{8}$	3x4	Brass	1, 2 & 3	
		6.00	.0005	.000012	2	SLF	No	3 hole	$\frac{1}{8}$	3x4	Brass	1, 2 & 3	
Gardiner & Hepburn, Inc., Philadelphia, Pa.	Separator	3.50	.00025	.000007	13	SLW	No	3 hole	$\frac{1}{8}$	3½	Al.	1	
	Separator	3.75	.00035	.000009	18	SLW	No	3 hole	$\frac{1}{8}$	3½	Al.	1	
	Separator	4.00	.0005	.000018	25	SLW	No	3 hole	$\frac{1}{8}$	3½	Al.	1	
	Separator	5.00	.001	.000066	45	SLW	No	3 hole	$\frac{1}{8}$	3½	Al.	1	
	Separator	4.50	.00025	.000007	13	SLW	Yes	3 hole	$\frac{1}{8}$	3½	Al.	1	
	Separator	4.75	.00035	.000009	18	SLW	Yes	3 hole	$\frac{1}{8}$	3½	Al.	1	
	Separator	5.00	.0005	.000018	26	SLW	Yes	3 hole	$\frac{1}{8}$	3½	Al.	1	
	Separator	6.00	.001	.000066	45	SLW	Yes	3 hole	$\frac{1}{8}$	3½	Al.	1	
	Junior	1.25	.000022		12	SLC	No	1 hole	$\frac{1}{8}$	1	Al.	1	
	Unitrol	7.00	.00025	.000007	14	SLW	No	3 hole	$\frac{1}{8}$	3½	Al.	2	
	Unitrol	7.50	.00035	.000009	18	SLW	No	3 hole	$\frac{1}{8}$	3½	Al.	2	
	Unitrol	8.00	.0005	.000018	26	SLW	No	3 hole	$\frac{1}{8}$	3½	Al.	2	
	Unitrol	9.00	.00025	.000007	14	SLW	No	3 hole	$\frac{1}{8}$	3½	Al.	3	
	Unitrol	9.50	.00035	.000009	18	SLW	No	3 hole	$\frac{1}{8}$	3½	Al.	3	
	Unitrol	10.00	.005	.000018	26	SLW	No	3 hole	$\frac{1}{8}$	3½	Al.	3	
	Condenseretta	.50	.000008	.000002	2	SLC	No	1 hole	$\frac{1}{8}$	1	Al.	1	
	General Radio Co., Cambridge, Mass.	Type 247—H	5.00	.0005	.000015	26	SLW	Yes	Panel	$\frac{1}{8}$	4x4x4½	Brass	1
E		6.25	.0005	.000022	26	SLC	No	Case	$\frac{1}{8}$	5x5x4½	Brass	1	
F		4.00	.0005	.000015	26	SLW	No	Panel	$\frac{1}{8}$	4x4x4½	Brass	1	
G		7.25	.0005	.000022	26	SLC	Yes	Case	$\frac{1}{8}$	5x5x5½	Brass	1	
N		3.75	.00035	.000015	21	SLW	No	Panel	$\frac{1}{8}$	4x4x4½	Brass	1	

Variable Condensers—Continued

Name and Address of Manufacturer	Trade Name and Model Number	List Price	Capacity in Microfarads		No. of Plates per Unit	Type	Is Vernier Built-in	Method of Mounting	Diameter of Shaft in Inches	Overall Dimensions at Min. Cap. in Inches	Material of Plates	No. of Units on Shaft	
			Max.	Min.									
General Radio Co. (Continued)	P	\$4.75	.00035	.000015	21	SLW	Yes	Panel	1/4	4x4x4 1/4	Brass	1	
	M	4.50	.00025	.000012	14	SLW	Yes	Panel	1/4	4x4x4	Brass	1	
	K	3.50	.00025	.000012	14	SLW	No	Panel	1/4	4x4x4	Brass	1	
	J	5.75	.00025	.000020	14	SLC	No	Case	1/4	5x5x4 1/4	Brass	1	
	L	7.00	.00025	.000020	14	SLC	Yes	Case	1/4	5x5x4 1/4	Brass	1	
	Type 334—H	5.25	.0005	.000020	26	SLW	Yes	Panel	1/4	3 1/2 x 3 1/2 x 4 1/4	Brass	1	
	F	4.25	.0005	.000020	26	SLW	No	Panel	1/4	3 1/2 x 3 1/2 x 4 1/4	Brass	1	
	P	5.00	.00035	.000018	21	SLW	Yes	Panel	1/4	3 1/2 x 2 1/2 x 4 1/4	Brass	1	
	N	4.00	.00035	.000018	21	SLW	No	Panel	1/4	3 1/2 x 3 1/2 x 4 1/4	Brass	1	
	M	4.75	.00025	.000015	14	SLW	Yes	Panel	1/4	3 1/2 x 3 1/2 x 4 1/4	Brass	1	
	K	3.75	.00025	.000015	14	SLW	No	Panel	1/4	3 1/2 x 3 1/2 x 4 1/4	Brass	1	
	Type 248—F	6.50	.0005	.000020	26	SLW	No	Panel	1/4	3 1/2 x 3 1/2 x 5 1/4	Brass	2	
	(Tandem) N	6.15	.00035	.000020	21	SLW	No	Panel	1/4	3 1/2 x 3 1/2 x 5 1/4	Brass	2	
	(per section) K	5.75	.00025	.000018	14	SLW	No	Panel	1/4	3 1/2 x 3 1/2 x 5 1/4	Brass	2	
	Type 239—H	10.00	.001	.00003	33	SLW	No	Panel	1/4	4 1/2 x 4 1/2 x 6	Brass	1	
	G	13.50	.001	.00003	33	SLW	Yes	Panel	1/4	4 1/2 x 4 1/2 x 6	Brass	1	
	M	13.00	.002	.000035	65	SLW	No	Panel	1/4	4 1/2 x 4 1/2 x 6	Brass	1	
	L	16.50	.002	.000035	65	SLW	Yes	Panel	1/4	4 1/2 x 4 1/2 x 6	Brass	1	
	Type 374—B	3.75	.000125	.00001	13	SLF	No	Panel	1/4	3 1/2 x 3 1/2 x 3 1/4	Brass	1	
	K	4.25	.00025	.000012	24	SLF	No	Panel	1/4	3 1/2 x 3 1/2 x 4 1/4	Brass	1	
N	6.50	.00035	.000015	19	SLF	No	Panel	1/4	3 1/2 x 3 1/2 x 5	Brass	2		
F	7.00	.0005	.000015	24	SLF	No	Panel	1/4	3 1/2 x 3 1/2 x 6	Brass	2		
Type 368	1.25	.000012		5	SLF	No	1 hole	1/8	2x2x1 1/4	Brass	1		
Gray Brothers, Plano, Ill.	Gray	3.50	.00035	.000005	16	SLF	No	3 hole	1/8	2 1/2 x 5	Brass	1	
Haig & Haig Mfg. Co., Inc. Rochester, N. Y.	Straightline	4.00	.00025		15	SLF	No	3 hole	1/8	5 1/2 x 2 1/2 x 2 1/2	Al.	1	
	Straightline	4.00	.00025		11	SLW	No	3 hole	1/8		Al.	1	
	Straightline	4.00	.00035	.00001	15	SLW	No	3 hole	1/8		Al.	1	
	Straightline	4.50	.0005	.00001	23	SLW	No	3 hole	1/8		Al.	1	
	Straightline	4.50	.00038		21	SLF	No	3 hole	1/8	5 1/2 x 2 1/2 x 2 1/2	Al.	1	
	Straightline	5.00	.0005		29	SLF	No	3 hole	1/8	5 1/2 x 3 1/2 x 2 1/2	Al.	1	
Hammarlund Mfg. Co., Inc., 424-438 W. 33rd St., N. Y. C.	Hammarlund Model C Vernier	7.00	.001	.000027	43	MSLW	Yes	Screws	1/8	3 1/2 x 4	Brass	1	
		6.00	.0005	.000017	23	MSLW	Yes	Screws	1/8	3 1/2 x 4	Brass	1-2	
		5.75	.00037	.000014	17	MSLW	Yes	Screws	1/8	3 1/2 x 4	Brass	1-2-3	
		5.65	.0003	.000012	13	MSLW	Yes	Screws	1/8	3 1/2 x 4	Brass	1-2-3	
		5.00	.00025	.000011	11	MSLW	Yes	Screws	1/8	3 1/2 x 4	Brass	1-2-3	
	Hammarlund, Model C Plain	6.50	.001	.000027	43	MSLW	No	Screws	1/8	3 1/2 x 4	Brass	1	
		5.00	.0005	.000017	23	MSLW	Yes	Screws	1/8	3 1/2 x 4	Brass	1-2	
		4.75	.00037	.000014	17	MSLW	Yes	Screws	1/8	3 1/2 x 4	Brass	1-2-3	
		4.65	.0003	.000012	13	MSLW	Yes	Screws	1/8	3 1/2 x 4	Brass	1-2-3	
		4.50	.00025	.000011	11	MSLW	Yes	Screws	1/8	3 1/2 x 4	Brass	1-2-3	
	Hammarlund, SLF	5.00	.0005	.000013	23	MSLW	No	Single Hole	1/8	3 1/2 x 5	Brass	1	
		4.75	.000375	.000011	17	MSLW	No	Single Hole	1/8	3 1/2 x 5	Brass	1	
		4.65	.0003	.000010	13	MSLW	No	Single Hole	1/8	3 1/2 x 5	Brass	1	
		4.50	.00025	.000009	11	MSLW	No	Single Hole	1/8	3 1/2 x 5	Brass	1	
	Hammarlund, Jr. Midget	1.80	.000032	.000004	9	MSLW	No	Single Hole	1/8	1 1/2 x 1 1/2	Brass	1	
		1.80	.00016	.000004	5	MSLW	No	Single Hole	1/8	1 1/2 x 1 1/2	Brass	1	
	Hart & Hegeman Mfg. Co., Hartford, Conn., U.S.A.	W 607	.85	.00005	.000006	3	SLC		1 hole	1/8	3 1/2 x 1	Al.	1
		W 610	3.75	.00025	.000015	11	SLC		3 hole	1/8	3 1/2 x 2 1/2	Al.	1
W 612		4.00	.00035	.000015	17	SLC		3 hole	1/8	3 1/2 x 2 1/2	Al.	1	
W 624		4.25	.0005	.000018	23	SLC		3 hole	1/8	3 1/2 x 3 1/2	Al.	1	
W 634		5.50	.0005	.000018	23	SLC	Yes	3 hole	1/8	3 1/2 x 3 1/2	Al.	1	
W 644		4.75	.001	.000018	43	SLC		3 hole	1/8	3 1/2 x 4 1/4	Al.	1	
W 654		6.00	.001	.000018	43	SLC	Yes	3 hole	1/8	3 1/2 x 4 1/4	Al.	1	
Hayes Products Co., Grand Haven, Mich.	Ensign	3.25	.00025		14	SLW	No	1 hole	1/8	4 1/2 x 2 1/2 x 1 1/4	Brass	1	
		3.50	.00035		19	SLW	No	1 hole	1/8	4 1/2 x 2 1/2 x 1 1/4	Brass	1	
		3.75	.0005	.000003	25	SLW	No	1 hole	1/8	4 1/2 x 2 1/2 x 2 1/4	Brass	1	
Imperial Elect. Mfg. Co. 50 Columbia St., Newark, N. J.	Puradyne	3.00	.0003		15	SLF	No	3 hole	1/8		Al.	1	
		3.25	.000385		17	SLF	No	3 hole	1/8		Al.	1	
		3.50	.000525		23	SLF	No	3 hole	1/8		Al.	1	
Indiana Mfg. & Electric Co., Marion, Ind.	Ind. Hyperlyne		.00035		19	SLF	Yes	3 hole	1/8		Al.	1	
Jones Radio Mfg. Co., Jos. W., 46 W. 25th St., N. Y. C.	Jones		.00035		13	SLC	No	1 hole	1/8	4x4x3 1/4	Al.	1	
	Jones		.0005		23	SLC	No	1 hole	1/8	4x4x3 1/4	Al.	1	
	Jones		.001		43	SLC	No	1 hole	1/8	4x4x3 1/4	Al.	1	
	Jones F		.005		23	SLW	No	1 hole	1/8	4x4x3 1/4	Al.	1	
Kapaciton Company, Inc., 24 Elliott Place, Jersey City, N. J.	Helicon	6.50	.00025	.00003	1	Spiral action	Yes	3 hole	1/8	2 1/2 x 2 1/2 x 2 1/2	Brass	1	
	Helicon	6.75	.00038	.000037	1		Yes	3 hole	1/8	2 1/2 x 2 1/2 x 2 1/2	Brass	1	
	Helicon	7.00	.0005	.000048	1		Yes	3 hole	1/8	2 1/2 x 2 1/2 x 2 1/2	Brass	1	
King Quality Products, Inc., Buffalo, N. Y.	King-Cardwell												
	R-190	4.25	.00025	.000008	11	SLC	No		1/8	3 1/2 x 3 1/2	Al.	1	
	R-191	4.50	.00032	.000009	15	SLC	No		1/8	3 1/2 x 3 1/2	Al.	1	
	R-192	4.75	.00035	.00001	17	SLC	No		1/8	3 1/2 x 3 1/2	Al.	1	
	R-193	5.00	.0005	.000018	21	SLC	No		1/8	3 1/2 x 3 1/2	Al.	1	
	R-194	6.00	.001	.00002	41	SLC	No		1/8	3 1/2 x 3 1/2	Al.	1	
	R-195	7.00	.00025	.00001	11	SLC	No		1/8	3 1/2 x 3 1/2	Al.	2	
	R-196	7.50	.00032	.000012	15	SLC	No		1/8	3 1/2 x 3 1/2	Al.	2	
R-197	8.00	.00035	.000015	17	SLC	No		1/8	3 1/2 x 3 1/2	Al.	2		
Lincoln Radio Corp., 224 No. Wells St., Chicago	Lincoln	4.50	.0005	.000011	24	SLW	No	2 hole	1/8	4 1/2 x 4 x 3 1/4	Al.	1	
Lombard Radio Mfg. Co., 67-71 Minerva St., Derby, Conn.	Lombardi	4.50	.0005		23	SLF	No	1 or 3 hole	1/8		Al.	Can be had in 1, 2 or 3	
	Single plain	4.25	.00035		17	SLW	No	1 or 3 hole	1/8		Al.		
	Single Plain	4.00	.00025		13	SLW	No	1 or 3 hole	1/8		Al.		
	Single Vernier	5.50	.0005		23	SLW	Yes	1 or 3 hole	1/8		Al.		
Magnus Electric and Radio Mfg. Co., 787 E. 138 St., New York	935	3.00	.00036		15		No	3 hole	1/8	2 1/2	Al.	1	
	933	4.00	.00055		23		No	3 hole	1/8	2 1/2	Al.	1	
Mazda Radio Mfg. Co., 3405 Perkins Ave. Cleveland, Ohio	Muzada No. 5540	2.25	.00025		16	SLF	No	1 hole	1/8	2 1/2 x 3 1/2	Al.	1	
	Muzada No. 5541	2.50	.00035		19	SLF	No	1 hole	1/8	2 1/2 x 3 1/2	Al.	1	
	Muzada No. 5542	3.00	.0005		25	SLF	No	1 hole	1/8	2 1/2 x 3 1/2	Al.	1	
Mohawk Corp. of Illinois, Chicago, Ill.	Mohawk 145	15.00			15		No	3 hole	1/8	6 1/2 x 4 1/2 x 2 1/2	Al.	3	
Neutrowound Radio Mfg. Co., 1721 Prairie Ave., Chicago, Ill.	Neutrowound	7.00		.00028	15	SLF	No	Base-board		3 1/2 x 1	Spring Brass	1	

Variable Condensers—Concluded

Name and Address of Manufacturer	Trade Name and Model Number	List Price	Capacity in Microfarads		No. of Plates per Unit	Type	Is Vernier Built-in	Method of Mounting	Diameter of Shaft in Inches	Overall Dimensions at Min. Cap. in Inches	Material of Plates	No. of Units on Shaft
			Max.	Min.								
Pacent Electric Company, 91 Seventh Ave., N. Y.	250B	\$3.50	.00035	.000010	17	SLF	No	1 or 3 hole	1/4	5 1/2 x 2 1/2 x 1 1/2	Brass	1
	250C	4.50	.0005	.000016	23	SLF	No	3 hole	1/4	5 1/2 x 2 1/2 x 2	Brass	1
Phenix Radio Corp., 114-16 East 25th St., N. Y. C.	Ultra-Low Loss	5.00	.0005	.000011	25	SLW	No	3 hole	1/4	3 x 3 1/2 x 3 1/2	Brass	1
Pilot Electric Mfg. Co., 323 Berry St., Brooklyn, N. Y.	7113	1.00	.0003		13	SLF	No	3 hole	1/4	2 1/2 x 5 1/2 x 2 1/2	Al.	1
	6113	2.25	.0003		13	SLF	No	3 hole	1/4	2 1/2 x 3 1/2 x 3	Al.	1
	6117	2.50	.00038		17	SLF	No	3 hole	1/4	2 1/2 x 3 1/2 x 3	Al.	1
	6123	2.75	.0005		23	SLF	No	3 hole	1/4	2 1/2 x 3 1/2 x 3	Al.	1
Potter Tool & Machine Works, New York City	Potter Precision	1.50	.00035		17	SLF	No	3 hole	1/4	3 1/2 x 3 x 2 1/2	Brass	1
Precise Mfg. Co., 254 Mill St., Rochester, N. Y.	Syncondenser 790	4.00	.00038	.0000009	17	SLF to 50°	No	3 hole	1/4	3 1/2 x 3 1/2 x 3	Brass	1
	790-L	4.00	.00038	.0000009	17	SLC 50° to 100°	No	3 hole	1/4	3 1/2 x 3 1/2 x 3	Brass	1
	750	4.50	.00058	.000001	25	SLF	No	3 hole	1/4	3 1/2 x 3 1/2 x 3	Brass	1
	750-L	4.50	.00058	.000001	25	SLF	No	3 hole	1/4	3 1/2 x 3 1/2 x 3	Brass	1
	722	8.00	.00035			SLF	No	3 hole	1/4	3 1/2 x 3 1/2 x 3	Brass	2
	720	9.00	.0005			SLF	No	3 hole	1/4	3 1/2 x 3 1/2 x 3	Brass	2
Premier Electric Co., Grace and Ravenswood Ave., Chicago, Ill.	Crofoot No. 107	2.75	.0001	.000005	7	SLF	No	1 hole	1/4	3 x 2 1/2	Brass	1
	117	3.25	.00025	.000006	17	SLF	No	1 hole	1/4	3 x 3	Brass	1
	123	3.50	.00035	.000007	23	SLF	No	1 hole	1/4	3 x 3 1/2	Brass	1
	133	3.75	.0005	.000007	33	SLF	No	1 hole	1/4	3 x 3 1/2	Brass	1
Radio Condenser Co., Thorne and Copewood Sts., Camden, N. J.	Certified	2.50	.00025	.000012	13	SLC	No	1 or 3 hole	1/4	2 1/2 x 3 1/2	Al.	1
	Certified	2.75	.00035	.000012	19	SLC	No	1 or 3 hole	1/4	2 1/2 x 3 1/2	Al.	1
	Certified	3.00	.0005	.000012	25	SLC	No	1 or 3 hole	1/4	2 1/2 x 3 1/2	Al.	1
	Certified	3.50	.001	.000012	45	SLC	No	1 or 3 hole	1/4	2 1/2 x 3 1/2	Al.	1
	Kompact	1.50	.000250	.000011	13	MISLW	No	3 hole	1/4	2 1/2 x 2 1/2	Al.	1
	Kompact	1.60	.0003	.000011	15	MISLW	No	3 hole	1/4	2 1/2 x 2 1/2	Al.	1
	Kompact	1.65	.00035	.000011	17	MISLW	No	3 hole	1/4	2 1/2 x 2 1/2	Al.	1
	Kompact	1.80	.0005	.000011	23	MISLW	No	3 hole	1/4	2 1/2 x 2 1/2	Al.	1
	R.C.	.75	.00005	.000009	3	MISLW	No	3 hole	1/4	3 x 3 1/2	Al.	1
	R.C.	1.50	.00025	.000009	11	MISLW	No	3 hole	1/4	3 x 3 1/2	Al.	1
	R.C.	1.65	.00035	.000009	17	MISLW	No	3 hole	1/4	3 x 3 1/2	Al.	1
	R.C.	1.80	.0005	.000009	23	MISLW	No	3 hole	1/4	3 x 3 1/2	Al.	1
	R.C.	2.10	.001	.000009	32	MISLW	No	3 hole	1/4	3 x 3 1/2	Al.	1
	R. C. Midget	.75	.000030	.000004	3	MISLW	No	1 hole	3/32	1 1/2 x 1 1/8	Al.	1
Rathbun Mfg. Co., Inc., Jamestown, N. Y.	SLC-3	1.25	.00002	.000002	3	SLC		1 hole	1/4		Al.	1
	ESLW-10	3.50	.00015	.000002	10	SLW		1 hole	1/4		Al.	1
	ESLW-12	3.50	.0002	.000002	12	SLW		1 hole	1/4		Al.	1
	ESLW-14	3.60	.00025	.000003	14	SLW		1 hole	1/4		Al.	1
	ESLW-18	3.75	.0003	.000003	18	SLW		1 hole	1/4		Al.	1
	ESLW-20	3.85	.00035	.000004	20	SLW		1 hole	1/4		Al.	1
	ESLW-30	4.00	.0005	.000006	30	SLW		1 hole	1/4		Al.	1
	ESLW-10	3.50	.00015	.000005	10	SLC		1 hole	1/4		Al.	1
	ESLW-12	3.50	.0002	.000005	12	SLC		1 hole	1/4		Al.	1
	ESLW-14	3.60	.00025	.000006	14	SLC		1 hole	1/4		Al.	1
	ESLW-16	3.75	.0003	.000008	16	SLC		1 hole	1/4		Al.	1
	ESLW-18	3.85	.00035	.000008	18	SLC		1 hole	1/4		Al.	1
	ESLW-26	4.00	.0005	.000009	26	SLC		1 hole	1/4		Al.	1
	Reichmann Company, 1725 W. 74th St. Chicago, Ill.	Thorola No. 410	6.00	.00050	.000020	23	SLF	No	3 hole	1/4	4 1/2 x 3 1/2 x 2 1/2	Brass
Thorola No. 411		5.50	.00035	.000018	17	SLF	No	3 hole	1/4	4 1/2 x 3 1/2 x 2 1/2	Brass	1
Stern & Co., Inc., 308 Asylum St., Hartford, Conn.	Fesco	1.25	.000228	.000007	11	SLC	No	Panel	1/4	3 1/2	Al.	1
	Fesco	.75	.00037	.000002	3	SLC	No	Panel	1/4	3 1/2	Al.	1
Triangle-Atlantic Corp., 349 Adams St., Brooklyn, N. Y.	Triangle-Atlantic Model F	2.50	.0005	.000008	23	SLF	No	3 hole	1/4	4 1/2 x 2 1/2	Al.	1
	Triangle-Atlantic Model F	2.50	.00035	.000006	17	SLF	No	3 hole	1/4	4 1/2 x 2 1/2	Al.	1
	Triangle-Atlantic Model W	2.00	.0003	.000005	13	SLF	No	3 hole	1/4	4 1/2 x 2 1/2	Al.	1
	Triangle-Atlantic Model W	2.00	.0005		23	SLW	No	3 hole	1/4	3 1/2 x 3 1/2	Brass	1
	Triangle-Atlantic Model W	2.00	.00035		17	SLW	No	3 hole	1/4	3 1/2 x 3 1/2	Brass	1
Walnat Electric Mfg. Co., 308 So. Green St., Chicago	Walnat	4.00	.00025	.0000009	13	MISLW	No	1 or 3 hole	1/4	3 1/2 x 2 1/2 x 2 1/2	Al.	1
Walnat	4.50	.00035	.0000010	17	MISLW	No	1 or 3 hole	1/4	3 1/2 x 2 1/2 x 2 1/2	Al.	1	
Walnat	5.00	.000511	.0000013	23	MISLW	No	1 or 3 hole	1/4	3 1/2 x 2 1/2 x 2 1/2	Al.	1	
"X" Laboratories, 25 West 45th Street, New York, N. Y.	"X" Laboratory Type	7.00	.00025	.000003	16	SLF	No	3 hole	1/4	2 1/2 x 3 1/2 x 3 1/2	Al.	1
	"X" Laboratory Type	7.00	.00035	.000003	22	SLF	Yes	3 hole	1/4	2 1/2 x 3 1/2 x 3 1/2	Al.	1
	"X" Laboratory Type	7.50	.0005	.000004	32	SLF	Yes	3 hole	1/4	2 1/2 x 3 1/2 x 3 1/2	Al.	1
	"X" Laboratory Type	9.00	.00025	.000003	16	SLF	Yes	3 hole	1/4	2 1/2 x 3 1/2 x 4 1/2	Al.	1
	"X" Laboratory Type	9.00	.00035	.000003	22	SLF	Yes	3 hole	1/4	2 1/2 x 3 1/2 x 4 1/2	Al.	1
	"X" Laboratory Type	9.50	.0005	.000004	32	SLF	Yes	3 hole	1/4	2 1/2 x 3 1/2 x 5 1/2	Al.	1

SLF—Straight Line Frequency.  
SLC—Straight Line Capacity.

SLW—Straight Line Wave Length.  
M—Modified.

S—Semi.  
Al—Aluminum.

Standardization Will Help Every Dealer

(Continued from Page 810)

3. Should all dials and knobs have the same size holes, and if so, what size do you recommend?

4. How far should condenser shafts project through the panel?

The report of the Standards Committee and of the sub-committee chairman will be made at the May, 1926, meeting of the Radio Manu-

facturers' Association to be held at Atlantic City, New Jersey.

Radio dealers have, in self defense, helped a great deal in this standardization process. A dealer who has a stock of condensers that have quarter-inch shafts will hesitate before ordering many knobs or dials that will only fit three-sixteenths inch shafts. This lessens the demand for the smaller-sized dials and automatically takes a step toward standardization. We need this form

of co-operation and will appreciate any dealer's ideas along this line. Readers of *Radio Retailing* are invited to mail me their suggestions, addressed to me at the Carter Radio Company, 300 South Racine Street, Chicago.

Our ultimate aim is to standardize every part that enters into the construction of a radio set. We have every assurance that our standards will be followed by the radio industry as a whole.

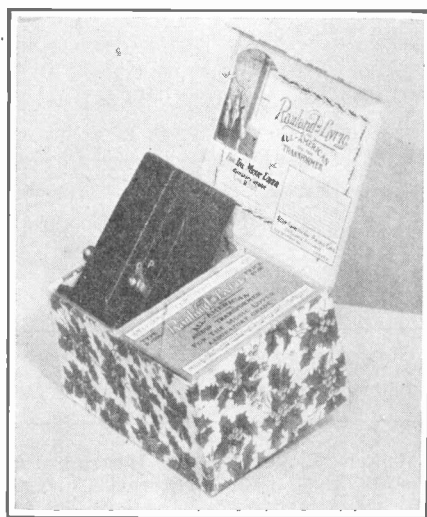


# How Manufacturers Promote Dealer Sales

New "Dealer Helps" Offered to the Radio Retailer by the Manufacturer to Increase the Merchant's Radio Profits

## Kolster Radio Issues Booklet

The Federal Telegraph Company of California, has issued an 8-page booklet from its merchandising division, located in the Woolworth Building, New York City, on the development of "Kolster" radio. This attractive booklet is being mailed by Kolster distributors to all dealers and prospective dealers. It gives a brief history of the company since it was organized in 1911, outlines its financial strength, sales and advertising policies, and then devotes several pages to a complete description of the four models which represent the Kolster line this year.



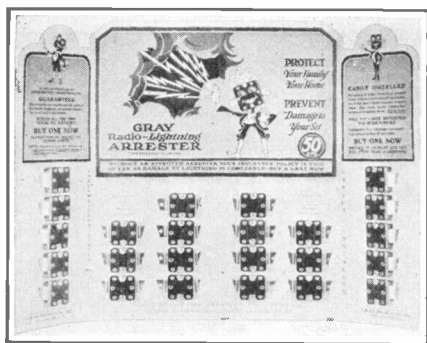
## Gift Box for Xmas Trade

Holly cartons which will hold two Itauland-Lyric transformers are being sent free with all orders for this apparatus by the All-American Radio Corporation, 4215 West Belmont Ave., Chicago, Illinois. The transformers are packed in their regular cartons, so that if any of the Gift boxes are left over after Christmas, they may be thrown away. Dealers may obtain as many of these cartons as desired without charge or any obligation to purchase transformers at the same time the boxes are received.

The Atwater-Kent Manufacturing Company, Philadelphia, Pa., has its new 48-page instruction book ready for distribution. This covers every important phase of installing and operating Atwater-Kent receiving sets and radio reproducers. As heretofore, a copy will be placed in a shipping container with each receiving set. It is a valuable handbook for those who own Atwater-Kent sets, and a material help to those who sell them. The list price of these books is 50c. each. Of particular interest is the section showing the installation of fuses between the batteries and battery-cable which is in accordance with the new fire underwriters' requirements.

The King Quality Products, Incorporated, Rano Street, Buffalo, N. Y., are distributing a booklet called "Radio Quest." This booklet is intended primarily for the man who has only the vaguest idea of how reception is accomplished. Technical terms and descriptions are avoided throughout the text. It is in a convenient pocket size, and may be had free upon writing the above company.

## Display for New Lightning Arrester



This display card will readily sell the new radio lightning arrester made by Gray Products, Incorporated, Poughkeepsie, N. Y. The card is approximately 12 in. x 18 in., with 4-inch wings on each side that are bent slightly forward to hold the display upright. Twenty-five lightning arresters are furnished on a card, which is supplied with twenty-six spaces. This leaves one space for a lead-on. The card comes with the arresters all mounted and five cards are packed in a carton, which are furnished the jobber. The lightning arresters themselves are black bakelite with nickel plated metal, and the card is yellow with black lettering which gives a very effective display. The sections marked off the top of the card, as can be seen in the illustration, have a background of orange.

The Ludwig Hommel Company, radio and electric appliance jobbers of Pittsburgh, Pa., have issued a well prepared catalogue of the radio parts, accessories, sets and electrical appliances which they are wholesaling this year.

## Cutout Stresses Enjoyment Value



This cutout is one of the many sales helps being furnished dealers by Gilfillan Brothers, 1815 West Sixteenth Street, Los Angeles, Cal. It measures approximately 15 in. x 18 in., is furnished with an easel back and attractively done in eight colors. Full of action, this card cannot help but catch the eye when placed either in the window or on the counter.

The Freed-Eiseman Radio Corporation, Sperry Building, Brooklyn, N. Y., has instituted a window dressing service for all dealers holding their contract. Upon receipt of a request, the Freed-Eiseman Company will send an expert metropolitan window dresser to the dealer's store, with a complete window dressing outfit containing a full supply of material, with which to dress the window from top to bottom. The usual charge for such service is \$20 to \$25, but as the above company furnishes the bulk of the cost and all the material, the total cost to the dealer is but \$5.

F. A. D. Andrea, Incorporated, 1581 Jerome Avenue, N. Y., has announced a new dealer co-operative newspaper advertising plan. This is in addition to the regular plan of zone co-operative advertising, which was instituted in September. This latter plan enables all authorized Fada franchise dealers to select the local newspapers they desire to advertise in, indicate the amount of money they are willing to spend for this advertising, and receive the financial co-operation of both distributor and F. A. D. Andrea, Inc.

## Stewart-Warner Brings Out Dealer Paper

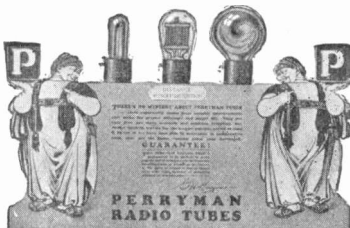
The Stewart-Warner "Hook-Up" is the very apt title chosen for the new house magazine published by Stewart-Warner Speedometer Corporation, 1820 Diversey Parkway, Chicago, Ill. Murray S. Smith will edit this twelve-page sales stimulating appeal. He states that this paper will appear every two weeks. It will be distributed without charge to Stewart-Warner dealers, jobbers, service stations, etc.

The Supertron Manufacturing Company, Hoboken, N. J., is issuing a station log which is made by the Rotary Log Company, 507 Fifth Ave., New York. It consists of a cardboard folder 5½ in. x 6¾ in., inside of which is inserted a cardboard dial pivoted at the center, which has space provided for marking three dial settings underneath a wave length designation. Both the back and the front of the dial are printed, and windows are cut in the cover which allows only one wave length to be read at a time. On the outside is printed the call letters, location and wave lengths of all stations of 500 watts or more. Space is provided on the front for imprints.

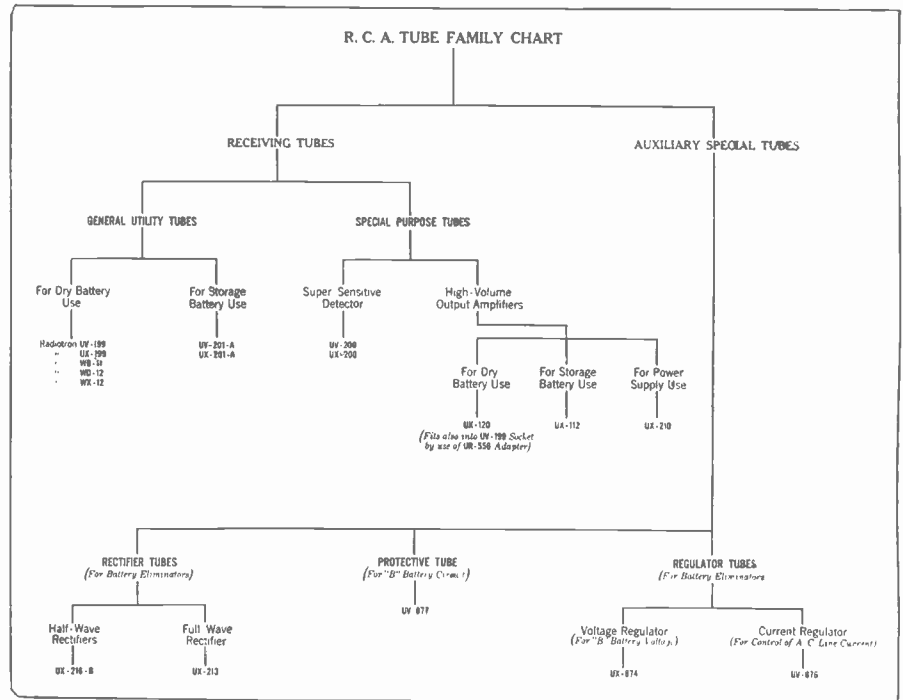
The Adler Manufacturing Company, Inc., 881 Broadway, New York City, has recently distributed to Adler-Royal dealers an attractive counter display. It is made of mahogany with gold lettering. The panel is 15½ in. wide, 8¼ in. high and has a 19-in. base.

The Bakelite Corporation, 247 Park Avenue, New York, is distributing a folder in which are a few scenes taken from its research laboratories, showing some of the scientific apparatus used for testing purposes. It is here that all materials are checked and development work carried out.

## Display Shows Tube Construction



A counter display being furnished to dealers by the Perryman Electric Company, 33 West Sixtieth Street, New York, is shown in the illustration. This has overall dimensions of 7 in. x 13 in. and holds three tubes. In the center is a clear glass type-201-A demonstrating tube which is furnished free with the display. Only half of the plate is constructed so that a full view of the grid and filament may be had. Information which will enable the salesman to explain the characteristics of these tubes is on the back of the display.



This tube chart, showing, in "family tree" form, the entire line of radio vacuum tubes and their uses, as manufactured by the

Radio Corporation of America, has been issued to help dealers in knowing the various functions of the tubes.

Wakem & McLaughlin, Incorporated, 225-235 East Illinois Street, Chicago, Ill., has issued a 24-page catalog for jobbers and dealers. This catalog contains only dependable, well known, nationally advertised products.

The Philadelphia Storage Battery Company, Philadelphia, Pa. has issued a cardboard display equipped with an easel back and measuring 5 in. x 13 in. The trade mark "Philco" is in white letters on a dark blue background while the border and other lettering is a bright yellow. Attention is called, on this card, to the new socket power devices made by this company.

The Belden Manufacturing Company, 2300 Southwestern Ave., Chicago, Ill., have recently instituted a new method of merchandising radio terminals. These are now furnished in small, attractive display cartons containing 25 consumer packets per carton. This method saves time in making sales, prevents losses from pilfering and provides a convenient and practical means of handling these small items. The packet method means uniformity of quality, both to the dealer and consumer.

The American Instrument Works, 613 Fulton Building, Pittsburgh, Pa., has available a counter display card with an easel back, for its "Split-Em" vernier instrument control. It is 7 in. x 9 in., with the lettering in black water color over a yellow background. A sample is mounted in the center where it is displayed to good advantage against the bright background.

The Mohawk Electric Corporation, Chicago, Illinois, has recently released a moving picture slide which can be used by dealers very effectively.

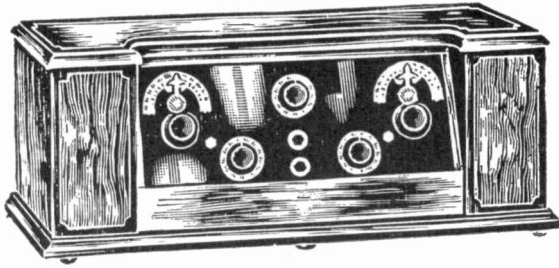
Patton-MacGuyer Company, Providence, R. I., has issued a small four-page folder illustrating their line of wire terminals. The cuts are actual size which will greatly aid the dealer when ordering.

## Federal Distributes New Designation



The Federal Radio Corporation, Buffalo, N. Y., is sending authorized retailers of Federal Ortho-Sonic sets a 9 in. x 13 in. window and counter designator, which is of the prismatic type, and finished in blue and gold. This is but one of the many pieces of advertising material to be distributed to Federal retailers this season. These designators are for the purpose of familiarizing the public with Federal retail appointees. All retailers showing this sign will exhibit and demonstrate the new Ortho-Sonic line.

The Arbee Manufacturing Company, 68-70 Springfield Avenue, Newark, N. J., has issued a booklet called "Resistances and resistance coupled amplifiers" which deals with the practical side of resistances. This booklet contains 15 pages and is illustrated with plates showing hook-ups together with a complete listing of all resistances kept in stock. These may be obtained by writing the above company.



**Crosley Super-Trirdyn Special**

The improved Super-Trirdyn panel is assembled in a new solid mahogany cabinet finished in duotone. This cabinet with its striking lines and simple detail decoration is of ample size to house all dry cell batteries required for dry cell tube operation **\$60**

# Performance that has no peer in any field of radio

Since the announcement of the present new Crosley models, Crosley sales have been leaping to sensational figures, literally taxing the production facilities of all Crosley plants.

This new leadership in sales is based on Crosley's new leadership in value; and this latter resolves itself into two simple propositions:

*Crosley sets consistently deliver a performance that has no peer in any field of radio—and this matchless performance is offered at the lower prices that only the economies of tremendous production make possible!*

On this page are shown four of the new Crosleys—the two famous Super Trirdyns and the two Special De Luxe models. Not only do they offer an effective beauty and accurate workmanship but they provide a performance that cannot be surpassed in the \$23.50—\$60 price range or many dollars above it!

Make your own comparison on the basis of selectivity, distance, clarity, and volume. Place the competing receivers side by side with lead-ins from the same antenna, and put them through their paces.

Forget the radical difference in price. Reach your conclusion solely on results. Then and only then will you understand why thousands upon thousands of radio buyers are singling these Crosleys out of the entire field—unwilling to pay more because a greater investment cannot provide greater enjoyment.

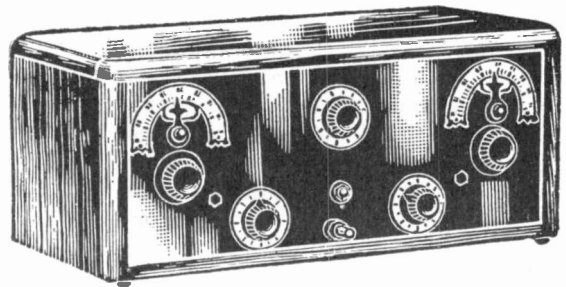
*See the complete Crosley line at the nearest Crosley dealer's. Address Department 130 for his name and our illustrated catalogue.*

**THE CROSLEY RADIO CORPORATION**  
Cincinnati, Ohio

Cable Address: Listenin-Cincinnati

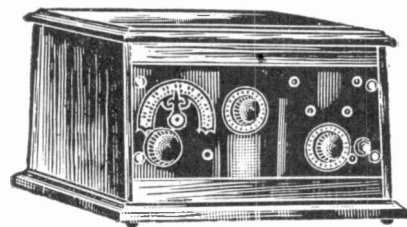
\* *Owning and operating WLW, first remote control super-power broadcasting station*

Crosley manufactures receiving sets which are licensed under Armstrong U. S. patent No. 1,113,149, and priced from \$9.75 to \$60.00 without accessories. None of the prices quoted include batteries, tubes, headphones, etc. Add 10% to all prices west of the Rocky Mountains.



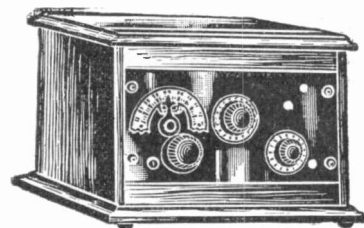
**Crosley Super-Trirdyn Regular**

Incorporating the famous Trirdyn hook-up, this set brings in stations sharp, clear, and mellow on the Musicon. The cabinet is of oil rubbed solid mahogany, exquisitely simple in design and beautifully finished. For sheer performance under all conditions the Super-Trirdyn cannot be surpassed **\$45**



**Crosley 3-Tube 52 S. D.**

In this improved model are introduced radical refinements that increase its general efficiency. Refinement of parts and improvements in design have made it a truly remarkable value considering its nominal price. Genuine Armstrong regeneration with the double circuit to reduce radiation to a minimum. Beautifully proportioned with attractive sloping panel. Cabinet holds all necessary dry cells. A genuine long range radio, easy to tune, easy to enjoy, and easy to pay for. **\$32.50**



**Crosley 2-Tube 51 S. D.**

This superb long range set combines Armstrong regeneration and one stage of audio frequency amplification. The handsome mahogany finished cabinet, with sloping panel, holds all required dry batteries. Improvements include new worm type tickler, new vernier plate condenser, and a double circuit to minimize radiation. Unusual selectivity and distance, extreme accuracy of control... **\$23.50**

*We solicit inquiries from dealers interested in our sales and service station franchise.*

# CROSLEY RADIO

BETTER · COSTS LESS

## How to Sell S. L. F. Condensers

(Continued from page 812)

S.L.F.?" Suppose we answer the last part of this question first.

The only guarantee that the buyer needs in regard to the curve of an S.L.F. condenser is the statement by a reliable manufacturer that it is S.L.F. Now this does not mean that every S.L.F. condenser on the market will have an absolutely straight frequency curve. As a matter of fact, it will probably be found that not one of them will give such a curve when used in the average set with the average coils under ordinary conditions. But who cares? As long as we are not going to do laboratory work with this condenser, it makes little or no difference whether the frequency curve is an absolute straight line or not. What we are after is to accomplish a practical result, which is to spread the stations out evenly over the tuning dial and, for all practical purposes, any of the so-called S.L.F. condensers will do this very effectively. Whether there is a slight falling off in the curve at one end or the other will make no difference in actual use and it is doubtful if any of the condensers will be so far from a straight line frequency as to cause a noticeable discrepancy in this respect.

### Design Rather Than Shape

Therefore, in choosing an S.L.F. condenser, I would stress the importance of electrical and mechanical design rather than the shape of the curve and it is on these two points that many of the new condensers are falling down. Some manufacturers seem to have forgotten the need of efficient and properly placed insulation in their rush to produce a condenser with a proper type of curve, while others have fallen down miserably in the mechanical design and the latter is the more common fault.

This has been due to the fact that this type of condenser requires plates of rather a peculiar shape and necessarily takes up more room for a given capacity than the old style condensers. Some manufacturers have attempted to overcome this by making the clearance between plates less, thus gaining capacity without increasing the size. This is a very dangerous expedient, for the least warpage will cause the plates to touch and short circuit. Also, the

slightest amount of dust between the plates will cause the losses in such a condenser to become very bad and will also result in a noisy receiver.

It is much better to use a larger condenser with good, honest, solid plates, having ample clearance between them, unless it is absolutely necessary to save an extra inch of space.

### Bearing Construction Weaknesses

Another point where many of these condensers have fallen down is in the bearing construction. Condenser manufacturers, in general, seem to have spent very little time or thought on the design of a mechanically sound bearing. Anything which held the rotor plates in position and allowed them to turn with a reasonable degree of smoothness, seemed to do. How few condensers we find on the market, even of the old type, that have an absolutely smooth adjustment and maintain this smoothness regardless of the tension of the adjustment.

In other words, some people like a condenser which turns easily, while others prefer a considerable drag. There is no reason why a good condenser bearing should not be adjustable to provide any degree of drag desired without becoming sticky or jerky in operation. Incredible as it may seem, many of the condensers, even ones that are rated highly in electrical losses, depend upon springing the end plates slightly out of position to hold the proper tension on the rotor. Certainly from a mechanical standpoint, this is crude construction and such an adjustment will be anything but permanent.

Construction of this kind was bad enough with the old straight line capacity or straight line wavelength condensers, but in the straight line frequency condensers, where, in the majority of designs the plates are very much off-set from their rotating shaft, poor bearing construction is a thing to be avoided.

The S.L.F. is apparently the ultimate condenser, as far as we can see, and there is no reason in the world why such a simple piece of mechanism as a variable condenser cannot be built to last a lifetime. If bearings can be made to maintain their adjustment within a few thousandths of an inch on high speed machinery over a period of years, what a simple problem it should be to design bearings which would last almost indefinitely on an instrument that is given such care and gentle

handling and which is rotated at such a slow speed as a condenser.

Thus, in picking your S.L.F. condenser remember that there is no reason why you should ever have to replace it, providing you will examine it carefully from a mechanical standpoint, after making sure that its electrical construction is efficient enough to warrant your attention.

In concluding this article, I would suggest that it would be well for every dealer and salesman who have not already a thorough understanding of the wavelength principle, to acquaint themselves with it. It simplifies to a large extent the entire conception of radio. Without it, a reasonable understanding of any of the functions of radio apparatus is almost impossible.

## Edison Company Starts Playwriting Contest

A search for playwriting ability among the radio audience and in particular for the ability to dramatize electricity's contribution to modern home life was started last month with an announcement from Station WJZ, New York, of The New York Edison Hour Radio Play Contest. Arthur Williams, vice-president commercial relations, of the New York Edison Company, personally has offered \$500 in gold prizes, the first prize being \$250, the second \$150, and the third \$100. One hundred dollars will be paid for each additional scenario accepted and the prize-winning play will be broadcast from station WJZ.

The conditions of the contest declare that the play should not extend over 30 minutes, and should present the idea of what electricity means in everyday life. The contest is open to all, and contestants may submit a complete manuscript for a play, a scenario, or simply a rough outline of a play suitable for broadcasting. The contest will close at Midnight New Year's Eve.

The New York Edison Company announces that it will send to all entrants on request literature which may be helpful in the preparation of plays on this subject. Communications concerning the contest should be addressed to the Edison Hour Play Contest Editor, care of Station WJZ, 33 West Forty-second Street, New York City.

The Neutrowound Radio Manufacturing Company, Homewood, Ill., has increased the power of its broadcasting station WOK, at Chicago, to 5,000 watts. The wavelength is 217.3 meters.

The Manhattan Electrical Supply Company, jobbers of New York City, have closed their retail stores at 127 West One Hundred and Twenty-fifth Street and 110 West Forty-second Street, and will confine themselves to their wholesale and manufacturing interests at 17 Park Place.

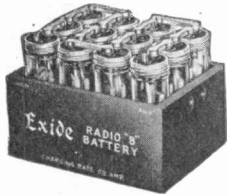




**6-VOLT "A" BATTERY**  
Here is the rugged, good-looking Exide 6-volt "A" Battery. One-piece case.



**2-VOLT "A" BATTERY**  
Compact Exide for low-voltage tubes. Also made in 4-volt size.



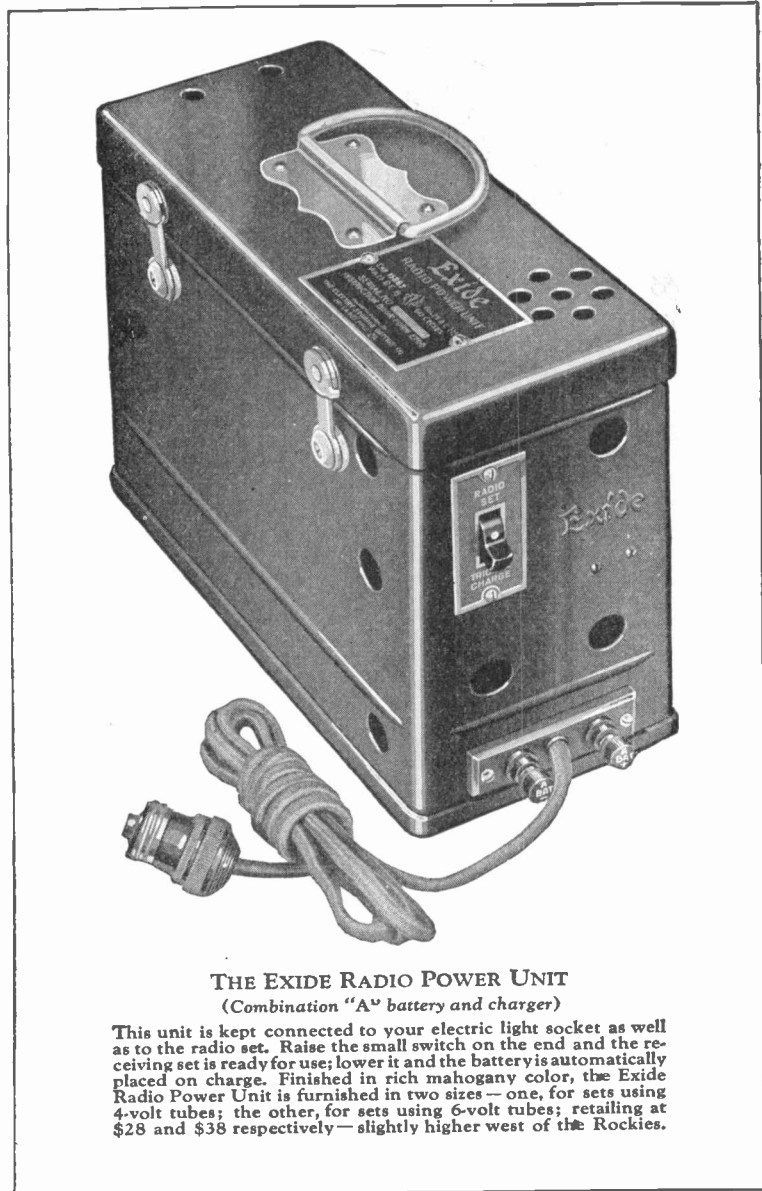
**24-VOLT "B" BATTERY**  
In glass cells, 6000 milli-ampere hour capacity. Also in 48-volt size.



**RECTIFIER**  
Exide Rectifier for economical recharging of "B" Battery from your own house current.

# Exide

**RADIO BATTERIES**



**THE EXIDE RADIO POWER UNIT**  
(Combination "A" battery and charger)

This unit is kept connected to your electric light socket as well as to the radio set. Raise the small switch on the end and the receiving set is ready for use; lower it and the battery is automatically placed on charge. Finished in rich mahogany color, the Exide Radio Power Unit is furnished in two sizes—one, for sets using 4-volt tubes; the other, for sets using 6-volt tubes; retailing at \$28 and \$38 respectively—slightly higher west of the Rockies.

## The name that boosts battery profits

The radio fan who insists upon clearest reception and uniform current throughout a long period of discharge, finds the greatest satisfaction, gets the best results, with Exide Batteries

**T**HE merchant who is building soundly for future business as well as immediate sales, finds prestige and profit in the Exide line.

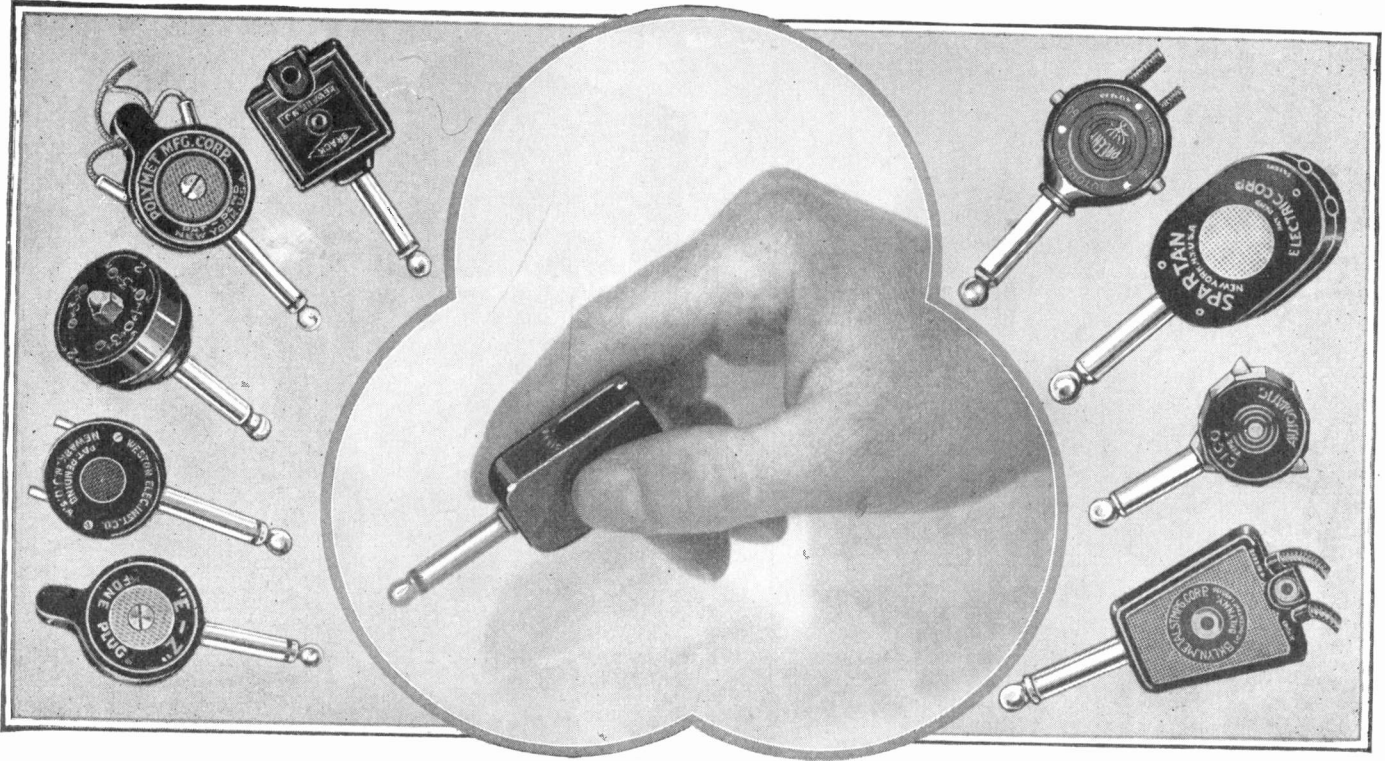
For every type of home receiving set there are capable Exide Batteries. For years people have been reminded by Exide advertising that the name Exide is the standard of value for judging storage batteries for every use.

Trouble-proof service given to the user, freedom from service hazards for the dealer, means satisfaction and profit on every Exide sale.

The experienced fan and the novice in radio will both respect your judgment when you convince them that the more they expect from their radio sets the more they need Exide Radio Batteries.

THE ELECTRIC STORAGE BATTERY COMPANY, Philadelphia  
Exide Batteries of Canada, Limited, 153 Dufferin Street, Toronto

**FOR BETTER RADIO RECEPTION, USE STORAGE BATTERIES**



## “It’s Bakelite” makes selling easier

Differ as they may about radio plug design, most makers agree that molded Bakelite improves plug performance and appearance.

A radio plug is small in size but big in importance. It will make or mar the reception of any set. A sure sign of a good plug is the mark “Bakelite.”

The universal acceptance of Bakelite by the radio public makes it easy to sell accessories and parts that are plainly marked “Made of Bakelite.”

*Write for Booklet 39*

### **BAKELITE CORPORATION**

247 Park Avenue, New York, N. Y.

Chicago Office: 636 West 22nd Street

Bakelite is an exclusive trade mark and can be used only on products made from materials manufactured by the Bakelite Corporation. It is the only material which may bear this famous mark of excellence.

# BAKELITE

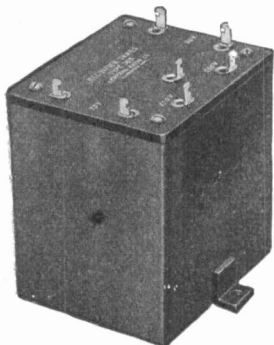
Reg. U. S. Pat. Off.



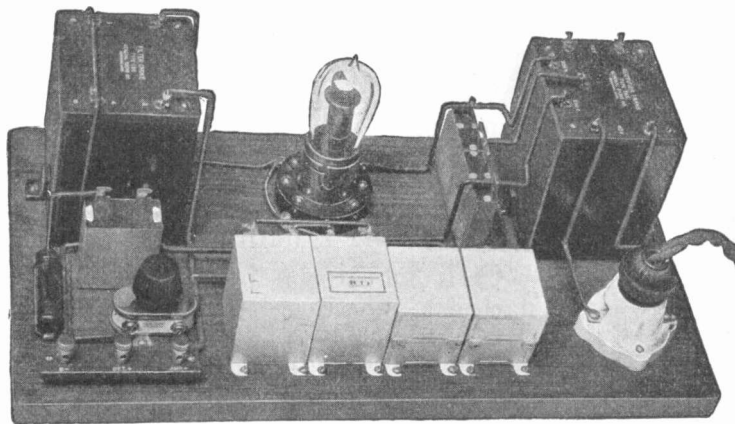
**BAKELITE**  
is the registered trade mark for the phenol resin product manufactured under patents owned by the Bakelite Corporation.

## THE MATERIAL OF A THOUSAND USES

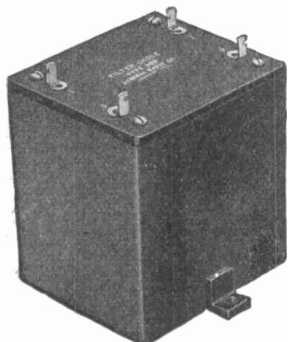
# Are YOU capitalizing on the POPULAR DEMAND for "B" Eliminator Parts?



Type 365  
Rectifier Transformer  
Price \$10.00



Raytheon  
Rectifier Tube  
Price \$6.00



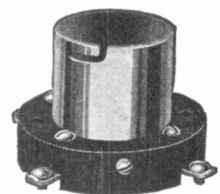
Type 366  
Filter Choke  
Price \$10.00

The popular topic of discussion among set-builders today is "B Battery Eliminators"—Set owners are anxious to modernize their receivers by the use of plate voltage supply units.

The new Raytheon rectifier tube now makes possible the construction of a "B" eliminator which will give the necessary plate voltages for all types of tubes absolutely without affecting the tonal purity of the amplifier.

The General Radio Type 365 Rectifier Transformer and Type 366 Filter Choke have been designed for use with the new Raytheon and other tubes of similar characteristics.

Order "B" eliminator parts now from your jobber and cash in on the popular demand. Write for our Bulletin 923-R with full description of necessary parts for constructing a "B" eliminator.



Type 156  
Standard Socket  
Price \$1.00

GENERAL RADIO CO.  
CAMBRIDGE, 39, MASS.

## GENERAL RADIO INSTRUMENTS

*Behind the Panels of Better Built Sets*

# FADA

## Radio

### Don't Sell "Bargain Counter" Radio

WOULD you select Bargain Counter Radio as an ideal Christmas Gift? Of course not! *Neither will your customers!*

Are you prepared to give them what they want?

Millions of Christmas shoppers are ready to buy *reliable* radio, designed, built and guaranteed by FADA.

Cash in on the big Holiday demand created by our nation-wide advertising—make this a record Christmas!

**The Fada Neutrolette at \$85.00**

**The Season's Fastest Seller**

Here's a self-selling Fada model that ought to lead your Christmas line.

A five-tube, tuned radio frequency receiver with the Neutrodyne improvements that retails for \$85.00!

*The public is quick to recognize the Fada Neutrolette as the biggest value ever offered in radio.*

*It gives them all they could hope to get from sets at twice the money.*

It is the fastest selling radio receiver on the market—and it stays sold.

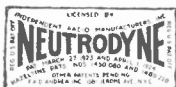
1925 sales efforts and results will be the best and only basis for 1926 dealer franchises.

Your distributor has our entire Christmas selling plan ready for your execution.

**F. A. D. ANDREA, INC.**

1581 Jerome Ave., New York

*Manufacturers of TUNED RADIO FREQUENCY receivers using the highly efficient NEUTRODYNE principle*





*The finest Console Speaker at any price*

**The  
CONSOLE  
Master  
Speaker  
for any  
Radio Set**



**The Greatest Loud Speaker Value Today**

Considered only as a piece of furniture or only as a loud-speaker the Console Master Speaker is worth the money. But as a combined cabinet and speaker it is the greatest loudspeaker value today. The loudspeaker is concealed behind the silk covered grill and has a beautiful natural tone of great volume.

**An Unusual and Exclusive Feature**

The Console Master Speaker with a front that may be opened to give convenient and quick access to batteries and speaker. This is our own exclusive origination, and strong patent claims protect it.

In Walnut or Mahogany. Either way a fine piece of furniture.

*The most practical Console Speaker*



31½-in. high, 38-in. long, 18-in. wide  
**The CONSOLE Master Speaker**  
with the opening front, showing the exceptionally spacious battery compartment, which will hold an "A" battery, a charger, and 2 dry or wet "B" batteries, besides the built-in loudspeaker.

Just a pull of the handle and ALL the batteries, charger, and loud speaker unit are within immediate reach.

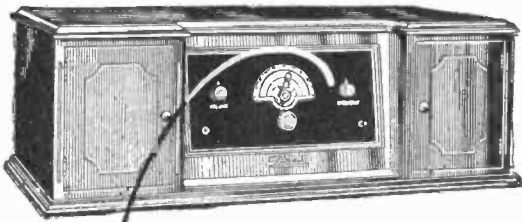
**Retail Price \$49.50**  
Complete with Loudspeaker  
(Adjustable Unit)

*Order from your  
jobber.  
Full trade discounts.*

**CONSOLE MASTER SPEAKER CO.**  
15 East 40th Street, NEW YORK

*Our model #25  
will fit the  
Radiola  
Superheterodyne  
#25*

# The MU-RAD



Model A  
Has Compartments  
to hold ALL Batteries

Price  
\$155<sup>00</sup>

## One Dial Control Means More Sales

THIS is a "One-Dial Year." Your customers are tired of tinkering with complicated dial settings—they want a set with a single dial control that anyone in the family can tune.

The Mu-Rad Transcontinental One-Dial Receiver fills every demand for a legitimate, simon-pure one-dial radio receiver. A real distance getter, absolute selectivity and wonderful tone quality.

Mu-Rad dealers get *Free* local advertising carrying their own names, and 100 per cent factory co-operation. *You* know what that means!

Model  
B  
Price  
\$125



Compartments  
for  
B Batteries  
Only

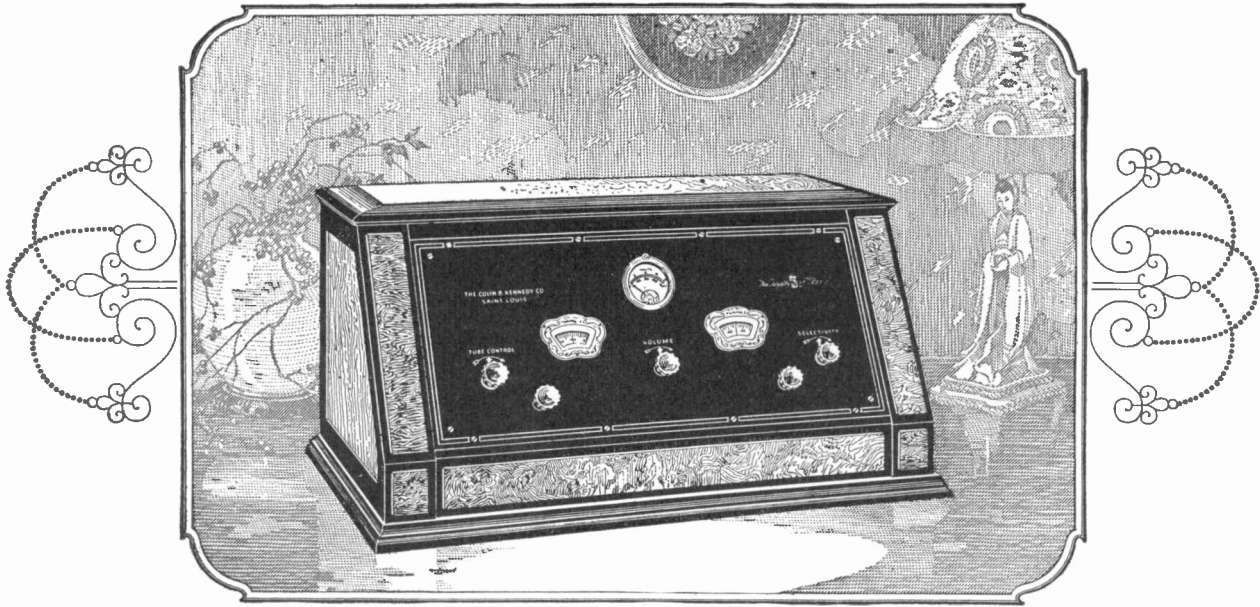
*The Mu-Rad Transcontinental Receiver Sells Itself  
on Demonstration Performance*

WRITE FOR EXCLUSIVE TERRITORY

**MU-RAD RADIO CORPORATION**

General Sales Offices  
Newark, N. J.

Factory  
Asbury Park, N. J.



## New Kennedy Model Thirty

*Presents Added Advantages to Radio Dealers*

THE INTRODUCTION of the new Kennedy Model Thirty ushers in even greater opportunities for Kennedy dealers! This new receiver has been built around the same fundamental principles that are responsible for the surpassing performance of the famous Kennedy Model Fifteen. The addition of certain refinements and improvements assures an instrument that is literally the acme of Kennedy radio perfection.

Here is a receiver that delights both the eye and the ear. It is presented in exquisite cabinetry—its two-tone burl-walnut paneled finish is in pleasing contrast with its gold and oxidized silver finished trimmings. Its tone fully measures up to the highest Kennedy standards. Its selectivity and gradual volume control leave nothing to be desired. It has a double range voltmeter—plug connection for all

battery, antenna and ground wires, taking the place of the usual binding posts—phone plug inside the cabinet—tubes concealed but readily accessible from the back. Operates on either inside or outdoor aerial—wired to accommodate the new type tubes, including special output amplifier. Price without accessories, \$145.00. . . West of Rockies slightly higher.

### A REAL SELLER

Model Thirty makes an instant appeal wherever it is demonstrated. It is a real seller with substantial profit-making opportunities—a fact that is strongly evidenced by the large volume of orders on file.

Literature is ready. Send for it and also ask for full details on the Kennedy Protective Dealer Policy.

COLIN B. KENNEDY CORPORATION · · SAINT LOUIS

*Other Kennedy Products—Royal Sixteen, a 5-tube cabinet type priced at \$235.00 without accessories. Royal Reproducers—Horn types, Model Six-Twenty, \$25.00, Model Six-Ten, \$20.00—Cabinet type, Model Six-Thirty, \$40. All prices slightly higher west of Rockies.*

# KENNEDY



Colin B. Kennedy Corporation  
2019 Locust Street, St. Louis, Mo.

You may send particulars of the Kennedy Protective Dealer Franchise and full information on the complete Kennedy line.

Name.....Address.....  
City.....State.....

# A Plan That Is Selling Radio Parts

## What a Group of "Parts" Manufacturers Are Doing to Stimulate Sales for Dealers

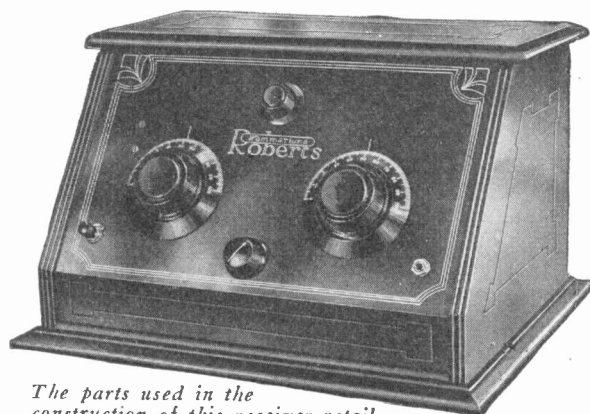
**T**HE Hammarlund-Roberts franchise offers to the dealer a sales plan so timely and so vital to the promotion of parts sales that no radio dealer can possibly afford to overlook it.

It is a unique plan, proven sound as a dollar, backed by ten of the best-known parts manufacturers in the country. It is a plan that automatically avails each Hammarlund-Roberts dealer of this great combined distributive machine, a plan that forces sales with forceful sales copy in

national mediums, a plan evolved solely to promote your parts business.

The Hammarlund-Roberts plan of merchandising has all the advantages of the "kit" idea, without this great disadvantage; it does not require large cash outlay in stock. It offers to the progressive dealer the "one big profit" of a set sale, and a means to turn over his stock of parts faster than he has ever been able to do before.

This plan requires no heavy investment in kits, no speculation on the success of any one circuit. No merchandise is left on your hands — all Hammarlund-Roberts specified parts are standard and sell on their own merits for any circuit. No complete kits left to dump on the market at the end of the radio season.



*The parts used in the construction of this receiver retail for \$62.30—a worthwhile sale!*

drilled sub-panel, all necessary wire and hardware to build the Hammarlund-Roberts. Retails for \$9.40.

This plan is worthy of support by the best dealers in the country. Its sole purpose is to speed up your parts business and it deserves your hearty backing.

Get busy now and order Foundation Units from your jobber. Learn the complete plan from him or write to us.



*Parts that every progressive dealer carries in stock which are incorporated in this circuit.*

### The Foundation Unit

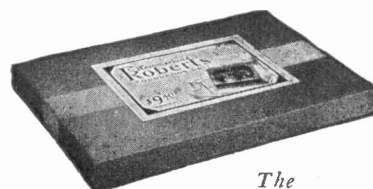
You can profit from this combined sales effort. Stock the Foundation Unit and you hold the key to the sale of the complete list of parts—all standard nationally-known parts that you probably now carry or should carry, on your shelves. The Foundation Unit includes a drilled and engraved Westinghouse Micarta panel,

## Hammarlund Roberts

1182-J Broadway, New York City

### Associate Manufacturers

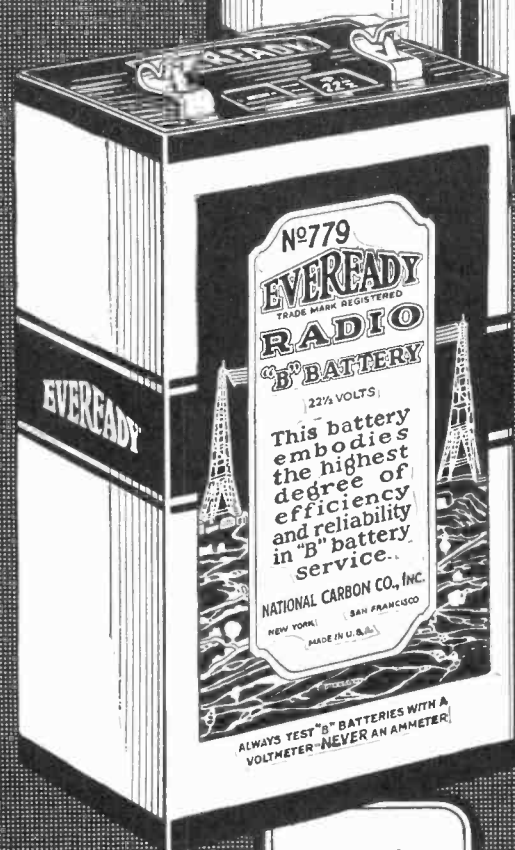
- |                                 |   |
|---------------------------------|---|
| All-American Radio Corp.        | Union Radio Corp.                                       |
| Alden Manufacturing Co.         | International Resistance Co., Inc. ("Durham Resistors") |
| Radio All Company ("Amperites") | Westinghouse Micarta Company, Inc.                      |
| Carter Radio Co.                | Hammarlund Mfg. Company, Inc.                           |



*The Hammarlund-Roberts Foundation Unit.*



Eveready horizontal "B" Battery No. 766, 22½ volts, for 1 to 3 tubes. List price, \$2.00.



Eveready large vertical "B" Battery No. 779, 22½ volts, for 1 to 3 tubes, where variable taps are not required. Width, 4¼ inches; depth, 3 ½ inches; height, 7 ½ inches; weight, 4¾ lbs. List price, \$2.00.

## EVEREADY

### No. 779

*A large vertical 22½-volt "B" Battery*

THE famous Eveready "B" Battery No. 766, horizontal, now has a vertical brother, No. 779, 22½ volts. This has the same large cells as the No. 766, and will last as long in equal service. Being vertical, it fits perfectly the battery compartments of many popular receivers. Also valuable for use where the table or shelf space is limited. Order from your jobber.

*Manufactured and guaranteed by*  
**NATIONAL CARBON COMPANY, Inc.**  
 New York San Francisco  
 Atlanta Chicago Dallas  
 Kansas City Pittsburgh

**EVEREADY HOUR EVERY TUESDAY at 9 P.M.**  
*Eastern Standard Time*

For real radio enjoyment, tell your customers to tune in the "Eveready Group." Broadcast through stations—

WEAF New York	WFI Phila.	WWJ Detroit
WJAR Providence	WGR Buffalo	WCCO Minneapolis
WEEI Boston	WCAE Pittsburgh	WOC St. Paul
WTAG Worcester	WSAI Cincinnati	WOC Davenport
	KSD St. Louis	

# EVEREADY

## Radio Batteries

*—they last longer*

# ASTRAL TONE THROAT

RADIO SPEAKER



*Volume !!*

Mahogany Finish, 14 inches high; 17 inches long; 4 3/4 inches deep.

## FOR ANY MAKE OF RECEIVER

**\$25**  
Complete  
with  
Adjustable  
Unit

**Yes! Volume with Tone Quality!**

**\$25**  
Complete  
with  
Adjustable  
Unit

That is the distinctive achievement of Astral Tone Throat. Not cone type. Designed especially for clear, distinct, loud reproduction, without distortion or blare. Comparative tests prove Astral Tone Throat superiority. A demonstration always convinces. A richly beautiful and appropriate ornament in the most luxuriously furnished home.

### ASTRAL 5-TUBE TUNED RADIO FREQUENCY RECEIVERS

**TYPE A** 8x23x8 1/2 in. Solid mahogany. **\$67.50**

**TYPE B** Solid mahogany cabinet 12 1/2 x 27 1/2 x 14 in. **\$90**

**TYPE C** Three-compartment mahogany cabinet 29 1/2 x 15 in. Built-in radio speaker. **\$175**

**TYPE P** Pooley three-compartment cabinet. 50x26x16 in. Pooley built-in radio speaker. **\$215**

**XMAS ORDERS**  
Last Minute Shipments from factory to meet your Xmas requirements on telegraphic orders.

*Jobbers and Distributors Wanted Throughout the World*

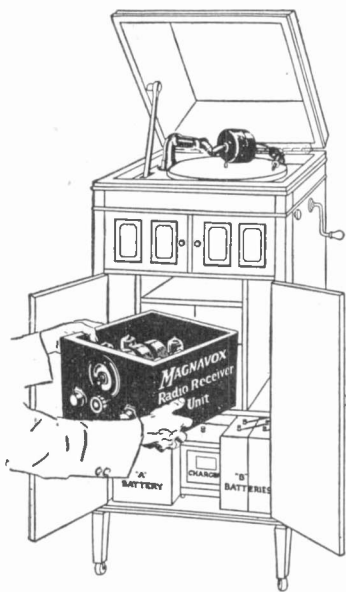
**ASTRAL RADIO CORPORATION**

1237 N. Broad Street  
Philadelphia, Pa., U. S. A.

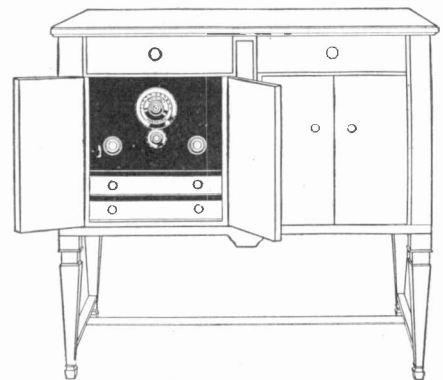
**XMAS ORDERS**  
Last Minute Shipments from factory to meet your Xmas requirements on telegraphic orders.

# To MAGNAVOX Dealers

## Here's an Exclusive Sales Maker for You!



WITH the new Magnavox Radio Receiver Unit, changing the old phonograph into a radio-phonograph combination is the work of only a moment. No mechanical skill is required. No tools, except perhaps a screw driver, are necessary. The illustrations show how easily and simply both console and upright models can be Magnavox Radio equipped.



Merely take out the record shelves, slide in the self-contained Magnavox Receiver Unit, batteries, charger, etc., attach the Magnavox Radio-Phonograph Reproducer, and the work is done.

**H**AUL out and dust off your lists of phonograph customers, old and new—Magnavox now offers you a new product which you can sell to every name on those lists.

It's the new Magnavox Single Dial, 5 tube, self-contained Receiver Unit for phonographs retailing for \$75.

Study the illustrations above. These show the ease and simplicity of installation in both console and upright models. Isn't this the most obvious and inexpensive means you have seen for turning your customers' phonographs into combinations?

And in addition you can sell the Magnavox Radio

Phonograph Reproducer at \$10, making two profitable sales in one.

This radio installation will appeal instantly to your customers. It solves the problem of their old phonographs. It makes them up-to-date and modern in every respect; a source of universal home entertainment from both air and record.

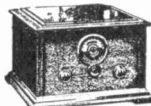
Of course we have told enough for you to see the profit making possibilities. Of course you will want to order a supply and get busy on selling these units at once. Your distributor will work right with you and furnish special literature and other selling helps. Write or wire him today.



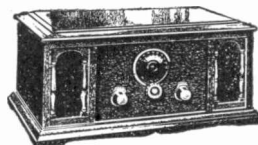
Magnavox Perfected Single Dial Control  
(Licensed under Hogan Patent 1,014,002)



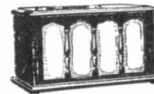
**MAGNAVOX 75**  
Five tube tuned radio frequency set. Built-in Magnavox Loud Speaker; encloses all batteries. Artistic mahogany cabinet, hand rubbed finish. Price, without tubes or batteries, \$200



**MAGNAVOX JUNIOR**  
Same circuit as Magnavox 75, but not removable from cabinet. A compact, portable set. Price \$85



**MAGNAVOX 10**  
Table model, allowing enclosure of B batteries, operating with external loud speaker. Artistic cabinet finish. Price, without tubes, batteries or loud speaker, \$110



**MAGNAVOX M-20**  
Cabinet Loud Speaker. Especially adapted for use with Magnavox Model 10 Radio Receiver Set. Price of the M-20 Cabinet Model including cord and plug is \$25



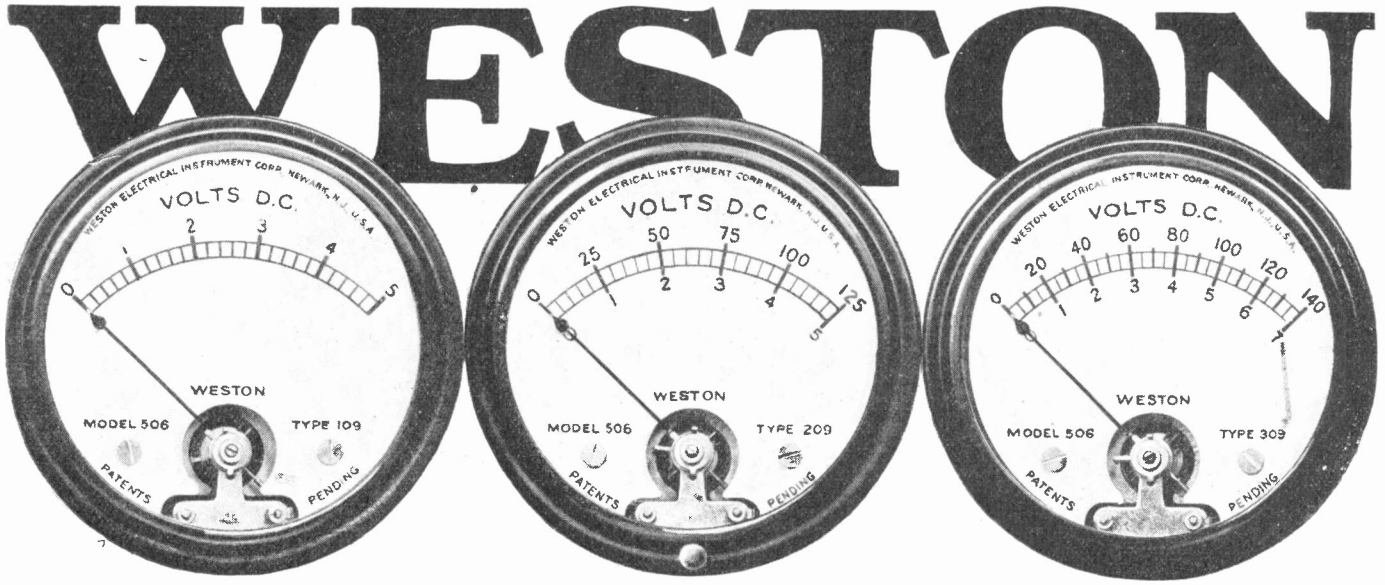
**MAGNAVOX M-3**  
Loud Speaker  
Magnavox Loud Speakers combine all factors essential to perfect reproduction. The M-3 has a 15 inch bell. Price \$25



**MAGNAVOX 25**  
Table model, Magnavox Built-in Loud Speaker, enclosing B batteries, exposed dial panel. Price, without tubes or batteries, \$145

**NOTE!** If you are not now a Magnavox dealer, but want to get in on this new profit maker, write us at once. If your territory is still open we will make you a mighty interesting proposition by return mail. Don't put this off. Write today!

**THE MAGNAVOX COMPANY**  
OAKLAND, CALIFORNIA 1315 So. Michigan Ave., Chicago



*Two Inch  
Radio Panel  
Instrument*

STANDARD Weston quality and dependability is contained in these small 2-inch instruments.

These remarkable Model 506 Radio Panel Meters are a distinctive contribution to the Radio Art. They are made as Voltmeters, Ammeters and Milliammeters in a comprehensive list of ranges.

The Voltmeters are made in both Single and Double Ranges for the measurement of filament voltage or filament voltage and "B" Battery voltages. They have an exceptionally high internal resistance of 125 ohms per volt, requiring an insignificant amount of current for operation. This means a very slight drain on the batteries.

Ammeters and Milliammeters are designed for measuring the plate current in receiving and transmitting sets.

For complete technical details making it possible for the dealer to intelligently recommend the best of these three types for his customers' particular needs write for the new edition of the booklet entitled "Weston Radio Instruments".

*Even Without the  
WESTON Name—*

THE NEW MODEL 506 PANEL INSTRUMENTS stand out as the finest type of electrical measuring instruments in radio.

They contribute greatly to successful and economical set operation. These instruments are so well designed, so precisely assembled and so painstakingly finished that even if the famous Weston signature did not appear they would be picked at once as an outstanding product in the Electrical Measurement Art.

Weston, the pioneer, and always the leader in commercial and research measurement fields has again taken the lead—in electrical measurement for radio.

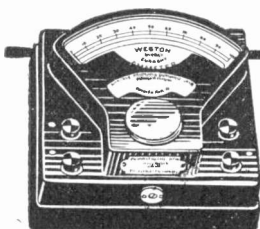
Model 506 Panel Instruments are being used by radio set manufacturers who wish to insure complete satisfaction and who wish to render to their customers the very maximum of service.

Naturally, these instruments have been imitated: wherever this has occurred a comparison with Weston has increased the sales of Model 506.

Weston stands for permanence, durability and above all accuracy. The use of Weston products has so increased the pleasure of radio enthusiasts that the radio dealer has correspondingly profited.

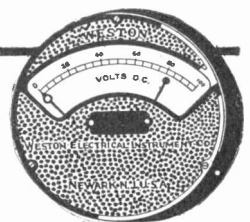
*Dealers building good-will should have full information on Weston Radio Products. Write for the new edition of the interesting free booklet "Weston Radio Instruments."*

WESTON ELECTRICAL INSTRUMENT CORPORATION  
25 Weston Avenue, NEWARK, N. J.



STANDARD THE WORLD OVER  
**WESTON**

*Pioneers since 1888*



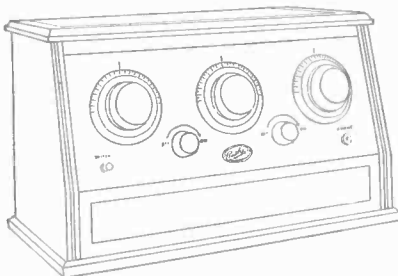


*If you want the best!*



*Grecian Model. Price \$25.00.*

*The new Pathé sets operate on house current*



*Some territories for jobbers and retailers still open. Write.*

**Pathé**  
REG. U.S. PAT. OFF. 

**CONE LOUD SPEAKER**

Exquisite in tone  
Exquisite in design  
Exquisite in workmanship

**PATHE PHONOGRAPH AND RADIO CORPORATION**  
DEPT. 59 20 GRAND AVENUE, BROOKLYN, N. Y.



TYPE 60

Five Tubes. Special Music MASTER design. Full, round, natural tone. Three selectors for precise tuning. Without equipment—

\$60



# Music Master

## A Line that Sells at Sight and STAYS Sold

MUSIC MASTER Receiving Sets once sold, stay sold, because these receivers surpass anything your customers have ever heard for range, selectivity, clarity, and mellow, resonant, natural tones.

They complete the MUSIC MASTER RADIO ENSEMBLE—a wonderful line to tie to because MUSIC MASTER has the most wonderful story in all radio to tell, and is telling it to ninety-three million Americans.

MUSIC MASTER's merchandising policy protects our authorized dealers from unfair competition and assures volume business at a profit.

Write today for details. If you have the standing in your community to qualify as a MUSIC MASTER dealer, we will gladly issue to you the MUSIC MASTER Franchise if you are in open territory.



Model VI, 14" Wood Bell . . . \$30

Model VII, 21" Wood Bell . . . \$35

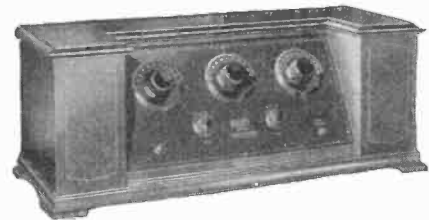
### Music Master Corporation

WALTER L. ECKHARDT, President

128-130 N. Tenth Street, Philadelphia

CHICAGO NEW YORK PITTSBURGH

**Music Master Products  
Are Money Makers**



TYPE 100

Five Tubes. Resonant reproduction, exceptional range. Massive mahogany console cabinet. "B" battery compartments in cabinet. Without equipment—

\$100



TYPE 460

MUSIC MASTER-WARE



Seven Tubes. No antenna or ground. Wonderful range and unequalled tone. Beautiful mahogany cabinet with ample battery compartments. Model XIII Reproducer included. Without other equipment—

\$460

# Where the Future of Radio Lies

*A Finer Musical Tone Obtained by a More Perfect Reproduction of the Overtones*

**Single Dial Tuning Which Is Absolutely Free from Verniers or other Auxiliary Adjusters**

THE time is coming soon, is here now, when radio receivers will be bought like pianos for the quality of their tone and for ease of operation. All other considerations are minor.

Last year radio advertising was full of claims for distance, volume and selectivity. This year the emphasis is upon tone quality and single dial tuning. Makers realize that these are the things people want, that this is the direction in which progress must be made.

### *Simplicity—Not Complications*

These two needs are fundamental and they must be *fundamentally* met. Superficial makeshifts merely complicate. You cannot get anywhere by attempting to improve radio tone by "trapping" stray energy coupling between circuits; you may thus neutralize unpleasant noises; but you still have the "traps" and the coupling and their hampering effect upon the flow of delicate vibrations which make overtones. The very presence of such neutralizing devices is evidence of error.

### *Perfect "Overtone" Reproduction*

The whole secret of Pfanstiehl tone is just here: There is no possibility of stray energy coupling; no "traps" are required. The reproduction of overtones is perfect because the pattern of vibrations is kept intact, unblurred and unmarred by inequalities in the circuit. Hence the tone is supremely beautiful.

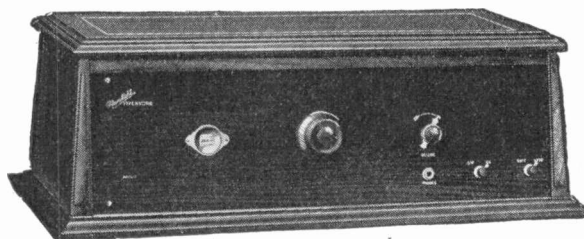
### *Absolutely SINGLE Dial Control*

Hence, also, the single dial control is absolutely SINGLE. No verniers or auxiliary adjusters are needed to refine or complete the tuning. The one dial works perfectly, tunes completely for any distance, because all three circuits are exactly alike; there are no *electrical* differences to overcome.

*For further details, address*

**PFANSTIEHL RADIO COMPANY, 11 South La Salle Street, Chicago, Ill.**

*Prices West of the Rockies Slightly Higher*



MODEL 10—Overtone Single-dial 6-Tube Receiving Set. Price \$155.00 (less accessories)

# Pfanstiehl

**"OVERTONE" RECEIVER**  
Perfectly Reproducing the Overtones

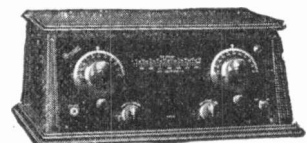
*Actual Wave Length GLOWS from Illuminated Disc—No Scale Necessary*



MODEL 10C—A complete 6-Tube Single-dial Console Overtone Receiver with Overtone Speaker, Control Board, Battery Charger and Compartments for Battery built in. Price \$450.00 (less tubes and batteries).



MODEL 10S—Overtone Single-dial 6-Tube Receiving Set with demountable Console Stand. Overtone Speaker built in. Price \$200.00 (less tubes and batteries).



MODEL 8—A low priced 2-Dial 5-Tube Receiving Set, Pfanstiehl quality throughout. Price \$85.00 (less accessories).

### *An Exclusive Dealer Franchise*

The Pfanstiehl line is sold through exclusive dealers who are thus protected against unfair competition and price cutting. Whatever good-will the dealer builds up for Pfanstiehl is his own. He enjoys a liberal profit and is expected in return to push the line aggressively with the cooperation of the maker.



**T**HAT'S what an enthusiastic Micro-dial user wrote us after his first night's experience. And his bother was STATIONS. Stations he had never heard before—or even heard of! Stations that came in so fast that he hadn't room for them all in the gaps he had left in his log book! Stations that kept coming long after his bedtime hour had passed!

This listener's own letters, over his own signature comprise our folder, "Your Dials Bother Me Like the Devil." It is, we believe, the strongest piece of radio sales literature ever put into a buyer's hands.

Ask your nearest Jewett jobber for a copy of this folder! See how it will breed sales and resales for you!

**Whether you are an Authorized Jewett Dealer or not, you can make money selling this station-getting leader of all tuning devices.**

*The Jewett Micro-Dial fits any quarter inch shaft. It needs only a screw-driver to install. And it's guaranteed by Jewett.*

**JEWETT RADIO & PHONOGRAPH CO.**  
5696 Telegraph Road, PONTIAC, MICHIGAN  
Factories: Allegan, Michigan; PONTIAC, MICHIGAN

*In Canada*  
Jewett Radio-Phonographs, Ltd., Walkerville, Ontario

*Export Sales Offices,*  
116 Broad Street, New York City

*The Jewett*  
**Micro-Dial**

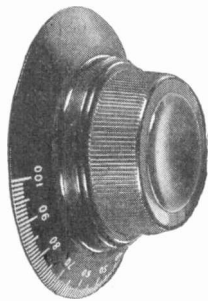
*"Quality Broadcasting to Match  
Quality Products—Station WJR"*



# The New Na-Ald Vernier with the 12 Sales-making features!

*Never before has the trade been offered a Vernier which so fully satisfies every demand of the radio fan*

**H**ERE is the new Na-Ald Vernier Dial—a vernier so smooth and positive in operation that to try it is to want it! If it had no other qualities, the unusually smooth action of the Na-Ald Vernier would be enough to sell it before all others. A simple demonstration backed by an explanation of the twelve features given below is an irresistible sales appeal.



Vernier Dial No. 6044

**1. It is of all-bakelite construction.**

This Vernier is an Alden processed Bakelite dial with only a minimum amount of metal. The metal is not "live" so does not carry the hand capacity to the panel—eliminating a serious objection to many vernier dials.

**2. Fits all condenser constructions.**

This new Na-Ald Vernier fits all the various condenser constructions. It is one of the few Vernier dials that can be used on a condenser with one hole mounting. It is attached quickly and satisfactorily under any conditions and does not require cutting of condenser shaft. It makes every fan a prospect.

**3. No back-lash—smooth operation.**

This Vernier is extremely smooth and positive in operation and the possibility of back-lash is entirely eliminated. A strong

sales appeal! It is the smooth action which makes the Na-Ald Vernier so different from others. Just let a customer turn it!

**4. No gears.**

The mechanism is enclosed in the dial itself and is simple and sturdy. There are no gears. It cannot be injured by turning too far.

**5. It has power.**

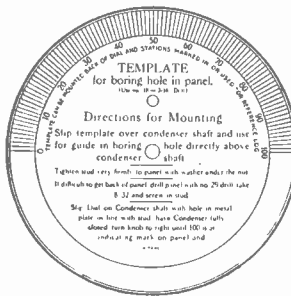
This Na-Ald Vernier Dial has power to run a double and triple condenser.

**6. It is self-adjusting.**

Adjusts itself automatically if condenser shaft does not run true. No come-backs!

**7. Ratio scientifically correct.**

The ratio of this Na-Ald Vernier provides for quick and accurate tuning.



TEMPLATE (back)

**8. Matches regular dials.**

It looks like the standard Na-Ald Dials. Fans can now use this vernier on the critical condenser and plain dials on the others, and all will match. Don't forget to stress this point.

**9. Fully guaranteed.**

Na-Ald Vernier Dials are guaranteed in every way if not taken apart.

**10. Template for mounting furnished with each Dial.**

A card board template as illustrated is furnished with each Na-Ald Vernier Dial with complete instructions for mounting. Template can also be mounted back of dial. The spaces provided on the template for marking stations make it a convenient log, whether mounted behind dial or not.

**11. Obtainable in colors.**

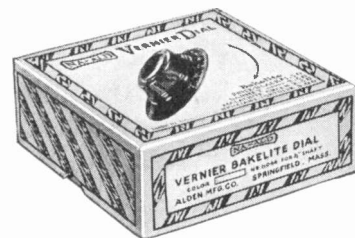
This Na-Ald Vernier dial is also made in the colors which have made such a hit with radio fans. An exclusive Na-Ald feature! Different colors are listed below under prices.

**12. Reasonably priced.**

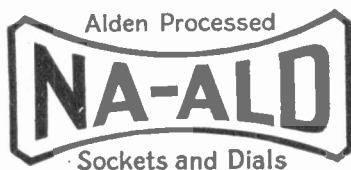
Although every desirable feature is included in this new Vernier, it is very reasonably priced. Prices: Black, \$1.50; Brilliant Tortoise, \$3.00; Malachite Green, \$2.50; Garnet, \$2.50; Mahogany, \$2.50.

Mail the coupon below for trial order of 10 Na-Ald Vernier Dials; also full information on the new Na-Ald 5-inch Dial and Na-Ald colored dials.

ALDEN MANUFACTURING CO.  
Dept. A-11, Springfield, Mass.



Mail this coupon today



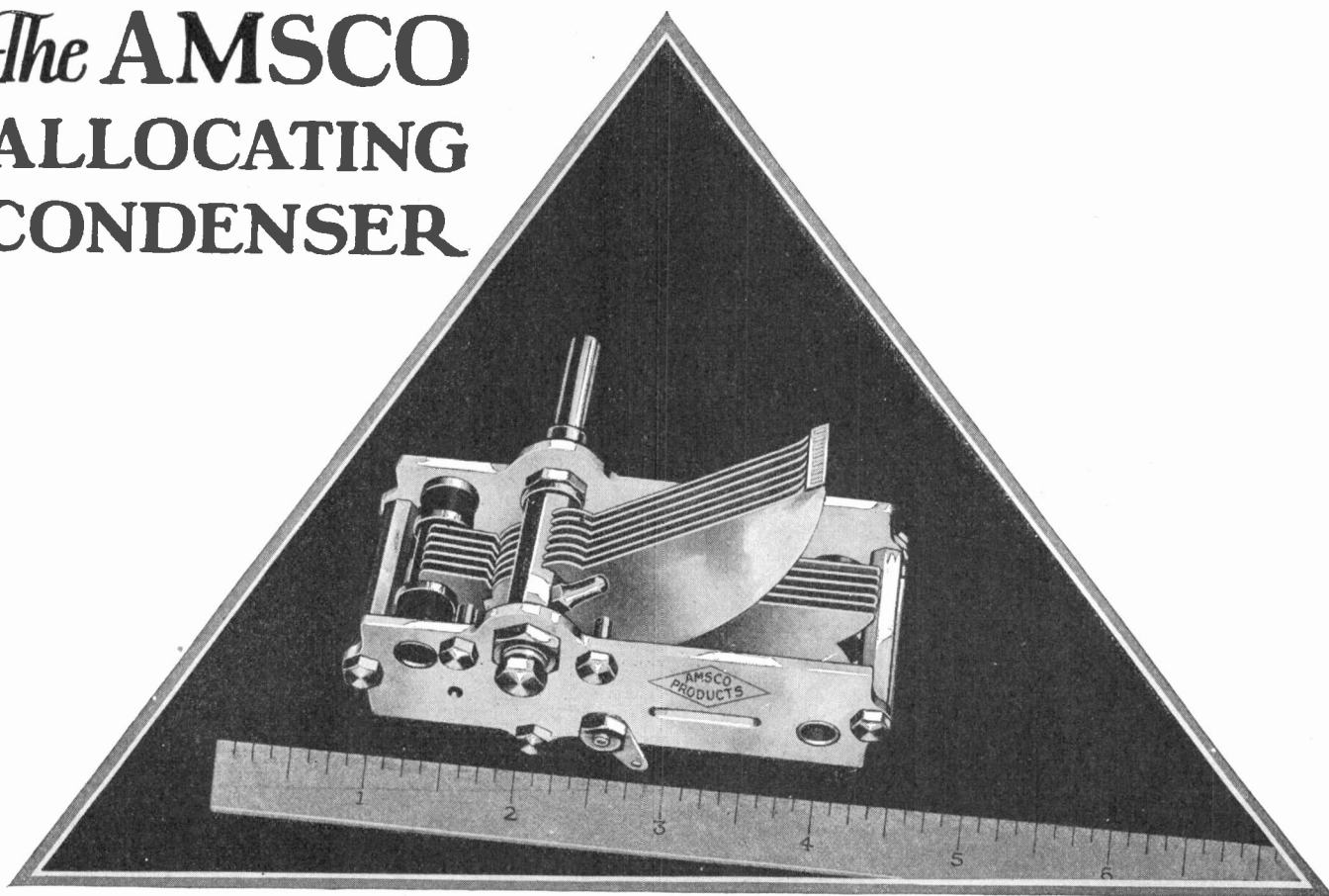
*New Na-Ald 5-inch Dial a popular item*  
This 5-in. Dial, the biggest on the market, has won its way into the affection of radio fans. They like the man-sized grip its double knob provides. That grip plus the 200-division dial helps them to swing from station to station quickly, surely, accurately. Greatly enhances the appearance of any set. Prices: Black, \$1.50; Brilliant Tortoise, \$3.00; Malachite Green, \$2.50; Garnet, \$2.50; Mahogany, \$2.50.

ALDEN MFG. CO.  
Dept. A-11, Springfield, Mass.

Please send the latest complete catalog information on the Na-Ald line, including further information on five inch and Vernier dials, and especially the very latest information on the new UX tubes, with the new connecterals, and adapters for their use.

Name.....  
Street.....  
City..... State.....

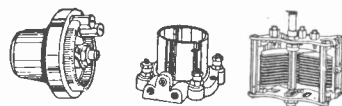
# The AMSCO ALLOCATING CONDENSER



## IT SAVES SPACE!

This straight line frequency condenser is a space-saver in the radio cabinet. . . . . It can usually be substituted for the old type condensers in existing sets. . . . . Once installed, it revolutionizes your ideas about tuning. . . . . Those Amsco half-a-heart-shaped plates add Kilocycles at the rate of ten to each dial division—giving “a station for every degree”. . . . . All wavelengths—high or low on the scale—tune in with equal ease. . . . . Amsco allocation of the stations is uniform and correct to within a fraction of 1%. . . . . *Insist on Amsco Allocating Condensers. . . . . Made in six space-saving models, three Single and three Siamese, at reasonable prices.*

Amsco Products, Inc. Dept. N  
Broome & Lafayette Sts., New York



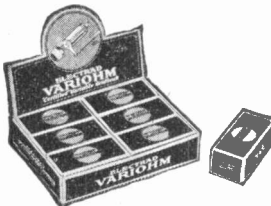
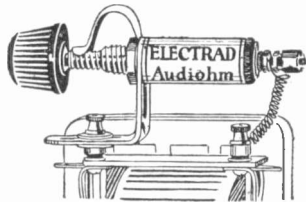
**OTHER AMSCO PARTS**  
Write for our booklet, “The Heart of the Hook-up” for full details and prices of the entire Amsco line. *Amsco for excellence.*



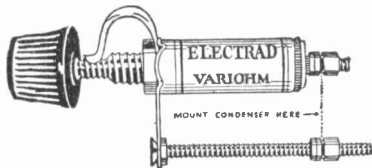
# An ELECTRAD Dealership is a Real Business Asset



"Electrad" Audi-ohm—An ingenious device to banish stuttering, sputtering reception forever. Installed across secondary of first audio-transformer. List, \$1.50.



"Electrad" Vari-ohm—A variable grid leak for extra fine tuning. Resistance variable from  $\frac{1}{4}$  to 30 megohms. List, \$1.25 for panel mount; \$1.50 for base mount.



FREE TO DEALERS—  
"Electrad" Lead-In mounted on display card. Write for yours today.

"Electrad" Lead-In. A tremendous market for this efficient accessory. Water proofing and insulation of superior quality. Made to satisfy "Electrad's" high standards—there is a difference. Fits under closed and locked doors or windows, no holes to bore. Absolutely safe. List, 40 cts.

**ELECTRAD LEAD-IN**  
Goes under the window  
No holes to drill

**40¢**

There is a difference  
Get the Genuine!

Mfd. solely by ELECTRAD Inc. 428 Broadway New York

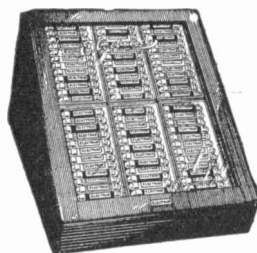
THE "Electrad" line is a remarkable sales stimulant in good stores everywhere, due to its good quality and value. It is powerfully reinforced by the "Electrad" policy of backing up dealers with national advertising and valuable selling helps.

Thousands of radio fans are being told each month about "Electrad" Products in the leading radio magazines. And the effective sales helps make the dealer a part of the big "Electrad" National Advertising Campaign without expense to him.

If you are not handling "Electrad" Radio Products you have a profitable opportunity open to you. *Get the "Electrad" proposition.*

**ELECTRAD, Inc.**  
428 Broadway, New York City

Also makers of Resistance Coupled Amplifier Kits, Lightning Arresters and Lamp Socket Antenna.

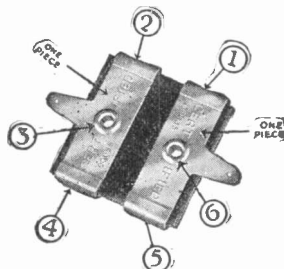


"Electrad" Certified Grid Leaks—Absolutely accurate, calibrated in fixed resistances from  $\frac{1}{4}$  to 10 megohms. Mahogany finish display cabinet FREE with order of six dozen grid leaks. List, 50 cts. each.



# ELECTRAD

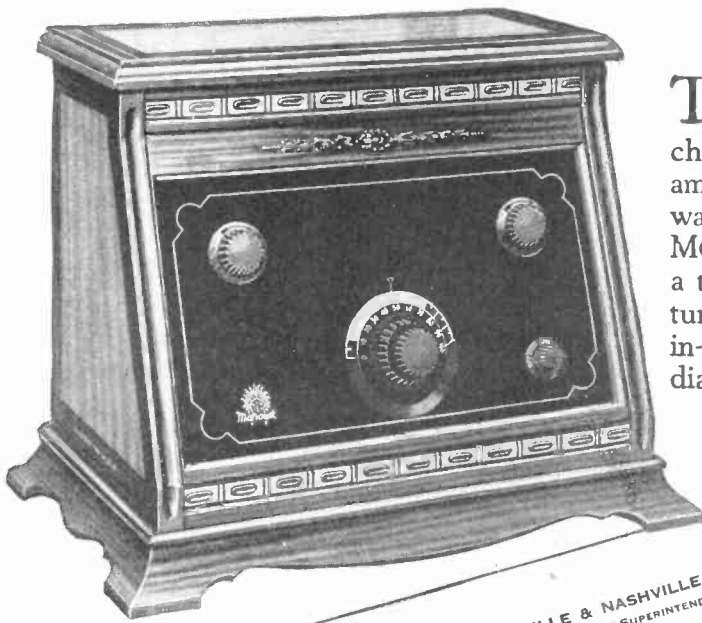
## The Six-Point Pressure Condenser



"The Six Point Pressure Condenser"

The "Electrad" Certified Fixed Mica Condenser is a revelation in accuracy and design. Ingenious, rigid binding and firm riveting fasten parts securely at six different points, insuring positive electrical contact. Impervious to temperature and climatic variations. Exerts even pressure upon the largest possible surface—can't work loose. Binding strap and soldering lug in one piece. Accuracy and quietness assured always. Value guaranteed to remain within 10% of calibration. Standard capacities, 3 types. Licensed under Pat. No. 1,181,623, May 2, 1916, and applications pending. List 30 cents to 75 cents, in sealed, dust and moisture proof packages.

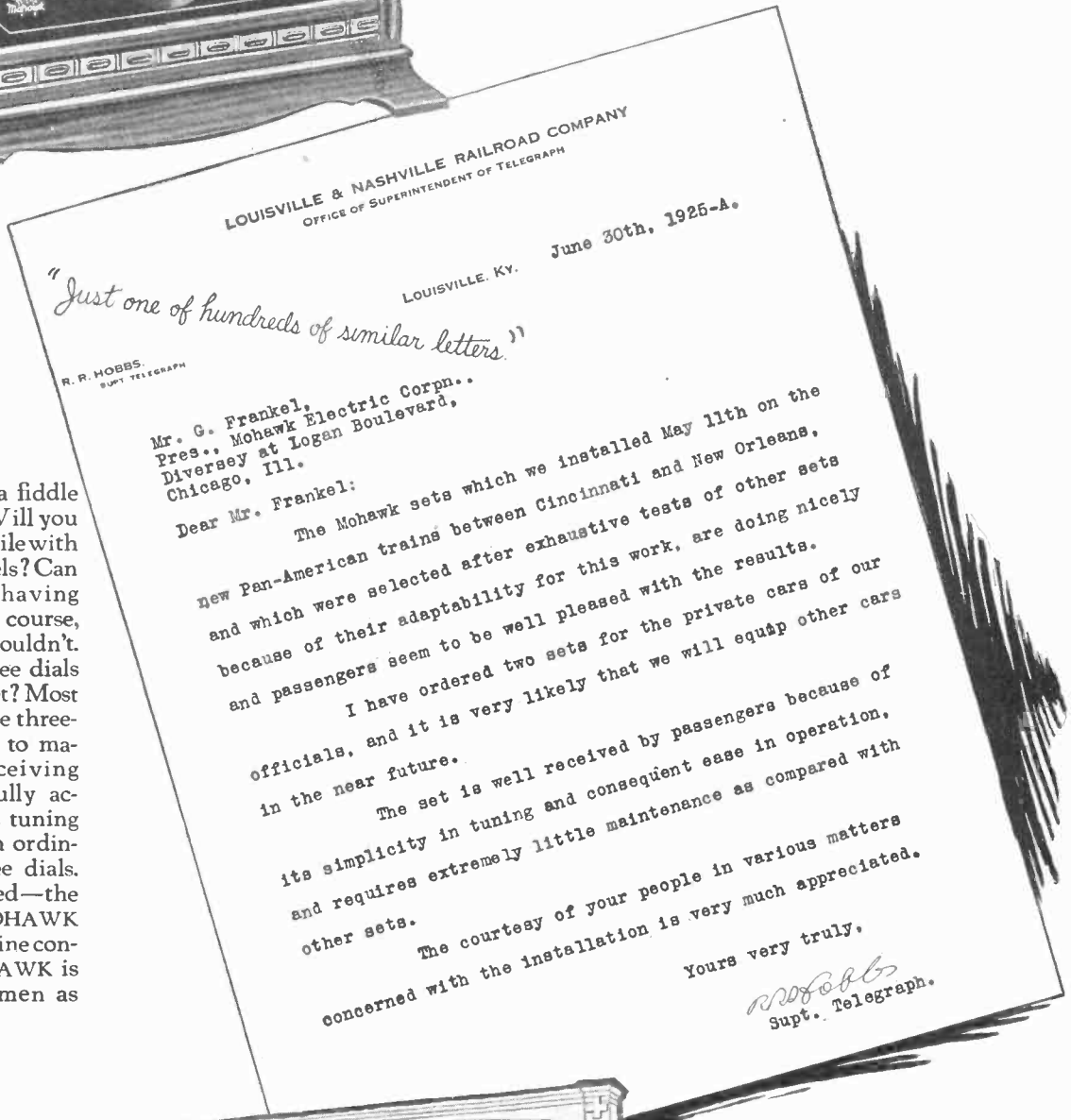
## Read this Letter



The Mohawk Table Model No. 100, five tubes, just ONE dial to tune. Retail price, without accessories, \$100.00

THE Louisville & Nashville Railroad, after exhaustive tests of about 47 various receivers, chose the MOHAWK. Overcoming the large amount of interference caused by a moving train was an achievement of which we are justly proud. MOHAWK, the pioneer one-dial radio has blazed a trail that is being followed by many manufacturers. But only MOHAWK has the balanced three-in-line condenser. And only MOHAWK gets three-dial results with only one dial.

Would you play a fiddle with three bows? Will you operate an automobile with three steering wheels? Can you steer a ship having three rudders? Of course, you couldn't, or wouldn't. Then why use three dials to operate a radio set? Most people do not have three-handed operators to manipulate their receiving sets. We successfully accomplish with *one* tuning control, that which ordinarily requires three dials. Nothing is sacrificed—the secret lies in the MOHAWK balanced three-in-line condenser. The MOHAWK is the radio for women as well as men.



LOUISVILLE & NASHVILLE RAILROAD COMPANY  
OFFICE OF SUPERINTENDENT OF TELEGRAPH

LOUISVILLE, KY. June 30th, 1925-A.

*"Just one of hundreds of similar letters."*

R. R. HOBBS,  
Supt. TELEGRAPH

Mr. G. Frankel,  
Pres., Mohawk Electric Corp.,  
Diversey at Logan Boulevard,  
Chicago, Ill.

Dear Mr. Frankel:

The Mohawk sets which we installed May 11th on the new Pan-American trains between Cincinnati and New Orleans, and which were selected after exhaustive tests of other sets because of their adaptability for this work, are doing nicely and passengers seem to be well pleased with the results.

I have ordered two sets for the private cars of our officials, and it is very likely that we will equip other cars in the near future.

The set is well received by passengers because of its simplicity in tuning and consequent ease in operation, and requires extremely little maintenance as compared with other sets.

The courtesy of your people in various matters concerned with the installation is very much appreciated.

Yours very truly,

*R. R. Hobbs*  
Supt. Telegraph.



The Pan-American Train  
OF THE L&N RAILROAD

with the **Mohawk** RADIO

AS STANDARD EQUIPMENT

Mohawk Electric Corporation  
2220 DIVERSEY BLVD. CHICAGO



Observation Car with Mohawk RADIO Operated by Child

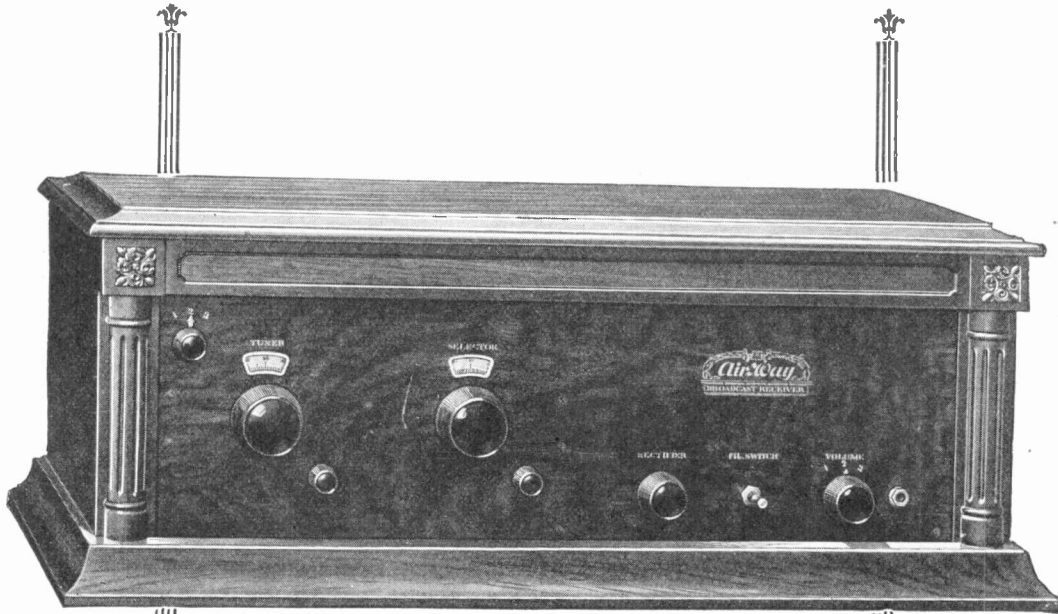
Just ONE Dial  
To Tune

Complete descriptive literature on request

Manufacturers  
MOHAWK CORPORATION OF ILLINOIS  
Independently Organized in 1924  
2222 Diversey Parkway Chicago, U. S. A.

Sales Department  
THE ZINKE COMPANY  
1323 So. Michigan Ave. Chicago, U. S. A.

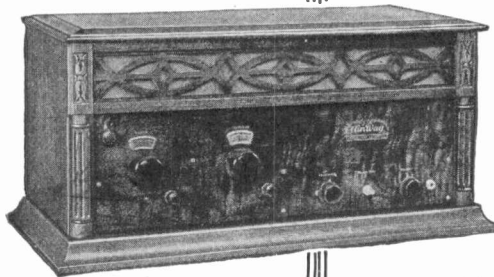




Model 61 (shown at top) selected American walnut. De Luxe rubbed finish. Artistically beautiful. 6 tubes. Resistance coupled amplification. \$98.50.

## STANDS OUT from the Crowd

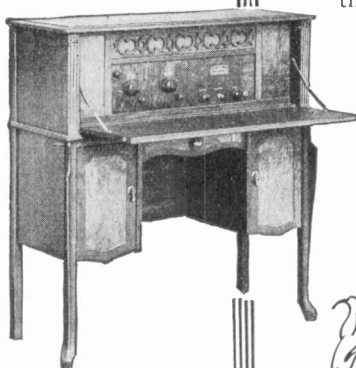
There are so many radios clamoring for attention that both the dealer and his customer listen dubiously to claims of superiority.



Model 62—Same as Model 61 with self-contained speaker. designed and built by Air-Way engineers and mounted horizontally on cover. \$137.50.

This makes interesting and *pertinent* the fact that Air-Way sales are pyramiding in amazing fashion in those centers where the Air-Way has been given a thorough competitive test. As soon as a dealer tries an Air-Way he puts some in stock. As soon as he demonstrates an Air-Way he sells it. And the Air-Way "Certificate of Satisfaction" now universally recognized as the outstanding stroke in 1925 radio merchandising, enables the dealer to build up fast to local dominance.

Write for the booklet which tells about the Air-Way "Certificate of Satisfaction." Order in an Air-Way model for any test you want to make. You need Air-Ways in your Christmas stock more than Santa Claus needs his reindeers. Get some Air-Ways now.



Model 63—The Air-Way console model. Priced at about half what you pay for consoles which approximate only its appearance and efficiency. \$197.50.

### AIR-WAY ELECTRIC APPLIANCE CORPORATION

618 Broadway, Toledo, Ohio

Export Department, 220 Broadway, New York, N. Y.



#### Factory Representatives

The Jackson Sales Company,  
308-20 E. Jackson Blvd.,  
Chicago, Ill.  
Telephone Harrison 3744

B. H. Smith Sales Co.,  
755 Boylston Street,  
Boston, Mass.  
Telephone Back Bay 7009

Mr. C. L. Titus,  
430 U. S. National Bank Bldg.,  
Denver, Colo.

Mr. J. H. Lyte,  
Box 917,  
Narbeth, Pa.

H. E. McKenney,  
997 Forest Ave.,  
Portland, Maine.

Motor Electric Co.,  
3320 Broadway,  
Oakland, Calif.

Mr. C. M. Cutting,  
1217 Bainbridge St.,  
South Richmond, Va.

Mr. James M. Sullins,  
Knoxville, Tenn.

Electric Power Maintenance Co.,  
1101 Monroe Street,  
Toledo, Ohio.

Mr. Ralph Bretzner,  
128 West 42nd Street,  
Telephone Wisconsin 2777  
New York, N. Y.

Mr. Frank A. Brady,  
747 Warehouse St.,  
Los Angeles, Calif.

The Carroll Company,  
1323 Wall Street,  
Dallas, Texas.

Thos. C. Jepson,  
277 Willow Ave.,  
Toronto 8, Ont., Canada

Mr. J. D. Palmerlee,  
Armada, Mich.

J. F. Nutting,  
1001 Flatiron Bldg.,  
Atlanta, Ga.

.....  
Air-Way Electric Appliance Corp.,  
618 Broadway, Toledo, Ohio.  
Please send me data and prices covering the new Air-Way  
Radio Receivers.  
Firm Name .....  
Address .....  
Your Name .....



## Sell 'em Radio on the Meyer-Kiser Plan

### Manufacturers and Distributors Favor Our Plan

THE MEYER-KISER financing plan has been submitted to a number of the leading radio manufacturers and a greater number of well-known distributors, and almost without exception the plan has received approval, and, in fact, a number of manufacturers and distributors are recommending the Meyer-Kiser Plan exclusively to dealers in general.

A good time payment service is so obviously a part of the radio dealer's sales program that there should be no delay in making the proper financing connections. Radio is a thing which appeals to the masses at large—and the radio dealer's sales plans should take this fact into consideration. Not many people have enough cash in pocket to walk into your store and purchase a radio set. Most purchasers must have credit. If you use the Meyer-Kiser Finance Plan you can give credit—and increase your sales.

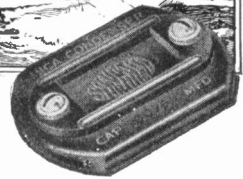
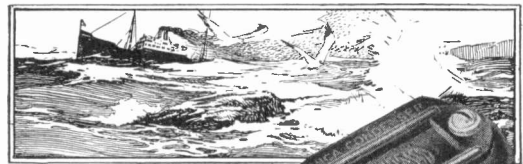
#### Make our Plan part of your Sales Program

December and January are the peak months in radio sales. You will need every possible sales advantage. You should investigate the Meyer-Kiser Plan at once and see for yourself just how the use of this plan will greatly increase your sales volume.

**MEYER-KISER CORPORATION**

Meyer-Kiser Bank Building

INDIANAPOLIS, INDIANA



## Corrects

### “salt air” troubles

As all sea-goin' operators know, salt air breeds trouble in fixed condensers. It creeps between the layers and causes corrosion. Then comes distortion and customers complain. Set buyers and home builders usually do not know this — nor do they care. They look to you for apparatus that can be used *anywhere*.

### Sangamo Mica Condensers

— solidly molded in bakelite — are so waterproof they can be boiled in water for hours without the slightest change in capacity. There are no exposed edges where salt air or dampness can creep in. They eliminate many hard-to-trace radio troubles.

A letter from Jeffress Radio Company of New York, manufacturers, outlines a typical experience.

“We find Sangamo Mica Condensers are far superior to any other of moderate price on the market. We find them to be the only type of condenser that we can use in our Super-Hetrodyne for use in salt air regions, as we have had Super-Hetrodynes returned to us in which other makes were used.”



Also Available  
**SANGAMO**  
By-Pass Condensers  
1 Mfd.—list \$1.25  
½ Mfd.—list .90

(Signed) Jeffress Radio Company  
By R. O. JEFFRESS

### Waterproof Heatproof Fumeproof

Accuracy guaranteed within 10 per cent of marked capacity, and they hold their accuracy. Now available in any desired quantity.



Ask any first class wholesaler for stock and display card

**Sangamo Electric Company**  
Springfield, Illinois

RADIO DIVISION, 50 Church Street, New York

OFFICES IN PRINCIPAL CITIES  
For Canada—Sangamo Electric Co. of Canada, Ltd., Toronto  
For Europe—British Sangamo Co., Ponders Erd, Middlesex, Eng.  
For Far East—Ashida Engineering Co., Osaka, Japan



# Hewing to the Line!

*Federal's Merchandising Policy has not been altered or modified in any way*

The Federal Merchandising Policy, announced to the trade last August, has proved very successful. So liberal are its provisions, so complete its protection, that Wholesalers and Retailers alike have heartily endorsed it. *It has not been altered or modified in any way.*

In the matter of territories, for instance, everyone is given an opportunity to profit to the fullest extent. Only one Wholesaler in each general marketing district is permitted to distribute Federal Ortho-sonic Receivers. This territorial arrangement allows each Wholesaler to realize to the full on the constructive effort he puts forth.

So, too, are Federal Retailers protected against excessive competition. The merchants sold in any one community are limited to a number commensurate with the characteris-

tics of that locality, and the character of the stores. This policy gives Federal Retailers the greatest opportunity for profit and expansion.

And just as Federal Wholesalers and Retailers are given complete protection, other provisions of our policy work for their welfare. They are allowed liberal discounts. They are backed up with an aggressive, powerful advertising campaign, and with selling helps that will bring business to them.

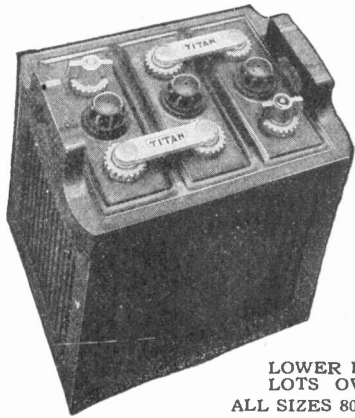
The new Ortho-sonic Radio Receivers meet every public demand. In addition to distance-getting ability and precise selectivity, the Ortho-sonic receivers produce that lifelike tone that every radio prospect seeks.

If you haven't read the details of this unusual proposition, so ideal from your standpoint, write us for a copy.

**FEDERAL RADIO CORPORATION, Buffalo, N. Y.**

(Division of Federal Telephone and Telegraph Company)  
Operating Broadcast Station WGR at Buffalo

**Federal**  
*ortho-sonic*  
**Radio**  
"Rivaled only by Reality"



TITAN  
RADIO "A"  
TYPE RS

6 VOLTS,  
80 AMPS.,  
RUBBER  
CASE

\$8.05  
IN LOTS  
OF 1 TO 5

LOWER PRICES IN  
LOTS OVER FIVE  
ALL SIZES 80 TO 140 AMPS.

*Now make real money  
on the radio battery  
The TITAN way!*

**B**ATTERY business is year 'round business but this is the time to really "cash in."

The market is flooded with the so-called "gyp" batteries — they are batteries of low capacity and short life — batteries that carry a good mark-up but by far the most costly to sell. Better sell a good battery or none at all.

TITAN Batteries, made by the General Lead Batteries Company, are sturdy, long life and high capacity batteries. They sell at a price that allows you good profit and volume sales. Write today for the TITAN Dealer Plan. It will show you how to build real battery business on TITANS.

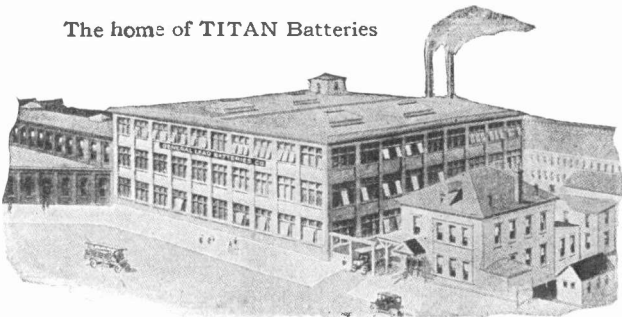
*(Free* Everyone that is interested in the construction and the care of the storage battery should write for Bulletin 28, "The Theory of the Storage Battery." *It's free.*)

**GENERAL  
LEAD BATTERIES COMPANY**

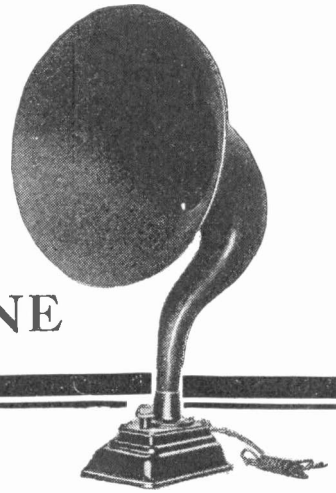
6 LISTER AVE. NEWARK, N. J.

*The Battery with the one-eighth inch Plate*

The home of TITAN Batteries



*The  
O'NEIL  
AUDIPHONE*



*is the Loudspeaker  
Your Customers Want*

**T**HE O'Neil Audiphone is being sold in direct comparison with other loudspeakers—at any price—and selling BIG on its merits.

Clear, full volume, resonant tone and absolute freedom from blast and chatter has made the O'Neil Audiphone supreme among loudspeakers.

Your customers want the O'Neil Audiphone. You will find that this loudspeaker with its wonderful 3-way control balanced armature will sell *itself* in comparison with any other loudspeaker on the market.

Build up new business and profits with the O'Neil Audiphone.

Endorsed and sold as the Marconi Speaker in Canada by the Canadian Marconi Co.

List Price  
**\$25.00**

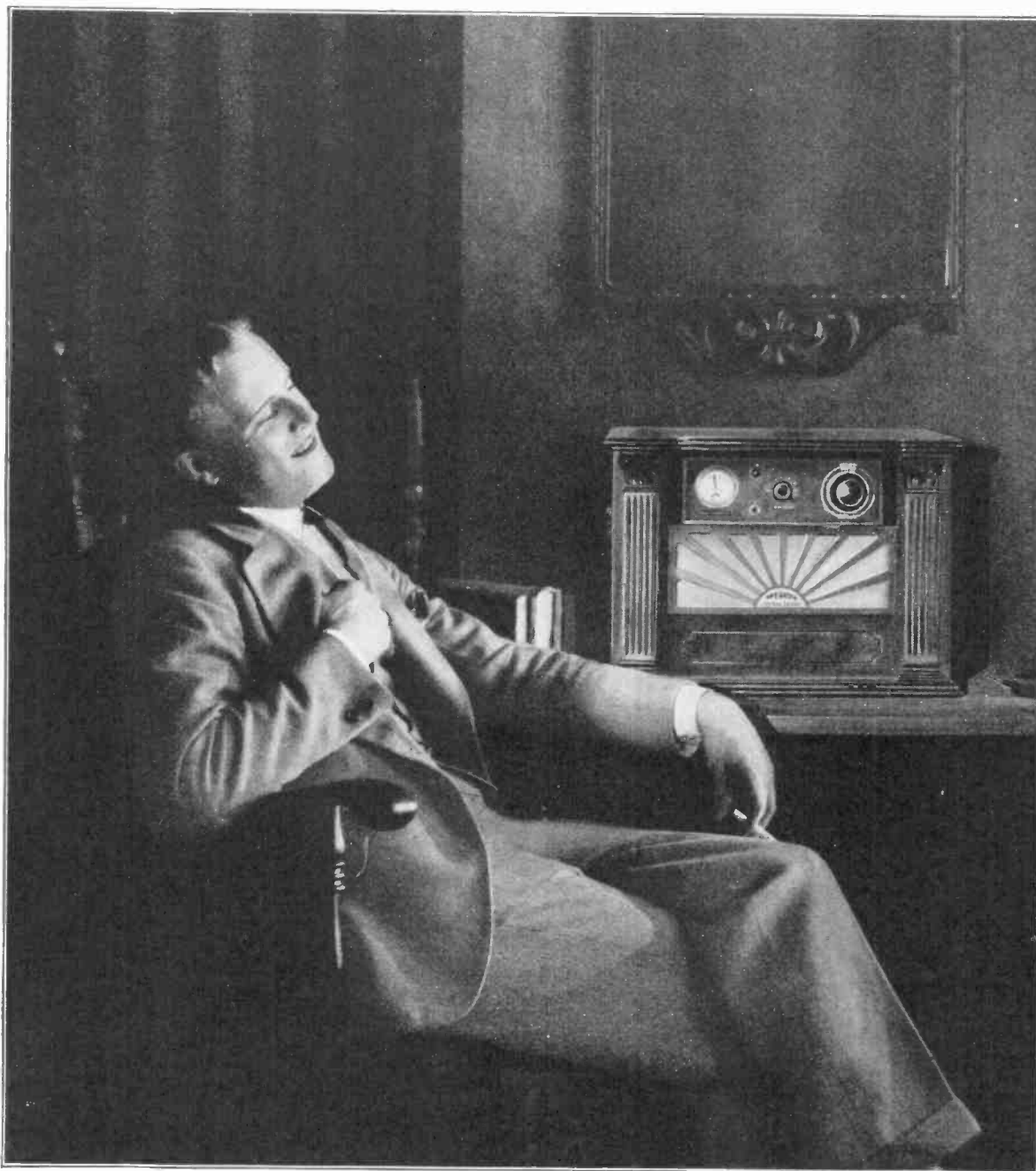
A Few Profitable Territories  
Now Open

*Write for Dealer Proposition and  
Free Local Newspaper Advertising*

**O'NEIL MFG. COMPANY**

4742 Hudson Boulevard  
West New York, N. J.





## The New Operadio Consolette

The tremendous popularity of the Operadio—which has increased radio enjoyment by making it available anywhere—has led to this beautiful six tube cabinet radio set for home and apartment use.

The set in its compact mahogany case may be easily carried—while it is actually playing, to any room of the house. Like all Operadios, it is entirely self-contained; no outside wires or connections of any sort being used.

The special loop supplied with the set is used either concealed within the cabinet, or exposed, plugged into the top when extremely directional effects are desired. The dealer who sells the Operadio line can meet any demand for a high-grade receiving set, yet carry a comparatively limited stock.

Public goodwill for this name, and many revolutionary developments, mean a prosperous year for Operadio dealers.

THE OPERADIO CORPORATION  
8 South Dearborn Street Chicago, Ill.

# OPERADIO

The Original Self-Contained Radio

Built by the Manufacturers of the Famous Operadio Portable



# *Why not a Safety Zone in Industrial Selling?*

## *The Peace Pact at Locarno—*

forever bans war by setting up a safety zone between two traditional enemies. Neither can cross the "dead line" without bringing to the other's aid the arms of great neutral nations.

Why not a safety zone in industry beyond which the seller may know he cannot go without penalty of loss?

If every manufacturer who sells to industry would set up a safety zone which would clearly mark the border between profitable and unprofitable selling, he would take a step

as momentous to his own business as Locarno is to world peace.

The McGraw-Hill Four Principles of Industrial Marketing are industry's safety zone. They safeguard profits as surely as the new Rhine barrier insures peace.

*1926 is approaching.* Some manufacturers will enter it with sales plans based on hunches. Others will enter with markets determined and programs outlined that will produce sales at the lowest cost.

Which plan will you follow?

**I**F YOU ELECT to apply the McGraw-Hill Four Principles of Industrial Marketing, here are the steps to take:

1. *Market Determination.* Study each market for your product. Weigh its potential. Determine which industries are the profitable ones to cultivate. The place to start is with your own books. Classify your sales by natural buying groups. Then compile data on each industry in which your product can be used. Compare the two and you will see clearly where your biggest opportunity lies.
2. *Buying Habits.* Study the buying habits of the industries you decide to sell. Find out who are the buyers and how they buy. This will save the expense and wasted effort of "barking up the wrong tree."
3. *Channels of Approach.* Having located the real buyers direct your selling on them. Support your sales effort with advertising in the publications which have the greatest influence with these buyers—the ones they look to for information.
4. *Appeals that Influence.* Don't talk generalities in your advertising. Talk shop

in the buyers' own language. Tell them how your product will increase the productiveness of their plants or will reduce costs. Performance facts are what interest them most.

Here you have a plan for successful selling which is simplicity itself. There is no patent on it, for the McGraw-Hill Four Principles of Industrial Marketing are plain common sense, coded and applied to the job of selling to industry.

*1926 is approaching.* If you want to apply the McGraw-Hill Four Principles of Industrial Marketing to your 1926 program, follow the above formula. If you need guidance, the McGraw-Hill Company may be able to help you. Obviously we cannot develop sales plans for many, but we can supply information and suggest methods which will make simpler a manufacturer's own plan building.

Fifty years of intimate contact with industry have given us a knowledge of markets and buying habits which is proving of great value to many manufacturers.

*1926 is approaching.* If we can be of service to you, please feel free to call on us. Our book "Industrial Marketing" will give you a good start. It will be sent gratis to any manufacturer who sells to the industries covered by the McGraw-Hill publications.

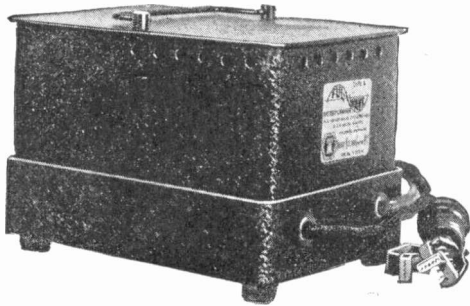
This advertisement is the seventh of the series which is appearing in the *New York Times*, *Philadelphia Public Ledger*, *Pittsburgh Gazette-Times*, *Chicago Tribune*, *Cleveland Plain Dealer*, *Detroit Free Press*, *Chicago Journal of Commerce* and *New York Herald-Tribune*; in *Printers' Ink*, *Advertising and Selling Fortnightly*, *Class. Sales Management*, and in the McGraw-Hill Publications. The purpose of these advertisements is to arouse a national appreciation of the need for improving industrial sales efficiency, and to awaken a keener interest in the correct principles of industrial selling.

McGraw-Hill Company, Inc., New York, Chicago, Philadelphia, Cleveland, St. Louis, San Francisco, London, Publishers of

# McGraw-Hill Publications

REACHING A SUBSTANTIAL MAJORITY OF THE POTENTIAL BUYERS IN THE INDUSTRIES THEY SERVE

<p>Mining ENGINEERING &amp; MINING JOURNAL PRESS COAL AGE Radio RADIO RETAILING RADIO TRADE DIRECTORY</p>	<p>Electrical ELECTRICAL WORLD JOURNAL OF ELECTRICITY ELECTRICAL MERCHANDISING</p>	<p>Industrial POWER . AMERICAN MACHINIST CHEMICAL &amp; METALLURGICAL ENGINEERING INDUSTRIAL ENGINEER</p>	<p>Overseas AMERICAN MACHINIST (EUROPEAN EDITION) INGENIERIA INTERNACIONAL</p>	<p>Construction &amp; Civil Engineering ENGINEERING NEWS-RECORD Transportation ELECTRIC RAILWAY JOURNAL BUS TRANSPORTATION</p>
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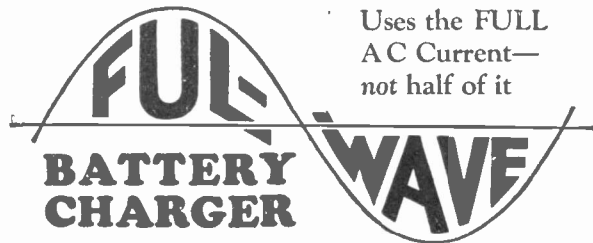


**MODEL "A"**  
 For radio "A" and 6 volt automobile batteries.  
 A. C. line, 40 to 60 cycle, 110-120 volts.  
 Battery—6 volts 6-8 amperes.  
 Comes complete with cords, plug and leaded clips  
 \$18.00 List (East of the Rockies)

**MODEL "A-B"**  
 For charging radio "A" and "B" batteries *simultaneously*.  
 A. C. line 40 to 60 cycle, 110-120 volts. Battery—"A,"  
 6 volts 3-4 amperes; "B," 48 to 96 volts in series 1/10  
 ampere up.  
 \$22.00 List (East of the Rockies)

- FACTS ABOUT FUL-WAVE**
- The only charger that charges A and 96 volts of B batteries at the same time.
  - Uses the Full electric wave to charge almost in half time.
  - More economical to operate.
  - Requires no water, chemicals or maintenance.
  - Needs no adjustment.
  - Quiet in operation.
  - Cannot blow fuses.
  - Not affected by jolts or jars.
  - Cannot overheat.
  - Foolproof. It is sealed at the factory.
  - Absolute guarantee printed on each charger.

You only have to **SHOW** it  
 —to **SELL** it!

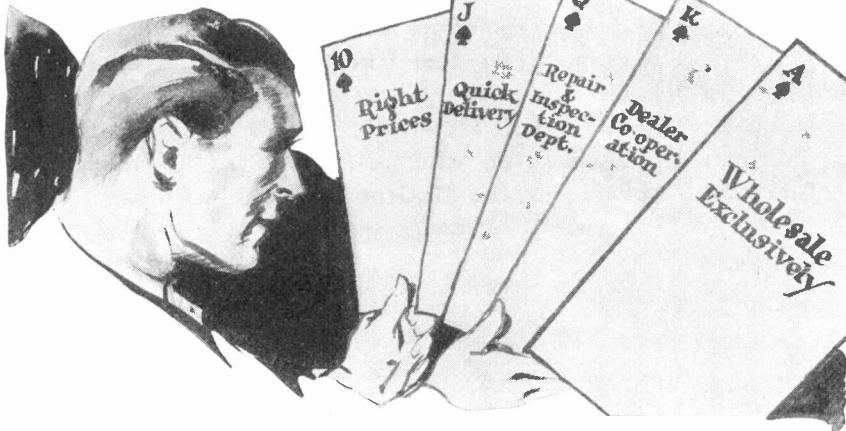


Uses the **FULL**  
 AC Current—  
 not half of it

Simplest to demonstrate and operate, neat, compact, efficient. Costs about half as much to operate, because it charges in almost **HALF** the time. No waste of current because it uses **BOTH** halves of the electric wave.

Here are selling points unique—without equal—a charger that needs no adjustment, no servicing—that has no "come back"—that **STAYS** sold—that is absolutely guaranteed.

**LIBERTY ELECTRIC CORP. of NEW YORK - 342 Madison Ave. New York**



**HOMMEL  
 IS AN  
 ACE-HIGH  
 RADIO  
 JOBBER**

**H**E works shoulder to shoulder with his dealers at all times—he never competes with them. Large stocks of the best and most desirable radio equipment are carried ready for dealer shipment on a moment's notice.

An inspection and repair department is maintained so

that apparatus, requiring testing, can be quickly checked before shipment, and repairs made to returned sets without sending the equipment to the factory.

Hommel dealers further benefit from Hommel's national advertising as all user inquiries and orders resulting are forwarded promptly to the local dealers.

Tie up with **HOMMEL** Now—the Helpful Jobber—Our New Encyclopedia on Radio Apparatus—466-R—will help you. Write for your copy to-day.

WHOLESALE

EXCLUSIVELY

**LUDWIG HOMMEL & CO**

929 PENN AVENUE



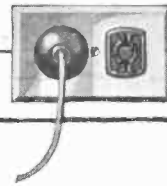
PITTSBURGH, PA.





The new 5 Ampere Tungar

# A new Tungar model— *demand- ed by public and dealers*



**F**ROM the moment the new two ampere model appeared, there has been a demand for a new five ampere Tungar to match it. Now it is here—and it will sell!

The Tungar is now available in five ampere size in a new model that does all that the new model two ampere size does—but at a swifter rate. Either size will charge all makes and types of storage batteries, *without attachments*. This means that if you stock the Tungar in both sizes, you are prepared to meet the whole field of battery charger demand with a single make of charger—the best.



The Tungar is a G-E product developed in the great research laboratories of General Electric.

East of the Rockies:  
2 ampere size \$18  
5 ampere size \$28  
60 cycles—110 volts

# Tungar

REG. U.S. PAT. OFF.

**BATTERY CHARGER**

*Tungar—a registered trademark—is found only on the genuine. Look for it on the name plate.*

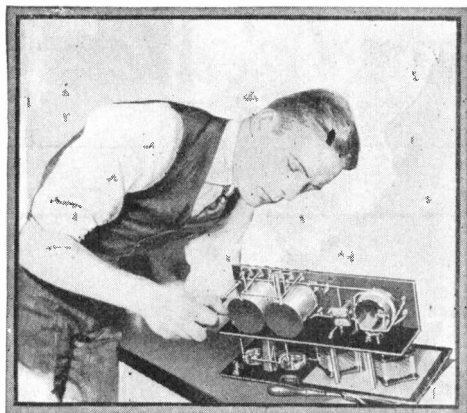
# GENERAL ELECTRIC

GENERAL ELECTRIC COMPANY

MERCHANDISE DIVISION

BRIDGEPORT, CONNECTICUT

# Radio Instruction for Dealers, Jobbers and Salesmen



**T**HE man who makes his living from radio must know his subject thoroughly in order to make a success.

In answer to the big demand for a comprehensive radio course, Radio Institute of America (conducted by RCA) now announces its new Residence and Home Study Courses for radio dealers, jobbers and salesmen.

*For further information address*

**Radio Institute of America**

(formerly Marconi Institute)

Established in 1909

324-B Broadway

New York

Product of over 30 years' Experience



*The Favorite  
Voice of Radio  
in All Tongues*

**T**O hear an Amplion in comparison with any or all other loud speakers is to appreciate at once why Amplions are internationally the leading favorites.

The actual originators and oldest makers of loud speakers, Alfred Graham & Co., London, England, evolved The Amplion. Its superbly life-like reproduction and supreme clarity on all notes give eloquent testimony to Graham's more than thirty years' experience in sound reproduction. Get an Amplion to test from your jobber.

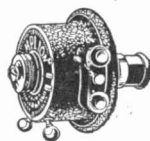
*At Christmas—*

*Feature Amplions as Christmas Gifts!*

Their supremacy of performance will also help you greatly in demonstrating and selling sets.

*Dealers! Jobbers!*

To test the Amplion—in comparison with any or all other makes—is to learn why it has the widest sale of any loud speaker throughout the world. Though more recently introduced to America, it is rapidly paralleling its success abroad. Nation-wide advertising on a greatly extended scale is multiplying the demand. Write immediately for the 1926 Amplion proposition.



Phonograph or  
Console Units  
in Two Sizes  
\$17 and \$25

Six models, \$12 to \$42.50. All Amplions are completely equipped with cords and panel plugs.

**THE AMPLION CORPORATION OF AMERICA**

*Executive Offices: Suite E, 280 Madison Ave., New York City*

*Canadian Distributors: Burndept of Canada, Ltd., Toronto*

*Associated Companies and Agents: Alfred Graham & Co., London, England; Patentees: Amplion Corporation of Canada, Limited, Toronto; Compagnie Francaise Amplion, Paris, France; Compagnie Continentale Amplion, Brussels, Belgium; Amalgamated Wireless (Australasia), Ltd., Sydney and Melbourne; British General Electric Company, Ltd., Johannesburg and Branches; Indian States and Eastern Agency, Bombay and Calcutta; C. J. Christie E. Hijo, Buenos Ayres; David Wallace & Co., Valparaiso; Mestre & Blatge, Rio de Janeiro; F. W. Hammond & Company, London and Tokio.*

**AMPLION**

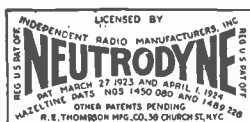
# Where great radio inventions were first produced

ALL the leading authorities in radio know of the famous Thompson laboratories, for during the past 16 years over 116 different types of radio apparatus have been designed and manufactured by Thompson; many of the important problems of radio were solved by Thompson engineers.

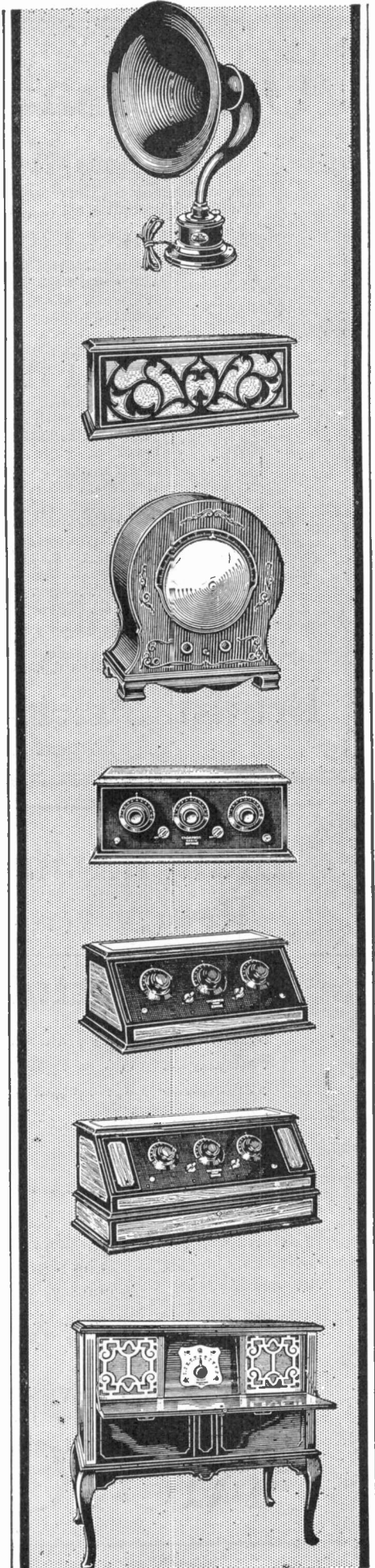
Out of the Thompson plant came many of the intricate devices used by sailors on the seas, soldiers on the field of battle, and by radio operators in aeroplanes and submarines. The radio direction finder, the sonic depth indicator, the light-weight aeroplane transmitter, etc., etc., have added to Thompson renown.

This bulwark of scientific and practical radio experience stands back of Thompson products today. It is your assurance that in design, manufacture and performance, Thompson Radio will meet the expectations of your most critical customers. Thompson Receivers are priced from \$89.00 to \$360.00. Thompson and Thompson-Fuller Speakers, \$28 and \$35. All prices slightly higher west of the Rocky Mountains and in Canada. The better dealers are invited to write for our sales plan. The R. E. Thompson Manufacturing Company, 30 Church Street, New York City.

# THOMPSON RADIO



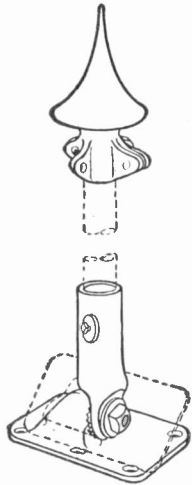
BUILT BY MAKERS OF ARMY AND NAVY RADIO APPARATUS USED BY LEADING NATIONS



# Universal Radio Mast Equipment

## Eliminates Antenna Troubles

Sell your customers Universal Antenna Mountings—they give greater radio efficiency—absolutely insure better results by eliminating all troubles due to poor installation, incorrect length, flimsy, makeshift masts, etc.



**Model 1000**  
To fit 1 in. mast pipe—Universal base, highly polished aluminum spiral top; center collar for guy wires. Price \$3.50 each.

**Model 1100**  
Same as above except furnished with black enameled ball top instead of highly polished aluminum spiral top. Price \$2.50 each.

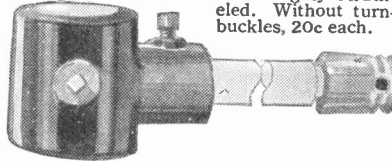
**Model 2000**  
To fit 1/2 in. mast pipe. Universal base and top black enameled. Center collar for guy wires. Price \$1.00 each.



**Guy Wire Collar**  
Made in two sizes to fit 1/2 in. or 1 in. masts. Adjustable to any position on mast between top and bottom. Price 20c each.



**Guy Wire Holder**  
A safe, secure guy wire holder. Cannot pull out as tension comes from curved end. Highly enameled. Without turn-buckles, 20c each.

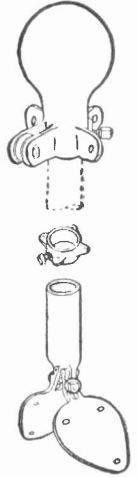


**Universal Outrigger**  
Drive wood plug in end of Outrigger arm and insert insulator which holds lead-in wire firmly. Made in two sizes.  
Model A for 1 in. mast and 1/2 in. arm. Price 40c ea.  
Model B for 1/2 in. mast and 1/4 in. arm. Price 35c ea.

**Model 1300**  
To fit 1 in. mast pipe. Adjustable black enameled hip roof base. Black enameled ball top. Center collar for guy wires. Price \$2.50 each.

**Model 1200**  
Same as above but equipped with highly polished spiral aluminum top as illustrated in Model 1000 to the left. Price \$3.50 each.

**Model 2100**  
Same style as shown in illustration above except made to fit 1/2 in. mast pipe. Price \$1.00 each.



**Don't worry about the type of building—Universal Mountings fit every type.**

You will find in Universal Antenna Mountings merchandise that gives you a quick turn-over and a good profit. They are not parts—they're a line of profitable radio accessories. If you cannot buy them through your Jobber write us direct and mention his name.

**Brown, Strickler & Brown, Inc.,** 108 North Jefferson Street  
Largest Manufacturers of Radio Aerial Mast Holders CHICAGO

## Branches in Nine Principal Cities Ready to Fill Rush Orders for Bristol Loud Speakers

Boston	Old South Building	New York	114 Liberty St.
Philadelphia	Widener Bldg.	Pittsburgh	Frick Bldg.
Birmingham	Age-Herald Bldg.	Detroit	Book Bldg.
Chicago	Monadnock Block	St. Louis	Boatman's Bank Bldg.
	San Francisco	Rialto Bldg.	

**D**ON'T lose good business because your stock is short. Wire or phone your needs to the nearest branch.

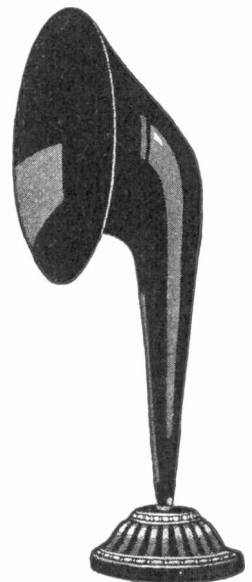
Remember, the biggest, newest selling point today is the Bristol Super-Unit with the low-pitch diaphragm. This diaphragm brings in, not only the middle and upper registers, but also all those bass notes which heretofore have come in only imperfectly, if at all.

Bristol Speakers are made in both horn and cabinet designs. The prices range from \$15 to \$30 retail. Super S, and Super C, the cabinet, have the Super-Unit.

**The Bristol Company, Radio Div. AL, Waterbury, Conn.**

For 36 years makers of the highly sensitive and accurate Bristol Recording Instruments.

**BRISTOL** TRADE MARK **AUDIOPHONE** REG. U.S. PAT. OFFICE **Loud Speaker**

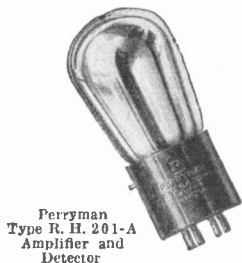
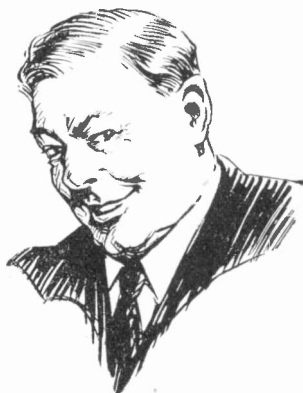


**"Super S" \$25.00**  
Rubber horn, 14 1/2 in. diameter. Black mat finish; gold decorated base. Contains the new Super-Unit with low-pitch diaphragm.

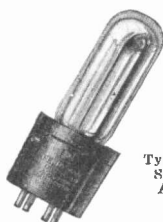


# PERRYMAN P RADIO TUBES

*"Distance without Distortion"*



Perryman  
Type R. H. 201-A  
Amplifier and  
Detector



Perryman  
Type R.H. 199  
Standard Base  
Amplifier and  
Detector



Perryman  
Type R. H. 199  
Miniature Base  
Amplifier and  
Detector



Perryman Rectifier

## You can believe your ears!

And that's all you have to do with Perryman Tubes.

The volume is there, and so is the tone quality.

The new construction does it.

The elements in Perryman Tubes are spaced at the distance of greatest efficiency and held there by rigid reinforcements. You can't shake them apart.

Nothing radical about it. Just a sensible improvement that makes these tubes act better and last longer.

Your customers can see the construction advantages in the clear glass demonstrating tube we supply free of charge. And they will believe their ears when they hear the tubes in operation.

*If your wholesaler cannot supply you,  
write, wire or phone us.*



Window Card  
Part of the  
Perryman Display

### Have You Received Your Perryman Displays?

A large window card, size 19 x 25, a set of figures, size 7 x 13, a number of small figures, and a counter display, size 7 x 13, all lithographed in 6 colors make up the display material. The individual pieces may be used separately or together as a unit, depending on the amount of space available for display.

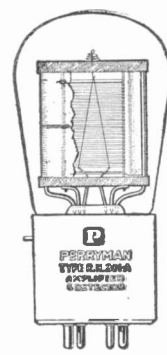
The counter display holds three tubes, a rectifier, a Type R. H. 199 Standard Base, and a Type R. H. 201-A clear glass demonstrating tube. The demonstrating tube is supplied free of charge with the display.

Imprinted folders are also supplied Perryman dealers.

If your distributor hasn't yet supplied you with this display material get in touch with him or write us direct.

### Have You Received a Type R. H. 201-A Clear Glass Demonstrating Tube?

This clear glass demonstrating tube clearly shows the two bridges which hold the filament, plate and grid in perfect parallel alignment, at the distance of greatest efficiency and prevent the displacement of these elements through shocks or jars. You can also see the fine spring that holds the filament in proper place and allows for natural expansion and contraction with changing heat conditions. Get one of these demonstrating tubes from your distributor or write us direct. It will help you sell many tubes.



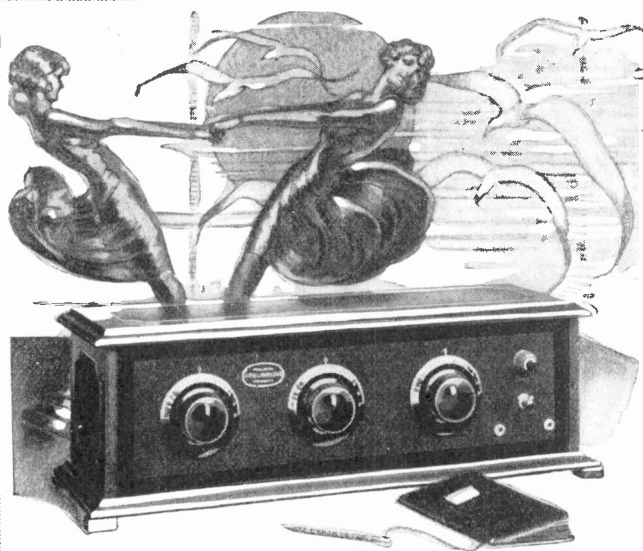
Clear Glass  
Demonstrating Tube

# PERRYMAN P ELECTRIC CO., INC.

LABORATORIES AND PLANT  
NORTH BERGEN, N. J.



SALES AND EXECUTIVE OFFICES  
33 W. 60th ST., N. Y. C.



**Better Reception  
—a Business Opportunity**

"Six months ahead of the season" is the way one large dealer has described the Arborphone Receiver.

Arborphone is a thoroughly proved circuit incorporated in a really fine cabinet of graceful design. Performance compares with the most expensive sets on the market.

Briefly Arborphone is an exceptional radio set priced to meet the demands of everyone. Arborphone dealers are building a splendid clientele. Complete sales information furnished any reliable dealer on request.

\$60.00 in Rocky Mt. and Pacific Coast States.

**MACHINE SPECIALTY COMPANY  
ANN ARBOR, MICHIGAN.**

\$55<sup>00</sup>

**ARBORPHONE**

**Dulce-Tone**

Radio Talking Machine Speaker

—combines  
radio and the  
talking  
machine!



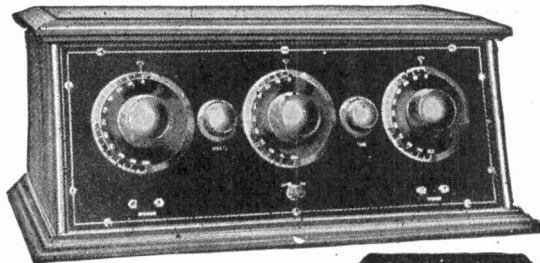
A COMBINATION radio and talking machine will soon be the ambition of most homes. Dulce-Tone makes the ownership of such a combination instrument available to the vast majority of families—people who cannot afford the expensive, factory-built machines.

Here is an unique opportunity for promoting your radio business—*make the most of it!*

**THE TEAGLE COMPANY**  
1125 Oregon Ave. Cleveland, Ohio

**TREGO**

**The World's Lowest Priced  
5-Tube Tuned Radio Frequency Set**



**Long Range**

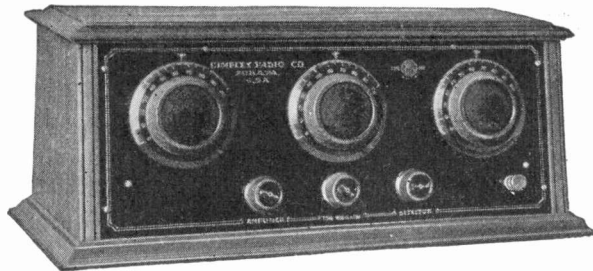
HERE'S the set that sells and satisfies! It's the TREGO 5-Tube Tuned Radio Frequency Set—highest quality at a price within the reach of all. Retailers at only \$45.00. Gives you Big Profits. Sells 10 to 1 over higher priced sets. Millions want it!

Storage or dry-cell operation. Backed by our Iron-Clad Guarantee. Sold only through dealers.

Send for Monthly Catalog and exclusive dealer plan. This TREGO TRF5 is only one of the hundreds of profitable, quick-selling items listed—just off the press. Get your copy now—cash in on fall and winter radio demand.

**TREGO RADIO MANUFACTURING CO.**  
Manufacturers and Wholesale Distributors  
1444 Chestnut Street KANSAS CITY, MO.

List Price  
**\$45<sup>00</sup>**



**Radio satisfaction  
without high cost**

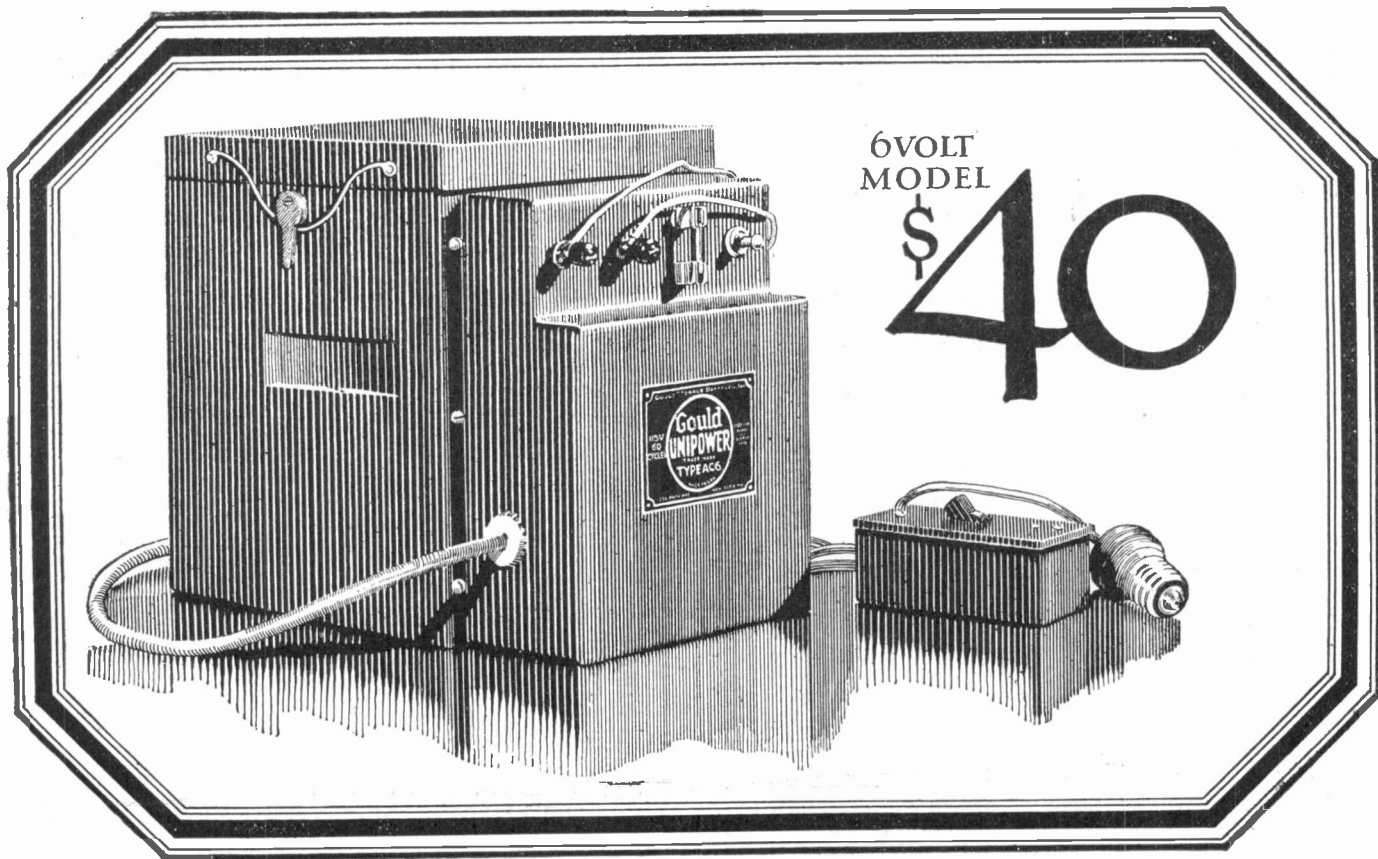
Are you prepared to meet the demand of that huge army of customers who want pleasurable, dependable radio reception—yet demur at fancy prices? Here is the ideal receiver for that big market.

**Simplex SR 8 \$65**

With a list price like that you can win many sales and make good profits. This new 1926 Simplex embodies the latest refinements of radio engineering. Straight line condensers. The modulator to control volume. Genuine mahogany cabinet with Adam Brown finish.

**JOBBERS and DEALERS:**  
*It will pay you to write*

**SIMPLEX RADIO CO.**  
Main and Rector Sts., Philadelphia



RADIO'S LATEST TRIUMPH

# How to put UNIPOWERS to work for you

WE have prepared a "Special Dealer Folder" which gives the complete details of the national advertising on Gould Unipower. It explains how you can reap the greatest benefit from this advertising. It illustrates all the sales-helps we supply *FREE*—booklets for your customers, counter cards, and complete copy and cuts for your local advertising.

### What Unipower Is

Unipower is a scientifically designed "A" power unit that

automatically converts house lighting current into radio power of the highest quality. It is a single compact unit, enclosed in a beautifully finished gas-tight case that fits safely *inside* most radio cabinets.

### Send for Folder

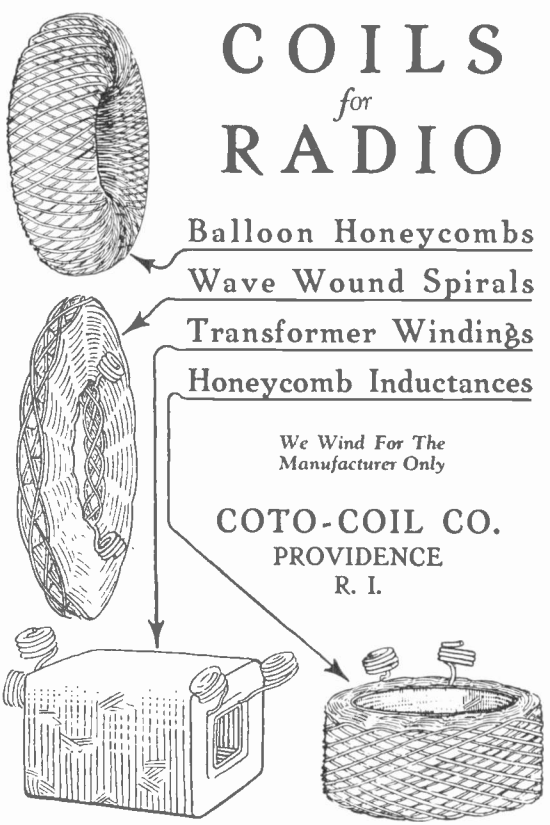
Place your order with your jobber immediately and then write for your copy of "How to put Unipower to work for you." THE GOULD STORAGE BATTERY CO., Inc., 250 Park Avenue, N.Y. Branches: Chicago, Kansas City, San Francisco.

UNIPOWERS is supplied in two models for use with 110-125 volt A. C. only. Standard models are for 60-cycle. (Special models 25-50 cycle are available at slightly higher prices.) All are equipped with special Balkite charger. The 4-volt model is for UV-199 tubes or equivalent and retails for \$35; 6-volt, for UV-201-A tubes or equivalent, retails for \$40. (West of the Rockies, prices are \$37 and \$43.)

# Unipower

TRADE MARK

*Off when it's on ~ On when it's off*



## COILS *for* RADIO

Balloon Honeycombs  
Wave Wound Spirals  
Transformer Windings  
Honeycomb Inductances

*We Wind For The  
Manufacturer Only*

**COTO-COIL CO.**  
PROVIDENCE  
R. I.



## Yes Sir!

The most critical buyer selects The Indiana Hyperdyne, because it gives Distance, Volume, Selectivity, and Tone Quality unequalled in any Radio near its price. Circuit is positively non-radiating and free from objectionable noises. By fabricating all the parts from raw materials, made to our specifications, and building sets complete in our modern plant, we keep the cost down. It is a one-profit line.

For over 18 years the principles and owners of this Company have successfully designed and manufactured nationally-known products in the Electrical, Radio and Telephone fields. Buy Radio Merchandise that is built right—that stays sold when sold. Write us for full descriptive literature, attractive window displays and dealer helps.

**DESCRIPTION**—A Quality 5-tube, Long-distance Receiver, with a beautiful Solid Mahogany Cabinet, 24x8x12, with an attractive 15° Sloping Panel. Set has many exclusive features, is thoroughly tested, and is packed ready for retailing. Lists at \$65.00 less accessories.

**Model 501.**  
A 6-tube Receiver using same circuit and parts as No. 500. It is the final refinement in Radio, and uses 3 Verner-controlled, silver-plated Pointers. Works on inside or outside Aerial. Retails \$100.00.

**Model 701.**  
Same as above only in beautiful Walnut Console, with Built-in Utah Speaker. Retails \$200.00.

**Model 702.**  
5-tube Console with Built-in Speaker. Retails \$175.00.

**INDIANA MFG. & ELEC. CO.**  
500 Imeco Block, Marion, Indiana

*Offices:*  
San Francisco, Cal.      Atlanta, Ga.  
Geo. L. Holmes,      T. A. Mitchell Co.,      Darling & Nevins,  
1819 Broadway      Balboa Bldg.      411 Ga. Sav. Bk. Bldg.  
Ft. Worth, Tex.      Minneapolis, Minn.  
F. J. Keller Co.,      J. C. Hoyer,  
905 W. Magnolia Ave.      310 Market Bank Bldg.

## THE HOUSE of SUPER-SERVICE

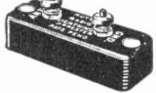
*Distributors of*

Radion	Pacent
Cunningham	Premier
Balkite	Howard
Brandes	Utah
Remler	Allen-Bradley
All-American	Weston
Frost	Dulce-Tone
Dubilier	Burgess
Benjamin	Jefferson
Rasla	Erla
Carter	Signal
Gould	Bremer-Tully

*and Many Other Nationally Known Products*

Dealers:—Write for a FREE copy of "HARRY ALTER'S POCKETBOOK," the convenient-to-carry Buying Guide listing over 2,500 items.

**The Harry Alter Co.**  
ELECTRICAL and RADIO SUPPLIES  
Ogden at Carroll Ave.  
CHICAGO ILL.



## MUTER Dependable Radio Products

### Lightning Arrester

Approved by Fire Underwriters. - - List **50c**

### Standard Complete Aerial Kit

Everything for installation with full instructions. - - - List **\$3.50**

*Sold by Leading Jobbers — Ask for Catalog*

**LESLIE F. MUTER COMPANY**  
76th and Greenwood Ave.      Chicago, Illinois

## RADIO CRYSTAL ORE

Pure Steel Galena direct from our mines, for use of Radio and Crystal Manufacturers.

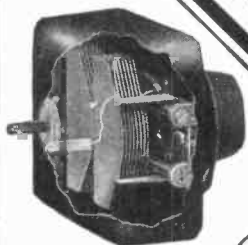
**KELSO NATIONAL MINING CO.**  
Georgetown, Colo.



# ALL-AMERICAN December Money Makers

## The Quality Christmas Gift for Every Radio Listener

A pair of Rauland-Lyric laboratory-grade audio transformers in a beautiful holly covered box. Advertised in The Saturday Evening Post and all leading radio magazines. A splendid holiday display feature and a profitable sales winner.



**ALL-AMERICAN**  
TRADE MARK

STRAIGHT-LINE-FREQUENCY

### TUNING

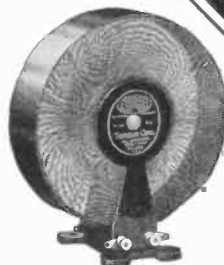
The ALL-AMERICAN Toroid Coils, singly and in sets of three, as well as the new shielded Variable Condensers, are now going out from the factory in ever-increasing numbers. The demand for these parts, already strong, grows heavier still as customers have an opportunity to examine and use them.

#### All-American Toroid Coils

- Type T-1 Antenna Coupler . . . . . \$ 3.50
- Type T-2 R. F. Transformer . . . . . 3.50
- Set of 3 coils complete . . . . . 10.50

#### All-American Straight-Line-Frequency Condensers

- Type C-35 Max. 350 mmf. . . . . \$ 4.50
- Type C-50 Max. 500 mmf. . . . . 5.00



List Price  
Per Pair  
**\$18**

ALL-AMERICAN RADIO CORPORATION, 4221 W. Belmont Ave., Chicago, Illinois

E. N. Rauland, President

Boston    New York    Philadelphia    Atlanta    Pittsburgh    Buffalo    Detroit    Chicago    Minneapolis    St. Louis  
Boise                      Los Angeles                      San Francisco                      Seattle



OWNING AND OPERATING STATION WENR—266 METERS

# ALL-AMERICAN

*Pioneers in the Radio Industry*

## How many drops in a teaspoon?

There are 60 drops to a teaspoon according to druggists measure, yet the AYANBEE Battery Tester requires only  $\frac{3}{4}$  of a teaspoonful or 45 drops.

Here is one of the secrets of the AYANBEE'S popularity.

Even the smallest and driest battery can be tested with an

### AYANBEE Radio Battery Tester

Easy to use in the hard-to-get-at places with no splattering or splashing of acid.

Yet accuracy has not been sacrificed because of its convenience.

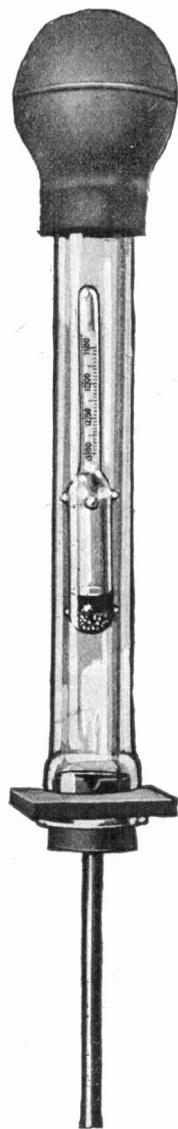
Every AYANBEE is "Triple Tested" for accuracy.

Sell it to your very best customers and they will thank you.

Order now  
from your  
jobber.



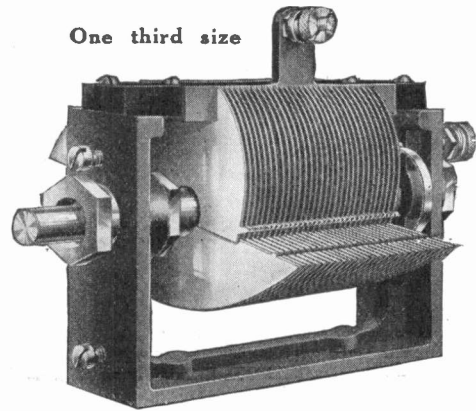
LIST  
75c



"Unless the Float  
is Right  
the Reading  
is Wrong"

The Scranton Glass Instrument Co., Inc.  
Scranton, Pa.

One third size



## Smallest Uniform Frequency Condensers made easily fit into present sets

They are half to a third the size of others, are only  $2\frac{1}{4}$  in. in diameter with plates fully extended, so will easily go into your set. Do away with crowding of station readings—85 out of 100 come below 50 on dial with ordinary condensers—by using

### Samson Uniform Frequency Condensers

These condensers are built to  $1/1,000$  inch, silver plated all over and—in addition—have gold plated plates to prevent oxidation. These grounded rotor type instruments have losses lower than the average laboratory standards. This condenser, due to its design, does not have the defects caused by either solid metal or dielectric end plates. 500 mmf. \$9.00, 350 mmf. \$8.75, 250 mmf. \$8.50.

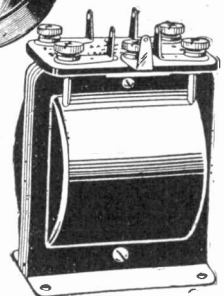
Samson Electric Company  
Canton, Mass.



Manufacturers of Quality Electrical Products Since 1882.  
Sales Representatives in Thirty Leading American Cities.



PRACTICALLY uniform high amplification over entire audible range with minimum distortion is obtained by using Samson Helical Wound Transformers. Ratios 6:1; 3:1. \$5.00.





# GOLD SEAL Radio Tubes

*Rigidly  
Tested*

*Uniformly  
Perfect*



Price  
\$2.50

Price  
\$2.50

## *They're Matched!*

Every Gold Seal Tube is made in our own modern factory and must pass strict tests not only for quality but also for uniformity.

Gold Seal *matched* tubes bring the dealer prestige and repeat orders. Sell your customers a set! We help you sell — write today for full particulars.

**GOLD SEAL PRODUCTS CO., Inc.**

250 Park Avenue, New York City



*New Improved  
Carton*

Test Gold Seal Tubes through special apertures without removing from carton. Saves time, trouble and loss.



*And the New High  
Power Tube*

Latest achievement of the Gold Seal engineers — greatly increasing volume and clarity.

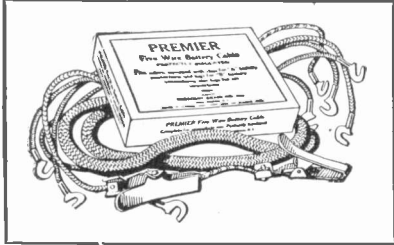
Price \$6.50



# PREMIER *Blue Ribbon* Battery Cables

IN 3 STYLES

Nationally advertised in the following high class publications:



*Radio News,*  
*Popular Radio,*  
*Radio Broadcast,*  
*Radio Call Book,*  
*Radio Retailing,*  
*Radio Dealer,*  
*Trade Directories,*  
*Etc.*

They sell profitably and easily, and when you think about cables remember these points:

"Standard New Code" is our rubber content for insulation. (It is dangerous to sell a cable not rubber insulated. Tubes blow out batteries are exhausted, and there is a constant fire hazard present.)

All terminals are soldered to the wire. (Prevents micro-phonous noises in the set.)

Terminals have a coating of lead to prevent corrosion.

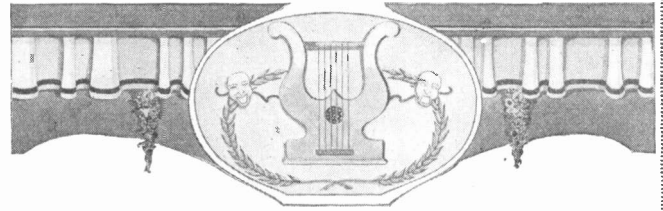
### MUELLER CLIPS for A Storage Battery Leads

Tightly braided, heavy cotton, fast colors that will not fade out and lose the markings and tracers.

3 Styles listing for 1.00, 75c, and 60c respectively

*Attractively boxed and counter display boxes.*

**CRESCENT BRAID CO., Inc., Providence, R.I.**  
*Makers of Premier Extension Cords, 20 ft. and longer. If your Jobber is out of stock, write us and we will have you supplied promptly from the nearest distributor.*



## Speaking From Experience!!!

The marked superiorities of tonal qualities in the Holtzer-Cabot Radio Loud Speaker are distinctly traceable to our fifty years' specialization in the manufacture of fine electrical apparatus.

By comparison let your own ear be the judge, let your eye rest on the beauty of line, and let your judgment decide the security that this half century of stability lends to your purchase.

The dealer carrying Holtzer-Cabot Loud Speakers enhances his reputation for quality merchandise and grants himself the security that such a reliable line offers.

National Loud Speaker  
\$12.00  
(Regular Trade Discounts  
Granted)  
Adjustable Control

1875-1925  
For Fifty Years  
Manufacturers  
of Quality  
Electrical  
Apparatus



The Holtzer-Cabot  
Electric Co.  
125 Amory St.  
BOSTON, MASS.



# Simplex "SUPER POWER"



You can teach a parrot to say "Just as good."

However he won't know what he is talking about.

Insist on Simplex Super Power tubes, they mean better reception and more profit.

### Dealers

We know that you are interested in PROFIT. Let us convince you that you can make 100% profit on the Simplex Super Power Tubes and still supply your customers with the perfect tube at a very attractive price.



Type 201A  
Bakelite  
Base. Silver-  
ed and Blue.

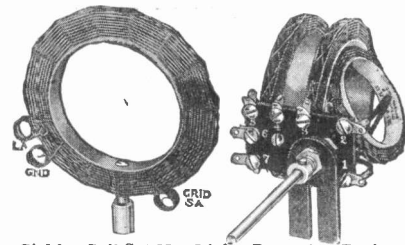
### Jobbers and Distributors

Increase your tube profit by handling the Simplex Super Power Radio Tubes. GUARANTEE—Tubes may be returned within 10 days—for credit—if unsatisfactory.

Type 199  
Bakelite  
Base. Silver-  
ed and Blue.  
Also with  
Adaptor Base.

# Simplex "SUPER POWER"

TITANIA MANUFACTURING COMPANY  
105 West 40th Street, NEW YORK CITY



Sickles Coil Set No. 24 for Browning-Drake Circuit. Price \$7.50.

# SICKLES DIAMOND-WEAVE COILS

(Trade Mark Registered Aug. 4, 1925)

*For Browning-Drake, Roberts,  
Craig, and Hoyt Circuits*

(Coils Patented Aug. 21, 1923)

Superiority of design and workmanship, combined with fair prices and a sound merchandising policy, have made Sickles Diamond Weave Coils leaders in their field.

Manufacturers and builders of quality sets have been coming to Sickles Coils in ever increasing numbers as performance facts became known. The trend toward Sickles equipment is stronger than ever this fall.

"DIAMOND-WEAVE," our registered trade-mark, has acquired profit value which it is paying manufacturers of sets, jobbers and dealers to tie up with. The public is being informed and reminded constantly of Sickles Coils through extensive national advertising. *Send for Descriptive Catalog.*

The F. W. Sickles Co.  
140 Union Street, Springfield, Mass.





## Most-Demonstrated Set of the Season

From radio as it has been known, to Thorola Islodyne is as great a change as could happen, even in radio! Here is so much of an advance that it seems to put final highest development into view. Thorola Islodyne now brings radio safe from being surpassed.

Only the Thorola Islodyne principle of *Isolated Power* makes it all possible. Based on the epochal discovery of Thorola Low-Loss Doughnut Coils, Islodyne action literally isolates the radio impulses—keeps them from interfering with each other—from tangling up—from weakening themselves—*keeps all unwanted stations out.*

Sharpest selectivity is most certain, even in congested areas. Tone is unbelievably pure, since interference is defeated. Superabundant volume is available at extreme distances because power, instead of being wasted, neutralized or damped, is put fully behind the broadcasting of the one chosen station only.

These amazing results, free from mysterious, unmanageable, disappointing old elements of radio reception, are the regular performance of Thorola Islodyne receivers. Excellence is uniform in all Thorola sets, and throughout the range of reception. Radio parties proceed as scheduled. Stations come in as logged. Words and music come in *as broadcast!*

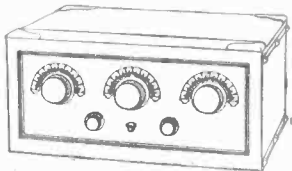
It is the latest proof of Thorola eminence, first established by the matchless tonal accuracy of Thorola Loud Speakers. Now there is a complete receiver, Thorola Islodyne, even further ahead. It is establishing records for hundreds of Thorola dealers, as the most-demonstrated set of the season. The whole Thorola line speeds along with sensational Thorola Islodyne sales.

REICHMANN COMPANY, CHICAGO

Illustrated: 5-tube Thorola Islodyne in Burled Walnut with Circassian top **\$100**

New Model 51, Genuine Mahogany Cabinet . . . . . **\$85**

Console Model . . . . . **\$225**



5-tube Thorola Islodyne in smart Thorocco Finish . . . . . **\$85**



Thorola 4 Speaker **\$25**



Thorola Jr. Speaker **\$15**



Islodyne action is based on Thorola Low-Loss Doughnut Coils. They bring many Thorola advantages to other receivers

Set of 3 Coils . . . **\$12**

Per Coil **\$4**

Thorola Low-Loss Straight Line Frequency Condensers can also be bought separately **\$5.50** and **\$6**

Thorola Golden Audio Reproducing Transformer . . . . . **\$4.50**

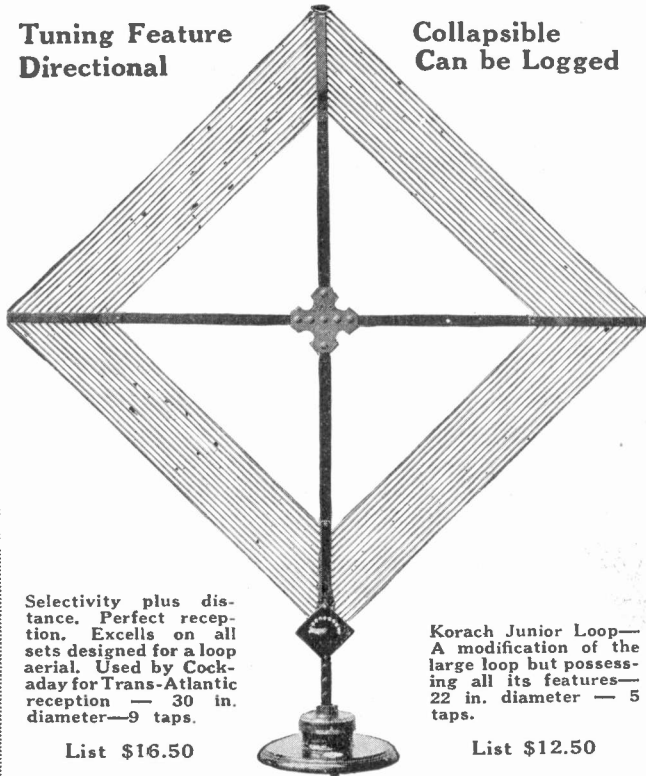
# Thorola

I S L O D Y N E

## The Korach Tuned Loop

**Tuning Feature  
Directional**

**Collapsible  
Can be Logged**



Selectivity plus distance. Perfect reception. Excels on all sets designed for a loop aerial. Used by Cockaday for Trans-Atlantic reception — 30 in. diameter—9 taps.

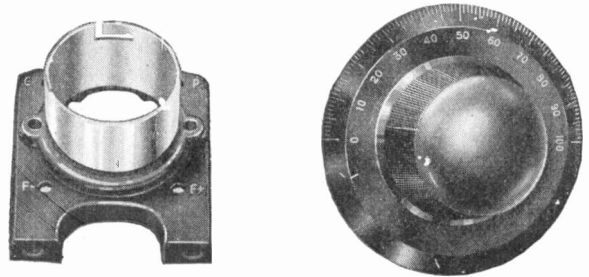
**Korach Junior Loop—**  
A modification of the large loop but possessing all its features—22 in. diameter — 5 taps.

List \$16.50

List \$12.50

**KORACH RADIO CO.**  
20 E. Jackson Boulevard, Chicago

## Molded Bakelite for Radio



Bakelite and Condensite knobs, dials, socket bases, rheostat bases, condenser end plates, and other parts, produced by our large and experienced Molding Organization.

**American Insulator Corp.**  
52 Vanderbilt Avenue, New York City



### -it's in the Tube

You sell radio satisfaction when you sell CeCo Tubes. Whether used as detectors or amplifiers, they deliver maximum results in tone, volume and life.

Our charted tests (results confirmed by laboratories of national reputation), prove CeCo superiority.

Now ready! CeCo Tubes with new type Long PRONG BASES. Also, Power Amplifier Tubes, E (Dry Cell Type), F (Storage Battery), for last stage of Audio Frequency.

Dealers write giving jobbers name.

**C. E. Mfg. Co., Inc.**  
702 Eddy Street,  
Providence, R. I.



The Wonderful Line of

## New and Improved FRESHMAN MASTERPIECE

### Five Tube Tuned Radio Frequency Receiving Sets

Sold direct to selected dealers—one dealer only in towns of less than 25,000 people—specified localities in larger cities.

### No More Cut-Throat Competition No More Losses on Installment Sales

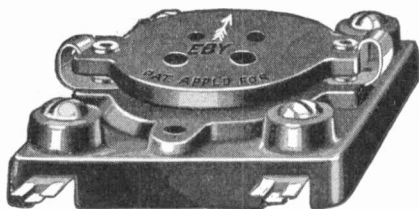
Eight distinctive models from \$39.50 to \$115.

Write to either office for complete information.

**CHAS. FRESHMAN Co., INC.**  
FRESHMAN BUILDING, NEW YORK CITY  
Chicago Office: 2626 W. Washington Blvd.

# Two EBY Profit Makers

## EBY PATENTED SOCKETS



This new socket provides a positive three point wiping contact at all times. An ingenious shock absorbing feature eliminates microphonic noises and acts as a guarantee against tube damage. These sockets will fit all tubes, including the marvelous new UX tubes.

EBY Cushion Sockets are ready for delivery. You can sell them profitably at their

**List Price 60c.**

Whether it's EBY Binding Posts or EBY Sockets, when you are handling a product marked EBY you are getting superior quality that can be merchandised and sold at a fair profit.

The name EBY, and what it stands for, started when radio first became a commercial enterprise. Today EBY products are standard equipment on hundreds of quality radio receivers, radio accessories and precision electrical instruments.

When you offer your customers EBY Binding Posts or Sockets, you are giving them something that has the recommendation and acceptance of the inventive brains of the industry.

**H. H. EBY MFG. COMPANY**  
4710 Stenton Ave., Philadelphia, Pa.

## EBY PATENTED BINDING POSTS



are standard equipment wherever a radio set is built. They have reached this position because they are superior in quality, perfectly packaged, adequately advertised and allow a fair margin of profit for everyone. Your jobber has all of the 25 different markings.

**List Price 15c.**

# Simplify That Aerial Problem

**"REDI-MAST" is finding favor from a world of radio owners**

Seeing is believing. Display the miniature Redi-Mast. Redi-demonstrator supplied free with every order for five Redi-Masts. Get yours at once.

### Description

Mast is of tough weather-proof round timber, 5 ft. high by 1 1/4-in. dia. Bottom ferruled. The tripod guys are of strong steel 1/4-in. thick, with patented adjusting devices. The set includes aerial pulley, mast nee irons, roof socket and anchor pins. Packed in individual cartons. Is weatherproof, windproof and lightning proof.

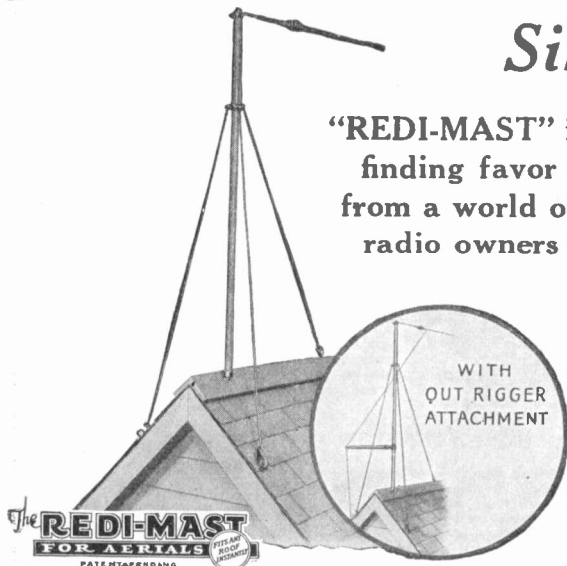
List \$3.50 ea. with outrigger \$4.00 ea.

### Sell them

Order at least a sample and show the REDI-Mast to your customers. Get their expressions of approval. With first order for twenty we give you free a miniature of the REDI-Mast, mounted on small green shingled roof. Makes a great window display. Dealers everywhere who have placed an order are now re-ordering.

### Profit

There is a handsome profit in each REDI-Mast sale. In addition REDI-Mast makes other radio sales and reduces complaints. REDI-Mast can be quickly mounted on any style roof and removes any chance of damage to the roof which is occasioned by installing an old style aerial. Get in on REDI-Mast sales now. Mr. Dealer—be first in your territory. Your jobber can supply you.



PRESSED METAL MFG. CO., WAUKESHA, WIS., U.S.A.

The **REDI-MAST**  
**FOR AERIALS**

PAT. PEND.

**FITS ANY ROOF INSTANTLY**

**Accurate and sturdy!**  
And a price that makes sales big

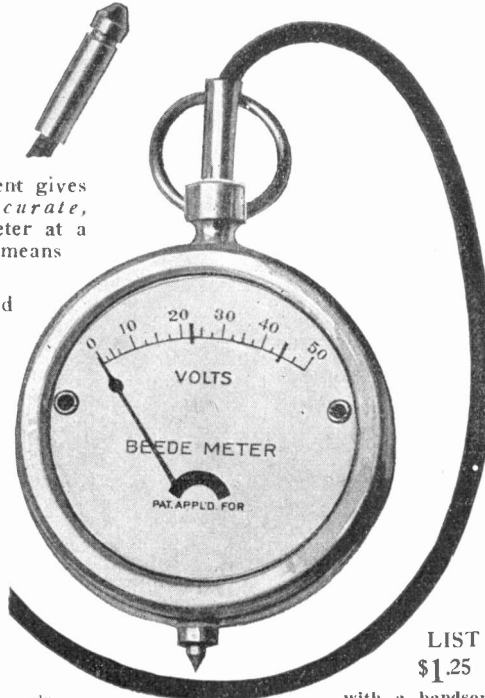
This instrument gives you an *accurate, sturdy* Voltmeter at a price that means *big sales!*

Used to read voltages of 22½ and 45 volt "B" Batteries

Construction makes it practically impossible to get out of order if properly used. Bearings are of brass to prevent rusting. No magnets to deteriorate. Accuracy retained indefinitely.

*In splendid nickel plated brass case. Bored individually.*

Sold through jobbers only. Write for full details.



LIST  
\$1.25

with a handsome profit for you!

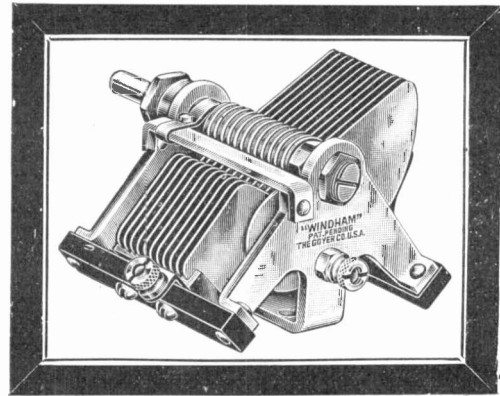
Address replies to

**BEEDE ELEC. INSTRUMENT COMPANY**

Manufacturers for 4 years of electrical instruments of supreme accuracy.

New York Office: 98 Park Place, New York City

(Factory Penacook, N. H.)



*Small  
Sturdy  
Efficient*

**Practical separation of short wave stations**

**THE NEW "WINDHAM"**

One of the few really distinctive condensers! Here is perfect separation of short wave stations; and in addition, small, compact construction, an adjustment brake for balancing the rotor, and independent adjustment of bronze cone bearings.

*Write for Details.  
Desirable Territories Open.*

**THE GOYER COMPANY**  
WILLIMANTIC, CONN.



**Cultivate**

*The virgin field of 80% of the population of this country which owns no Radio, by the sale of the*

**HOWE**

Radio Receiver

**\$1.75**

THE HOWE Radio Receiver is the "Stepping Stone" to the Sale of a Tube Set because its nominal cost induces the man who is "waiting for the perfect set" to "get into the game." The HOWE does more to Create "Radio Fans" than any other means of promotion we can think of.

The HOWE Receiver is most decidedly **Not a Toy**—it brings in loud and clear all stations within a 25-mile radius, and has good selectivity. Its **Low Price** induces the non-user of Radio to "get into the game."

*We shall be glad to hear from Jobbers and Dealers who are not selling the HOWE in large quantities*

**HOWE AUTO PRODUCTS COMPANY**  
120 No. Green Street, Chicago, Ill.

**POLYMET PRODUCTS**

Over 40 well-known Radio Manufacturers use Polymet Products as standard equipment. Follow the leaders—carry Polymet Products and double your sales. Write NOW.

Famous POLYPLUG



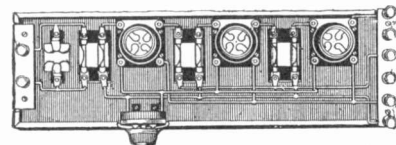
Over 1,000,000 already sold—a genuine Bakelite plug with strength, simplicity and precision—positive pole plainly marked—wires cannot loosen with tugging or jarring—a great seller, only 50c.

E-Z-EXTENSION CONNECTOR

enables Loud Speaker or headphones to be used in any room without moving receiving set—firm, positive contact guaranteed—easily attached without tools—popular, efficient, simple. Price with 25 feet of cord —\$1.50.



POLYMET RESISTANCE COUPLED KITS



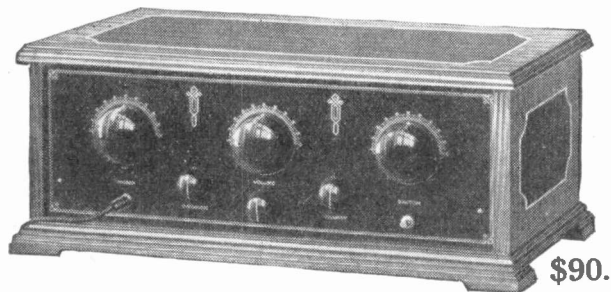
contain everything necessary for resistance coupled amplification—made in 3 sizes: —"A," 3 stages of resistance-coupled amplification, \$4; "B," 4 stages, \$5; "C," 2 stages, \$3.

**Polymet Manufacturing Corp.**

599R Broadway, New York, N. Y.



For immediate delivery!



\$90.

## The Popular "Big Six"

Six tube radio frequency with power amplification.

This big boy brings 'em in—distant stations with plenty of volume in clear natural tones. As easy to sell as it is easy to tune. Straight line frequency; low loss; gold etched panel; two tone walnut cabinet. It's there!

Write for full particulars today.

# AUDIOLA

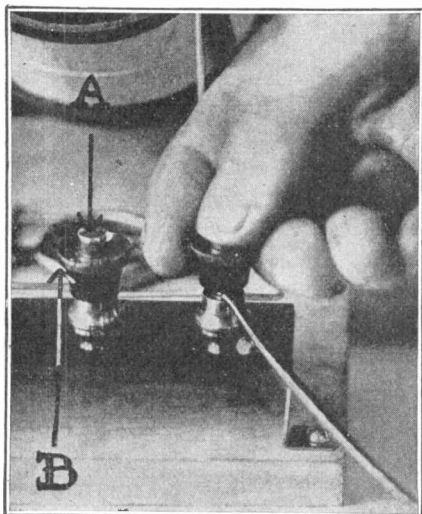
RADIO COMPANY  
430 South Green St., CHICAGO

Spring contact and release. Strong grip always.

Shaft slotted in line with hole—no fishing with wire.

Knurled-base—will not slip on panel.

Genuine bakelite knob built into post. Either plain or engraved.

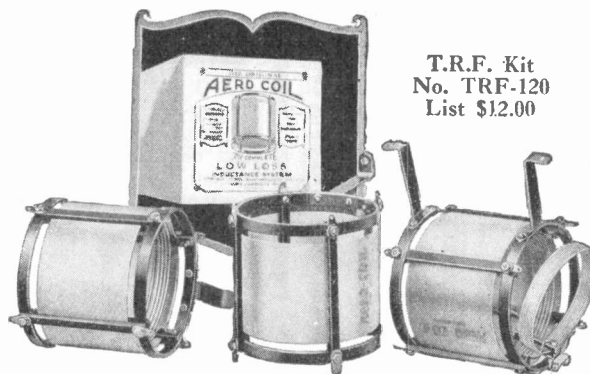


## G-K Spring Cap Binding Post

Used and endorsed by the foremost radio authorities and by many of the outstanding set manufacturers, the G. K. has established its place in the field. Fully protected by patent rights, its exclusive features have won for it a national recognition never before earned by a binding post.

Samples and Information upon request

GANIO-KRAMER COMPANY, Inc.  
238-240 53d St., New York City, N. Y.



T.R.F. Kit  
No. TRF-120  
List \$12.00

## This Season's Big Seller —and the PROFIT is Real!

Everywhere, everybody is buying Aero Coils—and everywhere dealers are making more money on coil sales than ever before! It is easy to see why.

Aero Coils do what no other inductances can do, because that which makes them so sensational in performance is patented.

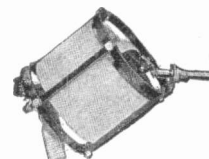
Look at an Aero Coil. You can almost guess its ideal electrical characteristics. At a glance, you know its high frequency resistance and distributed capacity are lower than others. You can see why it is more *selective* and at the same time more *powerful* than others. *And your customers can see the superiority of Aero Coils as quickly as you can!*

Stock Aero Coils—get them out in front—because Aero Coil advertising is causing thousands of fans to look for the Aero Coil dealer.

### AERO COILS for Every Circuit

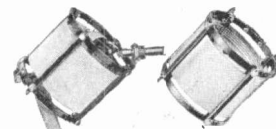
[The Only Air Dielectric Coils Having Variable Primaries in Antennae Circuits]

The Aero Coil 3-Circuit Tuner



Another adaptation of the patented protected Aero-Coil construction and for that reason the most efficient three-circuit tuner ever offered. No. CT-80. Price ..... \$8.00

The Aero Coil Radio Frequency Regenerative Kit



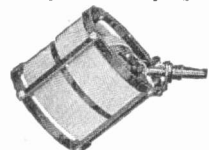
Consists of one tapped AERO COIL 3-Circuit Tuner and one AERO COIL Antennae Coupling Transformer. No. RFR-110. Price ..... \$11.00

The Aero Coil Wave Trap Unit

Also for Crystal Sets

By reason of the characteristics made possible by the Aero Coil construction, this unit makes a very efficient wave trap or crystal set. No. WTT-10. Price, \$4.00.

The Aero Coil Oscillator for Super Heterodynes



The ready means to tremendously increase the efficiency of the oscillator circuit in any Super Heterodyne receiver. No. OS-55. Price, \$5.50.

ANTENNA COUPLER  
Has Variable Primary  
No. AX-45—\$4.50

AERO PRODUCTS, Inc.

217 N. Desplains St., CHICAGO

# AERO COIL

THE PATENTED  
LOW LOSS INDUCTANCE

**Attractively Packed**

Both Ground Clamp and Lead-in are conveniently packed, 50 in each attractive display carton. Standard package 10 cartons. Dealers and jobbers should learn about our attractive proposition for new and bigger radio sales.



**THE NIFTY**  
RADIO PRODUCTS

30 50

**Don't Forget the extra Profits!**

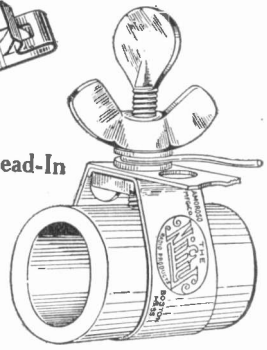
Carry accessories which have distinctive points that will draw the interest of the public, and you can depend upon them to sell themselves!



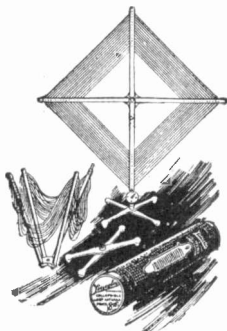
Completely weatherproof—pliable—thoroughly insulated—with high grade rubber. Simple and easy to use.

**The Nifty Ground Clamp**

No tools required—no soldering necessary. This ground clamp is made of tinned copper and brass. Easily adjusted to pipes most commonly used with diameters from 1/4 inch to 1 15/16 inches.



**AMOROSO MANUFACTURING CO.**  
14 Sears Street, Boston, Mass.



**Lincoln**  
RADIO PRODUCTS  
Collapsible Loop Aerials

**Standard of the Radio Industry**  
Popular prices, national advertising, and the recommendation of one user to another, have made Lincoln Loops leaders in their field. Lincoln Four-Point Tapped Loop lists at \$8.00; Lincoln Center Tapped Loop at \$6.50.

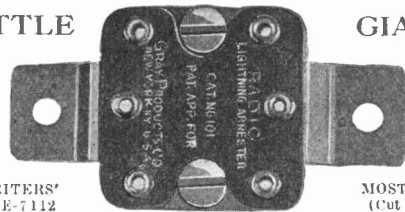
Write for catalog fully describing Lincoln Loops, Low-Loss Condensers and other Lincoln Guaranteed Products.

**LINCOLN RADIO CORPORATION**

224 North Wells St., Chicago, Ill.

**The LITTLE GIANT!**

35c List



35c List

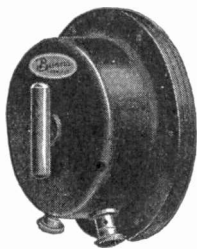
UNDERWRITERS' LIST No. E-7112

MOST COMPACT (Cut Full Size)

**GRAY LIGHTNING ARRESTER**

is offered at this new **LOW PRICE** without sacrifice of the high quality of materials, workmanship or standards. Black bakelite, mica and nicked brass give low loss, durability, reliability and great beauty. Testing three times assures each one to be effective. **WE GUARANTEE** every arrester sold. **DISPLAY CARDS** of 25 make them **SELL THEMSELVES**. Write **NOW** for discounts!

**GRAY PRODUCTS, Inc., Poughkeepsie, N. Y.**



**Burns**  
LOUD SPEAKER  
With Concert Unit

Large size and scientific construction in the Concert Unit gives remarkable tone values which with the special amplifying properties of the Burns horn produce wonderful results.

Burns horn is of a distinctive design with pyralin flare in several handsome finishes.—It pleases the eye as well as the ear.

MANUFACTURERS

**American Electric Company**

State and 64th Sts., CHICAGO, U. S. A.



**Radio Dealers WANTED!**

If you are the type of dealer who hustles after business, who isn't content to wait for trade to come in but who takes sets out to demonstrate, can talk and sell quality merchandise, and knows Radio values, we have a big proposition for you. Are you that dealer?

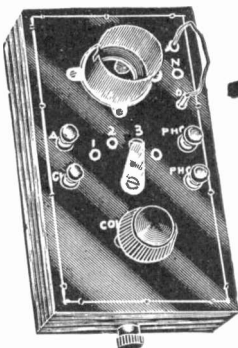
**50% Discount to Dealers**

We manufacture a complete line of high grade receivers and sell to dealers at 50% discount. We are distributors for more than 225 Nationally advertised lines.



**FREE** Write today for amazing offers, new 112-page catalog and regular monthly catalogs quoting below-the-market prices on latest merchandise—all free. Everything in Radio for less.

**AMERICAN RADIO MFG. CO.**  
1412 McGee St., Kansas City, Mo.



**Steinite**

Guaranteed Products  
Boost Your Profits

**\$6 ONE TUBE SET**  
1,500 Mile Range  
Easy to Sell—Stay Sold

5-Tube Set ..... \$60.00  
3-Tube Set ..... \$12.50  
Long Distance Crystal Set ..... \$6.00  
Interference Eliminator ..... \$1.00

**STEINITE DISTANCE CRYSTALS**  
Jobbers and Dealers Write for Wholesale Prices and Discounts

**Steinite Laboratories**

General Sales Office  
504 South State Street, Chicago, Ill.  
Factory, Atchison, Kansas

Size 4x7x2 Attractive—Simple  
Thousands of Satisfied Users

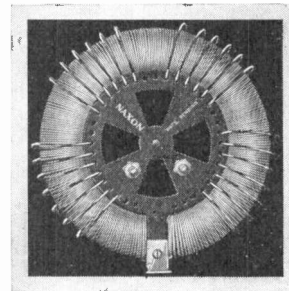


**Toroidal Transformer**

Unusual results are obtained with **NAXON TOROIDAL TRANSFORMERS**

Because of the following scientific principles:

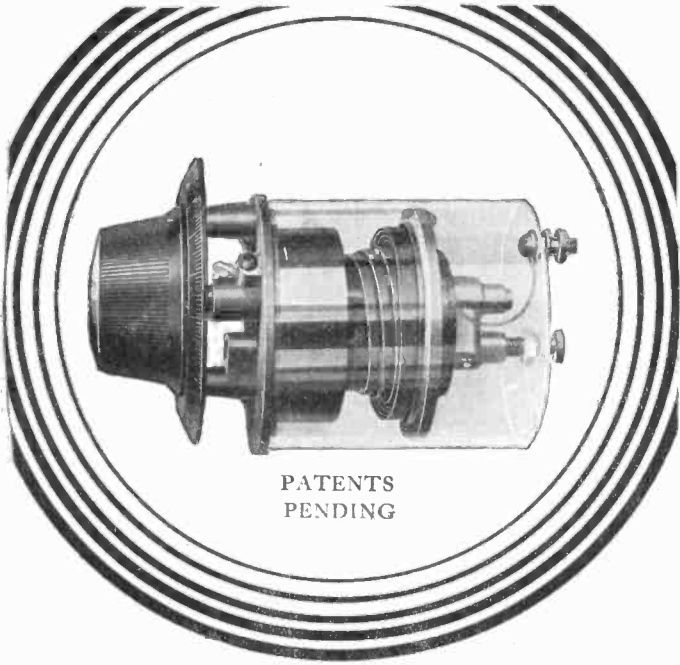
1. Correctly distributed external primary.
2. Maximum magnetic coupling with minimum capacity coupling.
3. Absence of usual secondary eddy-current losses.
4. Sturdy construction without coil housings to absorb energy.
5. Each turn a perfect toroid. No trick style windings with losses at every angular bend.
6. Low resistance spaced windings.
7. Silver-plated primary reduces skin loss.



These advantages coupled with the attention-compelling counter display package are making ready sales for dealers.

Correspondence Invited

**Naxon Electrical Laboratories**  
4526 Cottage Grove Ave.,  
Chicago, Ill.



PATENTS  
PENDING

## The First radical improvement in radio SLF condensers

**AT LAST!** A new era in variable condensers.

Professionals recognize in the new FURNELL Condenser—based on an entirely new and simplified principle—the most practical and efficient condenser ever designed for straight-line Frequency tuning.

It is the only condenser of its type on the market and experts agree that

*"It's the most important step forward that has yet been made in its field."*

The FURNELL replaces open multiple plates with two shielded plates each coiled in the form of an evolute. Assures clean-cut separation of stations. Tone clarity and scientific precision heretofore impossible. Dust-proof, moisture-proof, damage-proof.

Each condenser complete with special 4-in. Bakelite 360 Dial and enclosed in Pyralin Dust-proof case. Exclusive Sales Franchises Available to Reputable Jobbers in Locations Still Open.

*Write for Literature*

Furnell Manufacturing Corp., 24 Scott St., Newark, N. J.

# FURNELL

360° TAPER COIL  
CONDENSERS

THE TUBE WITH A SENSIBLE GUARANTEE



If someone wants to give you something for nothing.....hesitate

If someone wants to sell you something too cheap.....hesitate

If someone wants to sell you a radio tube —with an unlimited guarantee, and without means of identification, hesitate

SUPERTRON is reasonably guaranteed. Each tube serial numbered—identified by a guarantee certificate, for your protection—for your satisfaction.

**Buy Safe—Buy Supertrons**



ALL TYPES

**\$2.00**

Canada \$2.35

**DISTRIBUTORS:**

- |                              |                        |
|------------------------------|------------------------|
| C. E. Niehoff & Co.          | Chicago                |
| Fireside Radio Set Co.       | Chicago                |
| Yahr & Lange                 | Milwaukee              |
| The Roycraft Co.             | Minneapolis            |
| Hippee-States Auto Sup.      | Des Moines             |
| Sorenson Lamp Co.            | Des Moines             |
| Orr Bros.                    | Cedar Rapids           |
| Radio Dealers Sup. Co.       | San Francisco          |
| Franklin Electric Supply Co. | Philadelphia           |
| Keystone Radio Dist. Co.     | Philadelphia           |
| Swanson Electric Co.         | Evansville             |
| M. H. Johnson Electric Co.   | Utica                  |
| Hinsdill Electric Co.        | Troy                   |
| Iroquois Sales Co.           | Buffalo                |
| Hamburg Bros.                | Pittsburgh             |
| Radio Stores, Inc.           | Denver                 |
| Reynolds Radio Co.           | Denver                 |
| Burr-Fowler                  | Syracuse               |
| American Radio & Supply Co.  | Cincinnati             |
| Ed. J. Goetz Co.             | Cincinnati             |
| Elgin Radio Corp.            | Elgin                  |
| Turner Lippe Co.             | Newark, N. J.          |
| Herbrick-Lawrence            | Nashville              |
| Banner Accessories Co.       | St. Louis              |
| Witte Hardware Co.           | St. Louis              |
| J. W. Jenkins Sons Music Co. | Kansas City            |
| E. S. Cowie Electric Co.     | Kansas City            |
| Specialty Service            | Brooklyn               |
| G. J. Seedman                | Brooklyn               |
| Hermann-Brownlow             | Springfield, Mo.       |
| Hillman's Inc.               | Augusta, Me.           |
| Alberta Radio Co.            | Alberta, Canada        |
| Imperial Radio Co.           | Sault Ste. Marie, Can. |
| F. X. Guillevin              | Montreal, Can.         |

**BRANCH OFFICES:**

- |              |                            |
|--------------|----------------------------|
| ATLANTA      | Georgia Savings Bank Bldg. |
| DALLAS       | 2006 1/2 Commerce St.      |
| PHILADELPHIA | 353 No. 4th St.            |
| PITTSBURGH   | Federal Reserve Bldg.      |
| CHICAGO      | 53 West Jackson Blvd.      |
| DETROIT      | 714 Lafayette Bldg.        |
| MINNEAPOLIS  | 229 So. 4th St.            |
| KANSAS CITY  | 1307 Valentine Rd.         |
| DENVER       | 1641 Stout St.             |
| BUFFALO      | 293 South Elmwood St.      |
| BOSTON       | 99 Bedford St.             |
| OMAHA, NEB.  | 625 Securities Bldg.       |
| LOS ANGELES  | 3208 Glendale Blvd.        |
| PORTLAND     | 997 Forest Ave.            |
| TOLEDO       | Summit-Cherry Bldg.        |
| ST. LOUIS    | 425 Chemical Bldg.         |

**SUPERTRON MFG. CO., Inc.**

**HOBOKEN, NEW JERSEY**

Export Department, 220 Broadway, N. Y. City



# SUPERTRON

A SERIAL NUMBER - GUARANTEE



## One Dial Control

Here is the multiple condenser that made possible the New York Journal's sensational

### ONE KNOB SET

After months of tests and experimentation, the builders of the New York Journal One-Knob selected the

### United Scientific Compensated Multiple Condenser

because it was found to be the only real and practical one-dial control unit on the market.

With this remarkable unit, New York fans are getting distance, razor-sharp selectivity, volume, tone—in fact, all-around real radio satisfaction, with only one dial. This multiple is a straight line, low loss product and it can be built into any Tuned Radio Frequency circuit. Each condenser unit is evenly matched and balanced and the entire job is electrically and mechanically perfect.

Capacity, .00035 mfd. per unit.

Write for Full Particulars and Discounts

#### BRANCH SALES OFFICES

Chicago, Ill. 53 W. Jackson Blvd. San Francisco, Cal. Pacific Building	Minneapolis, Minn. 1026 Second Ave., So. Omaha, Nebraska 625 Securities Bldg.
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Boston, Mass. 53 State St.

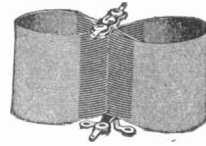
80 Fourth Ave.

New York City



## A Sure Winner With the Trade!

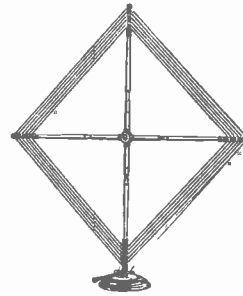
Better Tone, Larger Volume, Compactness—  
When you offer your customers this new type of Tuned Radio Frequency Transformer, you offer them merchandise they are glad to buy, for it has many advantages over ordinary toroidal or doughnut coils. And its performance is remarkable.



**BODINE**  
TWIN-EIGHT  
R.F. TRANSFORMER

The self-contained field of the Twin Eight Coil prevents magnetic interference from other coils, condensers, tubes, etc. Absolutely no distortions. Also, its condensed field and close coupling of primary and secondary windings assures exceptional volume—clarity of tone. And its compactness makes it easy to assemble in the set. Price, each, \$3.00, set of three matched transformers, \$9.00.

### Better Loop Reception



Remarkable selectivity and distance—greater volume—finer tone. The big advantages of the Bodine Folding Loop—advantages made possible by Bodine's basket-weave winding and superior construction throughout. Mahogany finish, wound with green silk wire. Satin silver calibrated dial for logging, concealed hinges; fully collapsible, folding to fit into a box 3½x6x18 in. Price \$8.50 to \$10.00.

**BODINE ELECTRIC COMPANY**  
2242 W. Ohio St., Chicago, Ill.



## Push RAY-O-VACS for Holiday Programs

A new set of French Ray-O-Vacs will make many a set give better reception for the hundreds of special holiday programs.

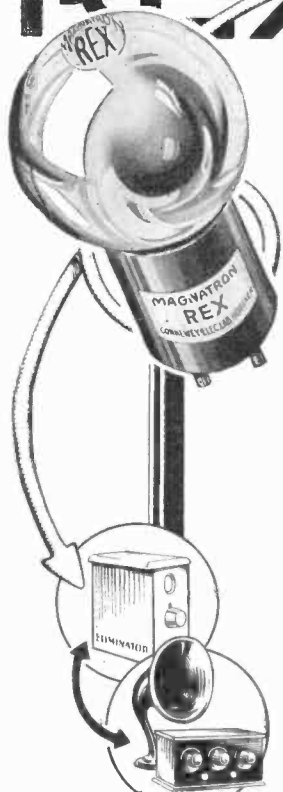
A simple suggestion along this line to every patron will make a surprising increase in your sales of French Ray-O-Vacs. The ten models cover every requirement. Stock the full line and suggest a new set to all your customers. It'll pay you well.

FRENCH BATTERY COMPANY, Madison, Wisconsin  
ATLANTA, DALLAS, KANSAS CITY, CHICAGO, NEW YORK, MINNEAPOLIS

**FRENCH RAY-O-VAC**  
Radio's Best Batteries



# REX



**R**EX answers the eliminator problem. The B battery eliminator equipped with Magnatron Rex tubes works day in and day out—silently and economically.

That's the point to drive home to your customers—the unfailing reliability of the Rex, the fact that this tube in the socket means good-bye to the usual eliminator worries. Your customers will appreciate this point, doubly so if they have previously used other tubes, and their appreciation will show on your cash register.

Magnatron Rex is the product of long research by the oldest exclusive manufacturers of thermionic valves in the country. It has been designed pri-

**for your  
B battery  
eliminator**

marily and only for eliminator work.

Magnatron Rex maintains the high standards set by the other Magnatrons, the DC-201A, the DC-199, the DC-199 (large base), and the DC-120. That is the highest compliment which can be paid—as radio engineers throughout the country have found by tests.

The new list price of all Magnatrons is only \$2.50.

*Write at once to Dept. R for your copy of "Magnatron News," a snappy trade newspaper that is published monthly.*

CONNWEY ELECTRIC LABORATORIES  
Magnatron Building, Hoboken  
New Jersey

Complete factory stock for Pacific Coast carried at Pacific Radio Laboratories, 256 So. Los Angeles St., Los Angeles, Cal.



# MAGNATRONS

## SUPERADIO



Patents Pending

### Dynometer—New Method of Testing Tubes

Direct reading. No curves, no calculations. Measures amplification factor, plate impedance and mutual conductance of ANY tube. **Tube manufacturers:** Improve your product. **Jobbers and Dealers:** Sell tested tubes—any clerk can test 3 tubes per minute. Price \$120.

### Special Amplifier, Model S-2

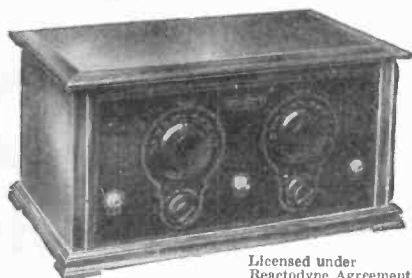
For use with the wonderful Superadio Dynometer eliminating head phones. Price \$30.

### 5-Tube Receiver of Advanced Design

Superior engineering has produced this Receiver in which finest results are uniformly obtained. Only 2 dials to tune. Matchless Tone Quality. Price \$56.

### Just Out—A Perfected "B" Battery Eliminator

[ Write today for further details on Superadio Products  
—the result of scientific design and modern production  
methods. ]



Licensed under Reactodyne Agreement

## DE WITT-LA FRANCE CO., INC.

54 Washburn Avenue, Cambridge, Mass.

BOSTON REPRESENTATIVE:

Martin, Hartley & DeWitt Sales Co., 99 Bedford St.

CHICAGO REPRESENTATIVE:

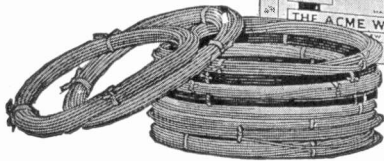
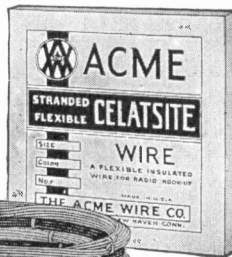
William A. Welty & Co., 36 So. State St.



# ACME WIRE RADIO PRODUCTS

## Flexible Celatsite

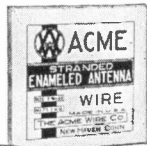
Flexible stranded wire for "point to point" and sub-panel wiring—latest method of wiring sets. 5 colors: black, yellow, green, red and brown, one for each circuit. 25 ft. coils.



## Stranded Enameled Antenna

The best outdoor antenna you can put up. 7 strands of enameled copper wire; maximum surface for reception. Enameling prevents corrosion and consequent weak signals. 100, 150 or 200 ft. coils, boxed.

Loop Antenna Wire—you can make a good loop with Acme wire made of 65 strands of fine copper wire, green silk covered. Flexible; non-stretching, neat.



## The Original Celatsite Wire

Celatsite is a tinned copper bus bar wire with a non-inflammable "spaghetti" insulation in five colors. Supplied in 30 inch lengths.

## Flexible Varnished "Spaghetti"

A perfect insulation tube for all danger points in set wiring. Costs little more and is worth a lot more than the cheaper substitutes offered. Black, yellow, red, green, brown; for wires No. 10 to No. 18. 30 inch lengths.

## Celatsite Battery Cable

For connecting A and B Batteries (or current supply) to radio set. Silk braid covering 5 flexible Celatsite wires—5 feet long—3 different color for each terminal. Prevents messy wiring and "blown" tubes. Adds greatly to the appearance of your set.



Write for Folder C

THE ACME WIRE CO., NEW HAVEN, CONN.

Branches:

New York, 52 Vanderbilt Ave.—Chicago, 427 West Erie St.  
Cleveland, Guardian Bldg.—Boston, 80 Federal Street.



\$60  
LIST

## A compact console for the Number Twenty Compact

Designed to house the Atwater Kent Number Twenty compact receiver, this beautiful console of Huguenot walnut stands 42 inches high. Its other overall dimensions are 26 x 13. It contains a built in wood horn which is recognized as having exceptionally fine reproductive qualities.

At such a popular retail price, this console is a splendid selling proposition. Write for particulars.

THE CRESCENT CHAIR COMPANY  
Plymouth, Wis.

# EVERY KIND of ANTENNA WIRE

SOLID—in copper  
in tinned  
in enameled

STRANDED—plain copper  
tinned  
enameled

7 by 22 and 7 by 24

BRAIDED—in tinned  
in enameled  
in bronzed

FLAT RIBBON—in copper  
in tinned  
in enameled

16 strands and 20 strands

17 strands and 25 strands

We also make silk and cotton covered loop wire, as well as Litz wire. Ten to 65 strands. We make special wires for special purposes and as this is our entire business we are in a position to give you the *best at the lowest price*, and QUICK DELIVERIES. Just tell us what you need.

Dealers everywhere ask your jobber for Literature and Sales-pulling prices

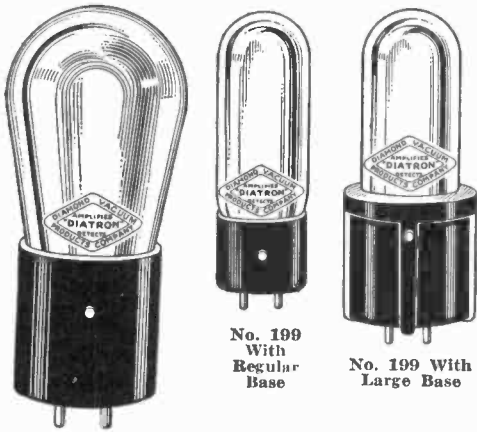
ROSS WIRE COMPANY  
69 Bath Street, PROVIDENCE, R. I.

**Radio  
ANTENNA**

38 Years' Experience  
Makes Every  
"DIATRON" Dependable

In 1887 when Walter Armstrong began his career with the Swan Lamp Co., he started the first work on the basic principles upon which are constructed tubes that give the best radio enjoyment. Present day radio and radio tubes were then unheard of, but the development of the processes of producing glass bulbs, filaments, high vacuums and other essentials for electric lights, x-ray and radio tubes have been his daily experience for 38 years.

His conception of a perfect radio tube and his ability to produce radio tubes that are always dependable is the net result of a lifetime's work with such as Shelby Lamp and Federal Miniature Lamp Division of General Electric. Over two years ago he sold his own large lamp Business to enter the exclusive manufacture of radio tubes.



Nos. 201A and 240\*

DIATRONS No. 201A & 240\*  
Both are detectors or amplifiers.  
Filament Volts . . . . . 5.  
Filament Amperes . . . . . 25  
Plate Voltage, 22 1/2 to 135.

DIATRON No. 199.  
With regular or large base.  
Filament Volts . . . . . 3.  
Filament Amperes . . . . . 06  
Plate Voltage, 22 1/2 to 90.

\*DIATRON No. 240 is the only tube manufactured for the Radio Frequency side of Neutrodyne and Tuned Radio Frequency Sets Made before January 1, 1925.  
List price for all types, \$2.50

**GUARANTEE**

"Any DIATRON that will not bring in signals will be replaced, no charge, whether the fault is due to a broken or burned out filament or other causes if returned to us at any time within 75 days of purchase by a jobber or 45 days of purchase by a dealer."

YOURS—a valuable booklet, "WORTH WHILE FACTS ABOUT RADIO TUBES". Ask for it, on your letter-head.

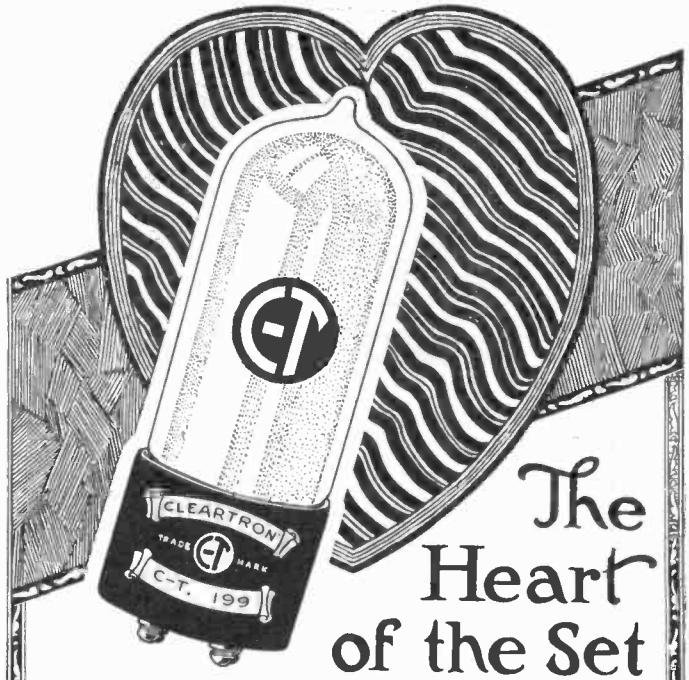
**Diatron Special Feature**

This illustrates the grid and filament with the plate removed. The filament is so supported that filament and grid must move together and cannot short circuit if the tube is jarred to an extent that would change the position of either element. Every turn of the grid is electrically welded. Patents applied for.



**DIAMOND  
VACUUM PRODUCTS CO.**

4053 Diversy Avenue  
Chicago, Illinois



The  
Heart  
of the Set

**CLEARTRON**

GUARANTEED  RADIO TUBES

There is no part more important than the tube. It is the heart of the set. That's why it is poor business for any dealer to handle inferior tubes.

Because Cleartrons are the only radio tubes sold under an iron-clad guarantee of perfect service or instant replacement, live dealers are stocking Cleartrons exclusively.



Five Color Window and Counter Display Supplied Free to Cleartron Dealers

Write for discounts and address of nearest distributor.

ALL STANDARD TYPES  
List \$2.50

- C-T 201 A
- C-T 199 Standard Base
- C-T 199 Small Base
- C-T 400 Rectron Tube for "B" Battery Eliminators.

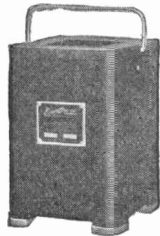
Hi-Constron model C-T 101 A \$3.00. The original Hi-Mu Tube for Resistance-Coupled Amplifiers.

CTX 112 Power Tube \$6.50

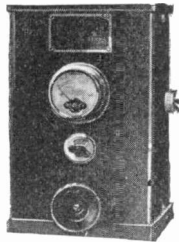
All equipped with Genuine Bakelite Bases.

**CLEARTRON VACUUM TUBE COMPANY**  
28 West 44th Street, New York City  
FACTORIES: West New York, N. J. Birmingham, England

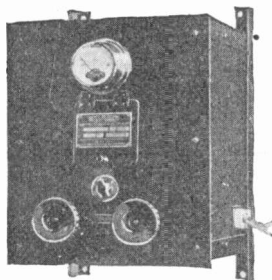
**FOR BETTER RECEPTION**



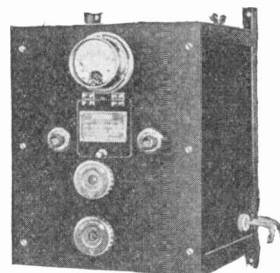
Single Battery Charger



Five Battery Charger



Fifteen Battery Charger



"Twin Six" 12 Hour Charger

## BATTERY CHARGING

A  
*Profitable*  
BUSINESS!

IN the first 9 months an investment of \$104 for a HEYER Battery Charger paid the Public Radio Store of New York City \$975 net profit. This case is typical of many others where HEYER Chargers are installed. Battery charging brings customers back again presenting opportunities for additional sales of Batteries and Other Equipment as well as Profits in Rentals.

### DEALERS!

Let us explain how these *efficient* and *superior* machines will make "Money for you."

### JOBBERS!

Here is a complete line of popular Battery Chargers, from the Single Battery type for Home and individual use, to the larger Service Station types such as the new "TWIN SIX" 12-hour Charger. Write for our attractive sales proposition.

Send for Catalog!

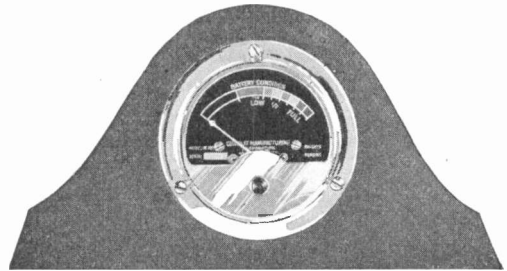
SALES DEPARTMENT

**CONSOLIDATED EQUIPMENT CORPORATION**

160 GRAND STREET, NEW YORK CITY

Gentlemen:—Please send complete details and prices on Heyer Battery Chargers.  
Name .....  
Address .....

It makes  
an excellent gift—



## More efficient than voltmeter and hydrometer combined

Merely press the button and it tells the exact condition of the "A" battery—whether low, half charged or full.

It keeps the battery at its most efficient point, removing all uncertainty and guesswork, eliminating the messy hydrometer. It is very easily connected with the receiver.

You can sell it to set owners everywhere for the enjoyment it adds to radio reception.

Its wooden mounting is very attractive.


Dealers—write for literature and special introductory offer, giving your distributor's name.

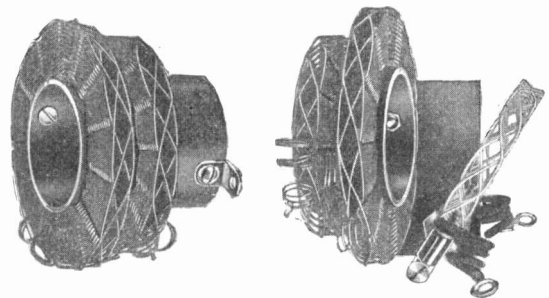
CELLOKAY MFG. CORP.

Sales Office—1705 Flatiron Bldg., New York

**CELL-O-METER**

## Coils for Browning-Drake or Roberts

Also 3 Circuit and Short Wave Tuners  
**HEXCELL**  **COILS**



	List Price
3 circuit HEXCELL tuner 200-575 meters.....	\$3.00
Complete set of HEXCELL coils for Roberts circuit .....	6.00
Complete set of HEXCELL coils for Browning-Drake circuit with new improvements.....	6.00
Short wave HEXCELL extra low loss 3 circuit tuner 40-115 meters .....	3.50

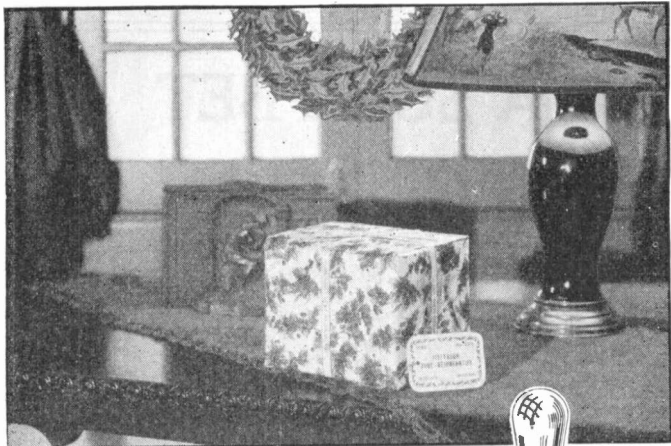
We have put real electrical and mechanical engineering into our inductances. Particular attention is given to efficient operation at the lower end of the Broadcast Wave Band.

Our coils are finished in beautiful silk shades, each coil having a different color. Highly polished bakelite and nickel mounting parts used. Merchandise packed in attractive boxes.

A live line for live dealers  
Liberal jobber and dealer discounts  
Write for information

**Eastern Electric & Manufacturing Company**  
140 Chestnut St., Providence, R. I.  
Coils patented Aug. 21, 1923





## New Profits for You This Christmas



Patent Pending

Last Christmas the Jefferson Radio Tube Rejuvenator was unheard of. This Christmas it will bring to the radio dealer many dollars that would formerly be spent for other gifts in other stores.

The Jefferson Tube Rejuvenator is as essential to satisfactory radio reception as a charger for storage batteries. Every radio owner wants one, and its price, \$7.50 (\$10 in Canada), represents the popular average expenditure for Christmas gifts.

The December 12th issue of the Saturday Evening Post will carry a large advertisement featuring the Jefferson Tube Rejuvenator as the Ideal Christmas Gift. Packed in an attractive holly container, with Christmas tag attached, it has a strong Christmas appeal. You will have calls for it. Order from your Jobber today.

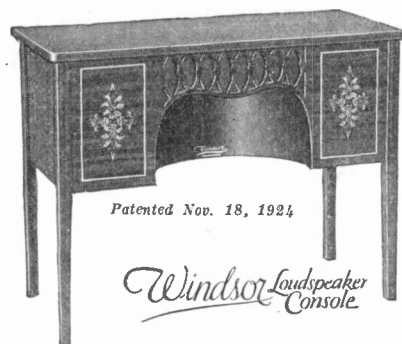
**JEFFERSON ELECTRIC MFG. CO.**  
501 SO. GREEN ST., CHICAGO, ILL.



Makers also of Jefferson Radio Tube Testers; Jefferson Radio, Bell Ringing and Toy Transformers; Jefferson Spark Coils for Automobile, Stationary and Marine Engines; Jefferson Oil Burner Ignition Transformers.

# JEFFERSON TUBE REJUVENATOR

Keeps Radio Tubes Like New



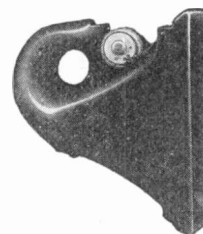
Patented Nov. 18, 1924

*Windsor Loudspeaker Console*

## For EVERY Radio Set

A stunning piece of furniture that restores order in the room where you have your Radio! No more cluttered table-tops, nor litter of equipment under-foot.

No unsightly horn in evidence, either! This console has its own loudspeaker, inbuilt. It's out of sight, but with very apparent tonal superiorities. For it has the highest-developed type of unit. With horn built of special non-vibrating, extra-hard, ceramic material. Produces clear non-vibrant tone.



Non-Vibrant Ceramic Horn

The clearest tone producer on the market. Made of special composition which defeats vibration.

There's ample room for everything; space for *largest* A and B wet batteries—or battery eliminator—required for any home set; and for a big charging outfit, too. Finished in mahogany, or walnut color. Dainty design of parqueterie on two front panels. Top, 38 in. x 18 in. Substantially built; the product of a 40-year-old furniture maker.

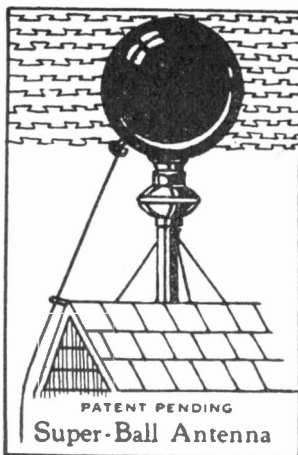
The price, forty dollars, is for the *complete* console and includes the loudspeaker horn and unit. Thousands of dealers are showing this artistic addition to home radio equipment.

Rear View—Set Hooked Up



Price, \$40  
West of Rocky Mts.  
\$42.50

**WINDSOR FURNITURE CO.**  
1436 Carroll Ave., Chicago, Ill.



## THE ANTENNA

That has made good on every claim we made for it.

Backed by National advertising and endorsed by Radio Experts as the

## Superior Antenna

From a World of radio owners it is on Top in Popularity.

From a production of 100 to 1000 a day in one month.

Jobbers and Dealers, you should be ready to supply the demand on this Sales Pulling winning line of merchandise.

List \$10.00

**SUPER-BALL ANTENNA CO.**  
GREEN BAY, WIS.



## Cannon-Ball Headsets are Messengers of Profit

For long distance reception, folks naturally choose a headset.

Now that folks may hear some of the world's greatest artists every week, they want to enjoy the famous voices, clear and natural and the artists music, pure in tone and quality.

Sell the idea of tuning down their set to eliminate noises and they'll appreciate the fidelity and naturalness with which music and speech is reproduced thru a good headset.

With an extremely sensitive, light weight, comfortable headset such as the Cannon-Ball or Cannon-Ball Junior, they'll get much more out of one high-grade concert than the price of the Phones.

Are you selling the CAMCO line—backed by the GUARANTEE of a well established, reliable, manufacturer?

LIST PRICES: Cannon-Ball \$3.50; Cannon-Ball Junior \$2.75; Grand \$4.75; Cannon-Ball Loud Speaker \$12.50. See your jobber.

**CANNON & MILLER CO., Inc.**  
Springwater, N. Y.

## A SURE BET

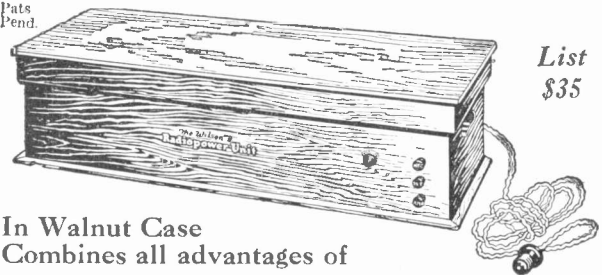
The "Hawley" 22½ volt un-acid everlasting rechargeable "B" storage battery \$2.95 list. Includes chemicals. 90 volts \$10 list. Other and larger sizes. Sold for over 3 years on a non-red-tape 30-day trial refund with a further guarantee of 2 years. Complete ready to run "B" battery charger \$2.75 list. Ask about the "Hawley" franchise giving exclusive and protected territory. The "Hawley" is backed by an aggressive advertising campaign in over 12 national radio publications. The "Hawley" is getting the business—you can by getting in on the ground floor. Free literature, same day service and friendly relations will make it worth your while.

**B. H. SMITH**

39 Washington Ave., Danbury, Conn.

## The Wilson "B" Radiopower Unit

Pats. Pend.



List \$35

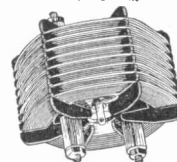
### In Walnut Case Combines all advantages of

dry batteries, storage batteries and devices for taking power direct from house current. Dependable, convenient and economical. Will not set up the slightest hum.

This unit consists of a dry storage battery, together with trickle charger, built into a handsomely finished walnut case. No acid to spill. No moving parts to get out of order. Nothing to adjust. Requires no attention from operator except to switch it on and off. Ideal from the dealer's standpoint. Will not deteriorate. Requires no service. Every set owner a prospect regardless of the type of unit he is now using.

Write for particulars.

Pats. Pend.



## The Andrews Paddlewheel Coil

Used in such high grade receivers as the DERESNADYNE and BUCKINGHAM. Made in three types adapting it to many different receivers and circuits. List, \$3.00.

Has highest ratio of inductance to resistance with minimum distributed capacity. Losses are negligible. No dope used on windings. Practically moisture proof. Improves tone quality. Gives maximum volume without distortion. We can furnish constructional blueprints. Our Technical Dept. will answer inquiries.

We also manufacture the Duo-Spiral Folding Loop.  
Write for complete information and discounts.

## Radio Units Inc.

1317 First Avenue

Maywood, Illinois

Perkins Electric, Ltd., Montreal, Toronto, Winnipeg.

# Effarsee

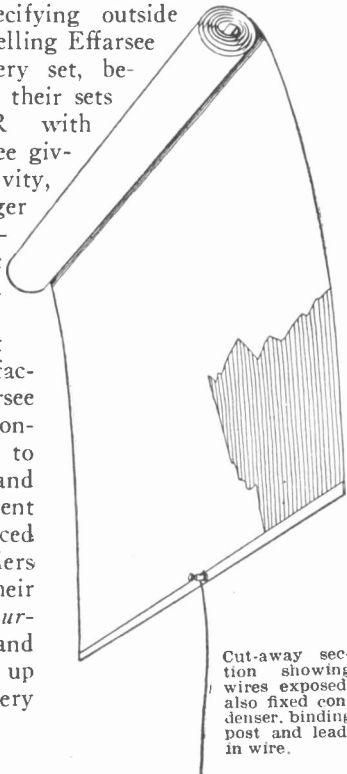
ANTENNAE  
REG. U. S. TRADE MARK  
PATENT PENDING

## DEALERS

*who are in business to stay*

are no longer specifying outside aeri- als. They are selling Effarsee Antennae with every set, be- cause they KNOW their sets operate BETTER with them due to Effarsee giv- ing greater selectivity, more volume, longer range, sharper tun- ing and less static to each set they sell.

The very fact that prominent Manufac- turers used Effarsee exclusively to demon- strate their sets to dealers, jobbers and the public at different Radio Shows convinced hundreds of dealers without a doubt. Their orders have been *pour- ing* in as a result, and Effarsee has lived up to our claims in every case.



Cut-away sec- tion showing wires exposed, also fixed con- denser, binding post and lead- in wire.

### Reduce Your Prices without Cutting Profits

No—this is not impossible if you sell Effarsee with every set. Installation can be made in a few min- utes, saving \$8.00 to \$10.00. And that's not all—YOUR service problems are over as most "radio trouble" is due to outside aeri- als. Once installed, Effarsee is foolproof and GUARANTEED. Thousands of users will attest to all of our claims.

**IXL (large) \$4.00**  
**BXL (small) \$2.50**

*Write for discounts and literature or see  
your jobber.*

**FISHWICK RADIO COMPANY**  
135 West Central Parkway  
CINCINNATI, OHIO

## —in demonstrating sets DURHAM Variable makes sales easier

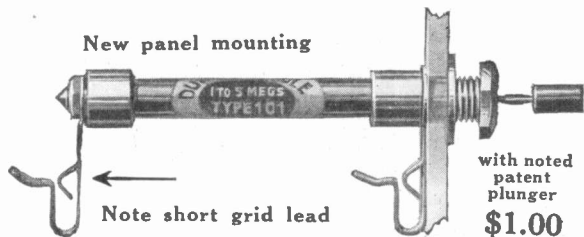
Slip this little variable leak into the clips of your featured receiver. Adjust the plunger. Then custom- ers will say "We like this one best."

Standard style



Fits all clips, 75c.

The old favorite in greater de- mand than ever. Fits all standard bases and grid condenser clips.



Brings noted DURHAM accu- racy under one-finger control out to the panel front. Single hole mount. A fast seller.

### Both types in these sizes

- No. 100—1,000 to 100,000 ohms.
- No. 101—0.1 to 5 megohms.
- No. 201A—2 to 10 megohms.
- DURHAM Bases, 30 cents and 45 cents.

### Nationally Advertised Watch this list:

- |                 |                   |
|-----------------|-------------------|
| Popular Radio   | Radio Digest      |
| Radio           | Radio in the Home |
| Radio Broadcast | Q S T             |

### Order thru jobber

Be sure to get a full line of all three sizes in both types.

**DURHAM & CO., Inc.**  
1936 Market St., Philadelphia



**No Back Panel Fussing**

Genuine Bakelite Throughout

**DeJUR RHEOSTATS**  
ONE HOLE MOUNT

The one hole mount, one of the many exclusive features of the DeJur, makes it the easiest of all rheostats to mount, and when mounted it sets fixed and rigid. No screws to get loose, no back panel fussing. Compare the DeJur. You will readily recognize its difference and superiority.

Manufacturers — Write for sample and prices

**DeJUR PRODUCTS CO.**  
LAFAYETTE & BROOME STS.  
NEW YORK

Patents Applied For.

*Do you know about the*  
**"SUPERUNIT" Family?**

They are all tested assemblies which make possible the construction of various sets with no worry about the location of the parts.

They are all equipped with cushion sockets and nickel brackets.

They solve the problem for the folks who like to build their own set.

**4-Tube "Superunit"**  
Type A for standard base, Type B for UV199, Type C for UX tubes. Add two stages of audio for 6 tube set. . . . .  
**\$37.50**



**"Superunit-6"**  
The same as the standard type, but with two stages of Thordarson audio mounted and connected. Size 5x15 inches . . . . .  
**\$50.00**



**"Superunit," Jr.**  
4 tubes with low loss plug in coils, R. F., detector and two stages of Thordarson audio. . . . .  
**\$37.50**

Any "SUPERUNIT" can be used with the S-C Capacity Element which we manufacture.

NOTE: The S-C Capacity Element is specified by Mr. Arthur H. Lynch for the Radio Broadcast Aristocrat Receiver.

BULLETINS ON REQUEST

**HANSCOM RADIO DEVICES**  
Woonsocket, R. I., U. S. A.

**Jones**  
**MULTI-PLUG**  
THE STANDARD GET CONNECTOR



**START RIGHT!**

Handle Radio Sets Multi-Plug Equipped or Equip Those You Have with Our Type BP Adaptable To Any Set

You can then demonstrate one or a number of sets from one set of batteries as all Multi-Plugs are interchangeable. A plug and socket is as essential as a cord and socket on an electric iron, and your customers will want one with the set he buys or for the set he now has. It will pay to stock Jones Multi-Plugs which are nationally advertised and non-competitive. Write today for descriptive folder and prices.

**HOWARD B. JONES, CHICAGO, ILL.**  
618 S. Canal St.

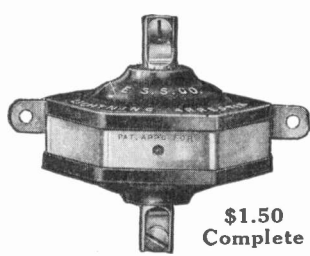
*Write for information*

The new and improved line of  
**ELDREDGE**

Pocket and Panel  
Ammeters, Voltmeters, Voltammeters

**ELDREDGE ELECTRICAL CORP'N**  
Springfield, Mass.  
Established 1892  
Dealers—Address Dept. 4 for information

**KEYSTONE**  
**ARRESTERS**



Whenever you sell a set or antenna sell a Keystone Lightning Arrester — at a generous margin of profit.

Listed as Standard by the Underwriters' Laboratories.

Ask Your Jobber for Particulars.

**\$1.50 Complete**

**Electric Service Supplies Company**  
17th and Cambria Sts., Philadelphia, Pa.





QUIET  
FAST  
SAFE

\$22.00

Complete with  
2 bulbs, \$14.00  
without bulbs  
east of Rockies.

### Points to Remember When Stocking Battery Chargers

(1) Select an up-to-date charger that is guaranteed by a reliable company. (2) That will charge quietly (3) at a fast rate (4) with no danger of overcharging or discharging the battery. (5) That is safe (6) dependable (7) easy to use (8) economical (9) and attractive in appearance.

The new TWIN BULB HANDY CHARGER is the latest improvement in battery chargers, made and guaranteed by the largest exclusive manufacturers of battery chargers—the Interstate Electric Company. It charges without the slightest noise and cannot overcharge or discharge the battery. A very economical and fast rate of charging is assured by the advanced “push-pull” principle that uses *both* halves of the AC wave at a speed of from 4 to 5 amperes. Adapted to “A” batteries of from 2 to 12 volts. “B” batteries from 24 to 120 volts in series. No extra attachments necessary. It charges them all, is easy to use and is practically trouble proof.

Order several from your jobber and see how quick they move.

Batteries are the only true source of noiseless current for radio reception.

The New TWIN BULB  
**HANDY CHARGER**

INTERSTATE ELECTRIC CO.

4349 DUNCAN AVE., ST. LOUIS, U. S. A.

**MURDOCK 204**  
*appeals to women*

Because  
it gives  
forth  
enchancing  
entertainment  
so easily  
so smoothly  
so clearly

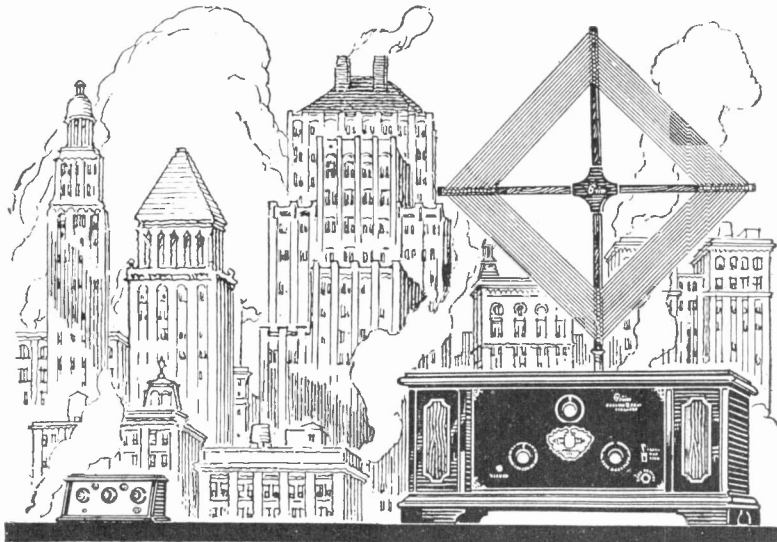
—and because there’s no machinery to fuss with—no exposed wires to puzzle over. (Women don’t want to understand radio).

No antenna or ground wires to clutter up the living room. A concealed loop in the cabinet takes care of that. The exquisite beauty of the MURDOCK 204 cabinet delights a woman’s artistic sense.

A dealer’s best prospects today are in the home. It is the woman who will decide *which* radio receiver will be purchased. The new Murdock 204 points the way to increased sales because it is the receiver that most strongly appeals to women. Once you introduce the Murdock 204 into your neighborhood, the demand takes care of itself. One dealer calls it “the self-selling receiver.” Put a letter in the mail tonight, asking for the Murdock proposition. Address Dept. 121.

WM. J. MURDOCK CO., CHELSEA, MASS.

**MURDOCK RADIO**  
Standard since 1904



*Priesse*  
TRADE MARK  
STRAIGHT EIGHT

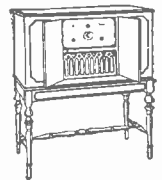
## Over 100 times the energy amplification of the average 5-tube set

The quickest, easiest and most satisfactory method to sell the Priesse Straight Eight is a side by side demonstration with *any other* set. The manner in which the "Straight Eight" with its 8 tubes out-performs all other sets *on any test*, particularly its ability to reach out and bring in with full loud speaker volume, stations that are far beyond even the head-

phone range of most sets—establishes a new standard for comparison.

Our liberal dealer discount plus full protective measures will interest progressive dealers. Write or wire us to arrange earliest possible demonstration by our distributor in your territory.

**PRIESS RADIO CORPORATION**  
697 BROADWAY  NEW YORK, N.Y.



Console model with enclosed panel operated loop and built in loudspeaker and battery compartments

\$285

### Radio Is Now Working On a Full Stomach

*and NOW is the time  
to CASH IN ON SERVICE*

With the radio season at its height, the public is clamoring for more service. New tubes that are purchased must first be tested. Tubes are taken to the dealer for testing. More sets and accessories bought at the Christmas season mean servicing on the dealer's part.

Have you installed your Sterling "Professional" Tube Tester? It takes the uncertainty out of tube selling, eliminates unnecessary losses, checks tubes when received and when sold over the counter, tests batteries, helps locate troubles in the set, truly a necessity for every enterprising dealer.



*Sterling*  
Professional  
TUBE TESTER

PRICE TO DEALERS \$30.00

The Sterling Manufacturing Company  
Cleveland, Ohio

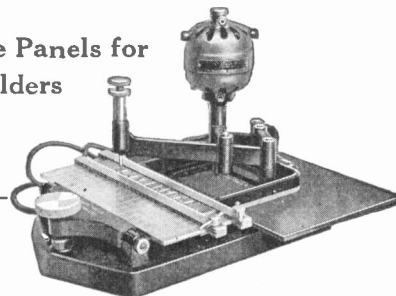
### Attention Dealers! Send for our 200-page Catalog



The finest and largest exclusive  
Radio Catalog in the United States

**SCHNEITTER RADIO COMPANY**  
Dept. I ST. JOSEPH, MISSOURI

### Engrave Panels for Set Builders



*You can earn several dollars an hour engraving panels  
for amateurs building their own sets.*

A low price engraving equipment for engraving the words used on radio panels, trade-marks, and border and corner designs. Will engrave on Hard Rubber, Bakelite, Aluminum and other soft metals. PRICE OF COMPLETE EQUIPMENT \$135.00.

Branch Tool Co., Dept. P, Forestdale, R. I.

*Morse Eureka*

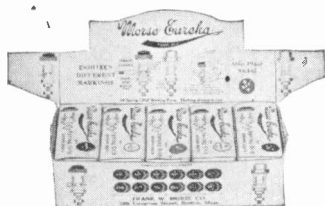
TRADE MARK

**Spring Grip**

*The King of all Binding Posts*

**SPRING GRIP  
QUICKER AND  
MORE POSITIVE CONNECTIONS  
MARKINGS ALWAYS IN LINE  
EASIEST TO CONNECT**

Morse-Eureka binding posts are probably the only ones to have been accorded such national recognition.



Counter Display Container

The reason?

From the very outset, we have gone into the making of binding posts with the same aims, the same carefully worked out policies, as though on a device many times more intricate.

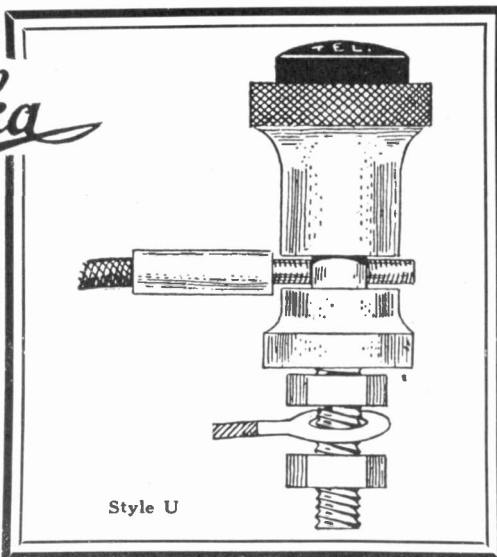
We have concentrated time and money without stint upon development work in their design and production.

"The King of Binding Posts" is superior.

**JOBBERS AND DEALERS!**

We have a proposition which makes it to your advantage to handle the nationally recognized binding posts. Write for particulars! (Set manufacturers write for information!)

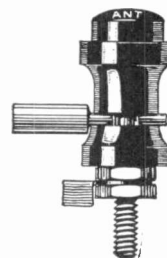
**FRANK W. MORSE CO., 289 Congress Street, Boston, Mass.**



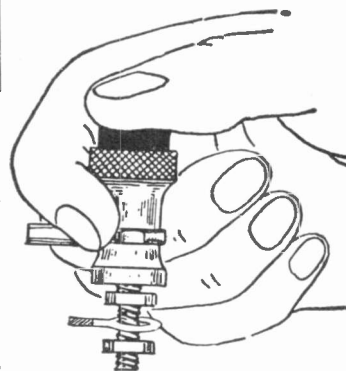
Style U

Made in 3 styles

1. All nickel.
2. Nickel with insulated marked knob.
3. All insulated with marked knob.



Style W



You don't pull or you don't push — just squeeze two parts together.



LIST PRICE \$3.00

## "New-Tone" Headset

The NEW-TONE Headset is guaranteed to give satisfaction to the user.

Reproductive quality has been the first consideration in the manufacture of the New-Tone. All high grade parts are used, it is light in weight, and has an attractive appearance.

**All sensitive parts,  
fibre insulated**

**Weight, 8½ oz.**

**Chrome steel magnets**

**Aluminum cups highly  
polished**

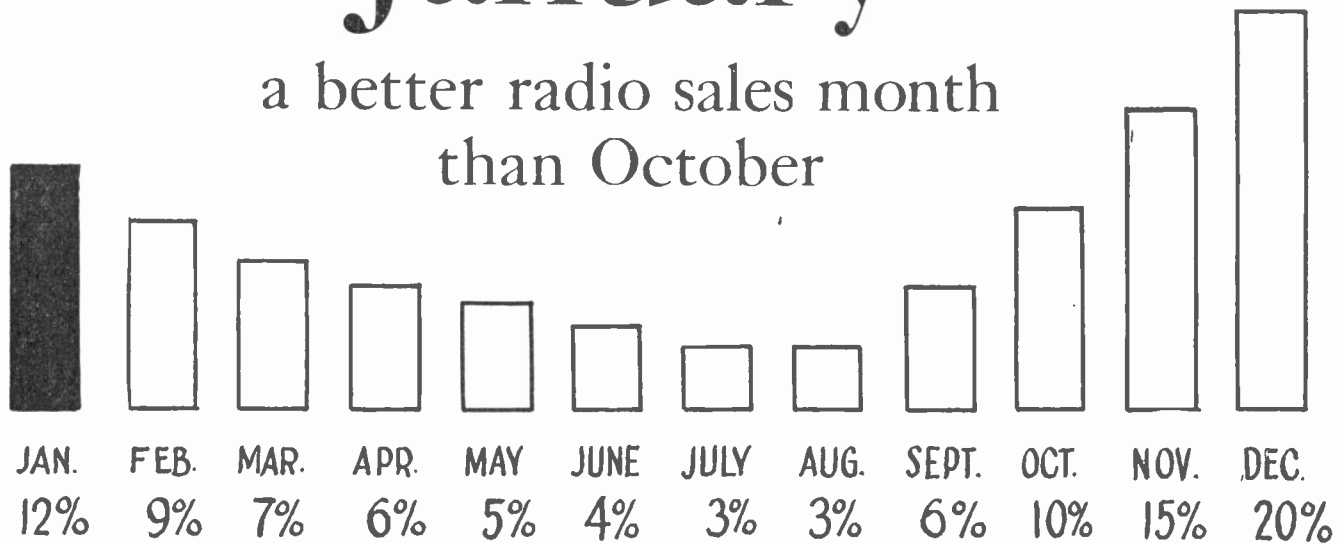
*Order from Your Jobber*

*Manufactured by Newton Pressed Steel & Mfg. Co., 13 Hawthorne St., Newton, Mass.*

**Also Manufacturers of the Superette Headset which Lists at \$1.95**

# January

a better radio sales month  
than October



Look at this chart—it shows how sales by radio retailers are split up among the twelve months of the year. People once thought that after Christmas radio sales dropped off like a plummet. Actually, however, sales by radio retailers hold up remarkably well after the holidays.

*January is a better month than October.* Christmas gift money has to be spent and clear, cold weather brings superlative radio reception. February and March show greater sales than September. Even April, the beginning of Spring, holds its own with September.

If you sell to radio jobbers and dealers you will want to employ even greater sales effort in January, 1926, than you did last October.

You will want to reach your whole market, of course—every reputable radio retailer and wholesaler. You will want to reach them through the medium in which they show the greatest interest, too.

To achieve these two ends you will want to use the January, 1926, issue of "Radio Retailing."

—because "Radio Retailing" reaches every known radio dealer, jobber and manufacturer and so has the largest total circulation of any radio trade publication—that means coverage—and

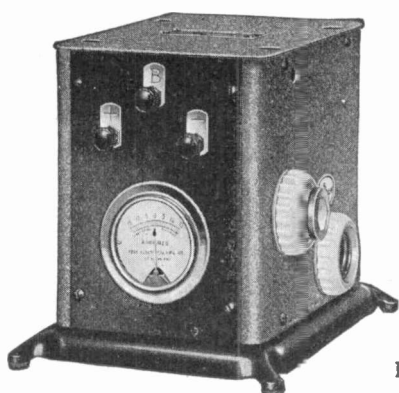
—because "Radio Retailing" also has the largest paid circulation of any radio trade publication—over 12,000 paid subscribers—and that means reader interest.

The radio manufacturer who gets home his sales message to the radio industry in the January issue of "Radio Retailing" and continues his publicity in each issue throughout the year is making the best possible investment—such is the experience of successful companies like Allen-Bradley, Apco, Benjamin Electric, Brandes, and so on down the alphabet.

## Radio Retailing

The Business Magazine of the Radio Industry  
McGRAW-HILL COMPANY, INC.  
Tenth Avenue at 36th Street, New York, N. Y.





### MASTER FORE

Charges both A and B Batteries

Every Radio owner wants the best reception possible. Weak A or B batteries are annoying to say the least. Sell him a Master Fore Battery Charger and win the good will of another customer.

Fill in, clip and mail the coupon now—  
**TODAY**

Manufactured by  
**Fore Electrical Mfg. Co.**  
5255 N. Market Street,  
St. Louis, Mo.

Sales Department  
**The Zinke Company**  
1323 S. Michigan Ave.,  
Chicago, Ill.

### RADIOGRAM

Fore Electrical Mfg. Co., St. Louis, Mo., Manufacturers. The Zinke Company, Chicago, Ill., Sales Department.

Send me free of charge complete information on how to make more money with the Master Fore.

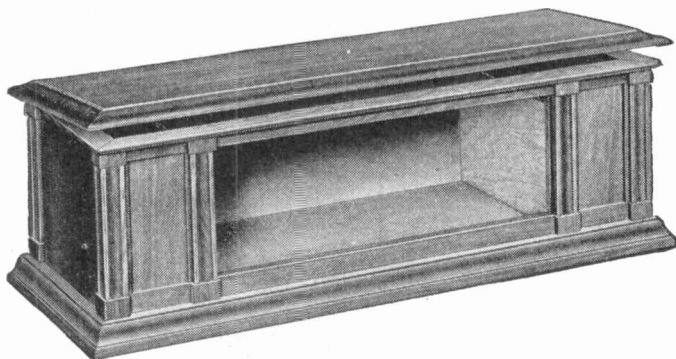
Name .....

Address .....

City .....

State .....

## B B Super-Master Cabinet



**POSITIVELY** the prettiest line of cabinets on the market. Get a sample, inspect it yourself and then you will admit that our cabinets are the cabinets. We make nine styles of cabinets. Capacity 1,000 cabinets daily.

**EHLERT CABINET COMPANY**  
Waukesha, Wisconsin

'Phone 46W

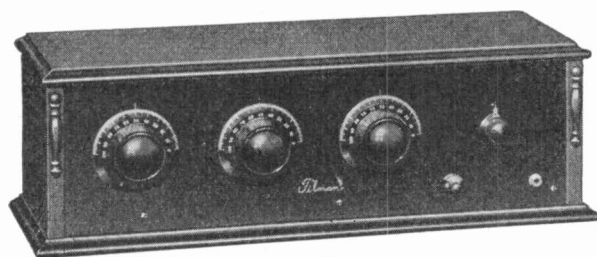


### UDELL Radio Cabinets

A good example of our stock line of Radio Cabinets is illustrated at left. UDELL covers a complete range in design, finish and price. Write for complete catalog R-83 and dealer's discounts.

We also build special Radio Cabinets under contract. Write us your requirements.

**THE UDELL WORKS, INC.**  
28th Street at Barnes Ave.,  
INDIANAPOLIS, IND.



Model T-18—\$49.50

### Five Tubes—No Squeals

The Tilman Receiver is without a rival in powerful, clear reception that sells at or double \$49.50.

You dealers that want selectivity, here it is.

Dealers discount 40%—2%.

*Jobbers write for territory.*

Sample set to dealers \$19.50, check with order.

Only one at this price. You may return set if not well pleased and we will refund the \$19.50. No delay. No questions asked.

**TILMAN RADIO CORPORATION**

Wabash, Indiana

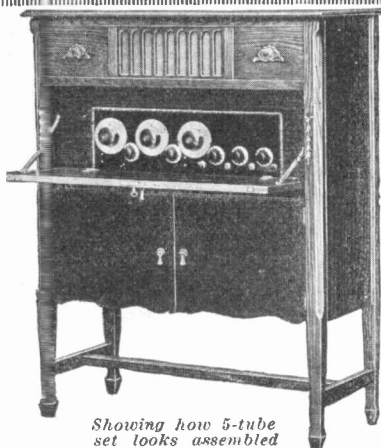
### A Cabinet that will sell!

The Standard No. 400 Radio Cabinet combines every Radio convenience with the artistic beauty that radio buyers are now demanding.

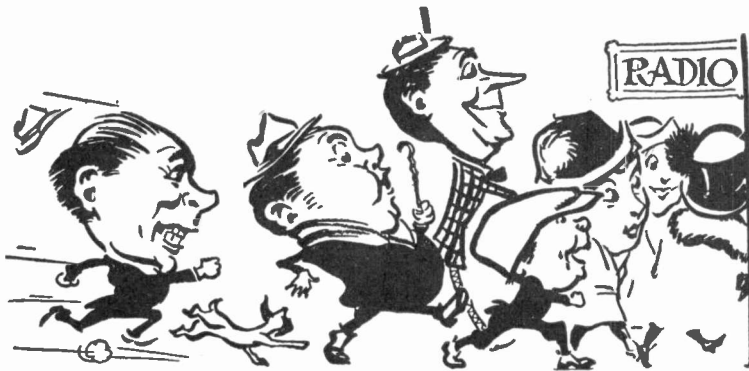
Access to set is very simple, compartments are roomy and the horn is made of spruce wood, conceded to be best for tone quality.

Made in Antique Brown Mahogany or Antique Burl Walnut finish. Write for dealers' transportation allowance and discount list.

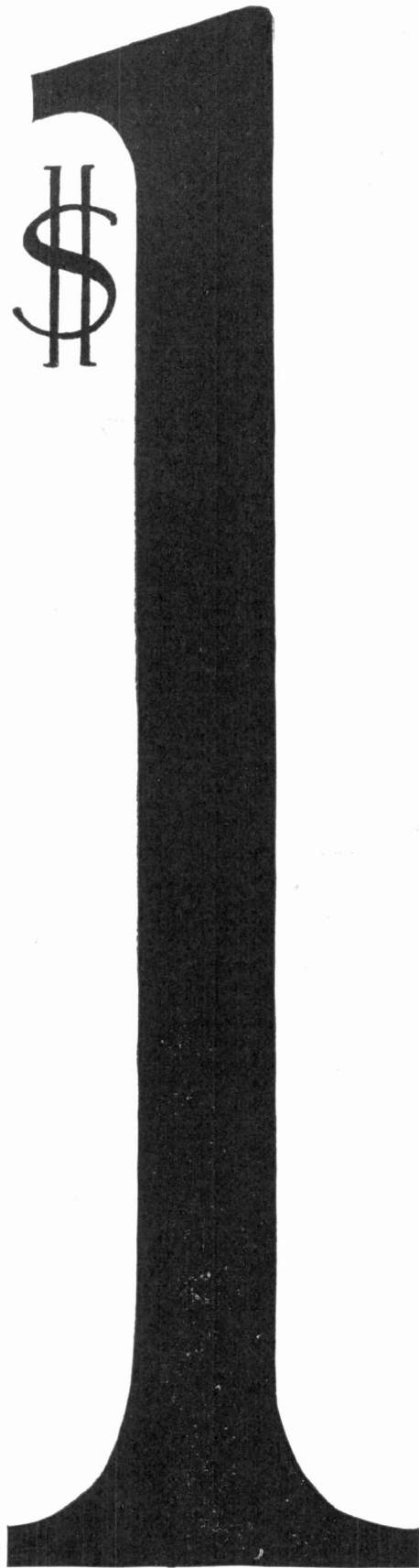
**STANDARD PIANO BENCH MFG. CO.**  
1221-1227 W. Lake St.  
Chicago, Ill.



Showing how 5-tube set looks assembled



YOU CAN DO THE BUSINESS—IF YOU USE



# Radio Retailing

You are holding the biggest value for a single dollar ever offered in the field of radio!

In *Radio Retailing* you get the very cream of all the most successful methods used to sell radio—the methods and ideas of the most successful radio concerns in every part of the country!

Not only do you get tried and tested methods for increasing radio sales but you are kept in constant touch with every new development in radio.

If having successful methods and right, up-to-the-minute information about all that's new in radio for a whole year isn't worth \$1, then the thousands of regular readers of this service are all wrong!

If you don't use this service regularly don't put off returning the coupon below with \$1 attached.

## The big hit of Radio

**McGraw-Hill Company**  
 Tenth Ave. at 36th St.,  
 New York, N. Y.

Send me *Radio Retailing* for a year,  
 attached is my \$1. Start the service with  
 the next issue, please.

Name .....

Street .....

City ..... State .....

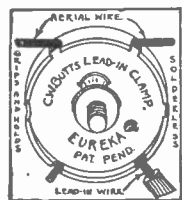
Name of Company .....

Besides Radio We Sell .....

12-25

**Solderless EUREKA Solderless Aerial Lead-in Clamp**

Nine out of ten sets now have poor connections between aerial and lead-in wire. The Eureka clamp makes a connection superior to most soldered jobs with one-tenth the trouble.



25c. each

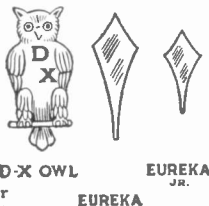
Packed 20 to the standard package listing at \$5.00 per package.

Jobbers—Write us for latest prices on these fast moving items.

C. W. Butts, Inc., 44 Hedden Pl., EAST ORANGE, N. J.

**EUREKA DIAL POINTERS**

Are now made in three types. Eureka 51 to card list, \$5.00. Eureka, Jr., 52 to card list \$5.00 D-X Owl 34 to card list \$3.40 for nickel and \$5.00 for gold plated. Our attractive display cards, and the beautiful finish of our pointers make them sell.



D-X OWL EUREKA JR. EUREKA

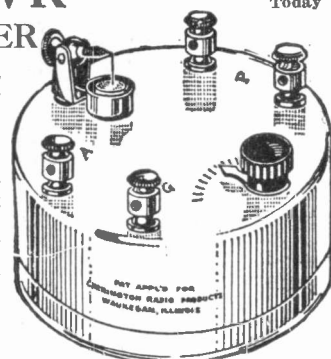
**SUP-R-POWR RADIO RECEIVER**

Retails for \$2.50 Order Quantity Today

Sell this crystal receiver to a customer and you have prepared the way for the sale of a tube set later on—

Two profits Instead of One!

The Sup-R-Powr is a real radio. Brings in all stations within 25-35 miles radius; of highly polished nickel; looks like \$10 merchandise. All terminals plainly visible. As for the crystal, there is none finer—looks like a jewel, works like a charm.



CHERRINGTON RADIO LABORATORIES Waukegan, Illinois

Manufacturers of the Nationally Known Radi-O-Bank

**SEARCHLIGHT SECTION**

**SURPLUS STOCKS—BUSINESS OPPORTUNITIES**

UNDISPLAYED—RATE PER WORD:

Positions Wanted, 6 cents a word, minimum \$1.25 an insertion, payable in advance.

Positions Vacant and all other classifications, 10 cents a word, minimum charge \$2.00.

Proposals, 40 cents a line an insertion.

INFORMATION:

Box Numbers in care of any of our offices count 10 words additional in undisplayed ads.

Discount of 10% if one payment is made in advance for four consecutive insertions of undisplayed ads (not including proposals).

DISPLAYED—RATE PER INCH:

1 to 3 inches.....\$8.65 an inch  
4 to 7 inches..... 6.40 an inch  
8 to 14 inches..... 6.20 an inch  
Rates for larger spaces, or yearly rates, on request.  
An advertising inch is measured vertically on one column, 3 columns—30 inches—to a page.

Radio Retailing

**POSITIONS WANTED**

AS radio service man or department manager. Graduate National Radio Institute. Old time amateur, ex-army radio electrician; employed at present. PW-7, Radio Retailing, 7 So. Dearborn St., Chicago, Ill.

**REPRESENTATIVE AVAILABLE**

Export Manager

Now successfully representing several American firms abroad, desires additional line on commission basis; will finance. RA-8, Radio Retailing, Tenth Ave. at 36th St., New York.

**RADIO DEALERS WANTED 5 Tube Demonstrator FREE!**

In addition to trade discount on our complete line of standard sets and accessories, \$5 to \$90. Money-back Guarantee of Satisfactory dealings. Write today for illustrated catalog and exclusive selling plan for live dealers. 20TH CENTURY RADIO CO., 1432, Coca Cola Bldg., Kansas City, Mo.

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Crescent Braid Co.	890	Holtzer-Cabot Elec. Co., The	890				

# 100% satisfaction

Many things control a retailer's success. But perhaps none is more important than his customers' satisfaction. And dealers can only learn about that *after* the sale is made—when it may be too late to regain the customers' confidence and patronage.

The "Perfect Results" in radio reception secured with Benjamin Radio Parts assure 100% customer satisfaction *before* the sale is made.

And the heavy demand, and large, steady profits, win a 100% satisfaction from the dealers.

### *Benjamin Tuned Radio Frequency Transformers*

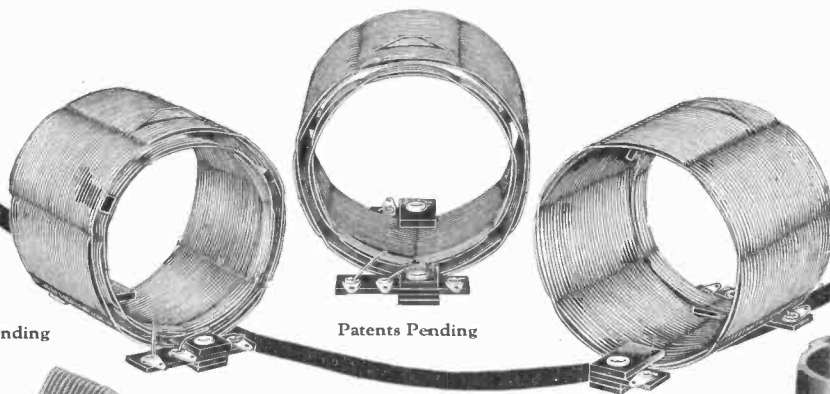
Even in what has been considered an excellent set, it is astonishing what an improvement in tone quality, volume and selectivity the introduction of these coils produces. Low Resistance. Low Distributed Capacity. Uniform both in inductance and distributed capacity. Space wound, air core; double green silk insulation—the nearest approach to an all-air dielectric construction and the highest type of inductance possible. Coils are coupled so as to reduce capacity coupling to a minimum. Put up singly and in sets of three.

### *Benjamin Low Loss, Long Range Condensers*

First of all a wonderful low loss condenser. The shape of the rotor blades spreads the broadcast range on the lower wave lengths, eliminating bunching of stations on the lower side of the dial and makes tuning very easy. A beautiful instrument, in unpolished silver plate finish. Friction disc on rotor shaft adjusts turning tension without loosening or throwing plates out of alignment. Made in three sizes: 13 plate for .00025 Mfd., 17 plate for .00035 Mfd., 25 plate for .0005 Mfd. Drilling template furnished with each condenser.

### *Benjamin Cle-Ra-Tone Sockets*

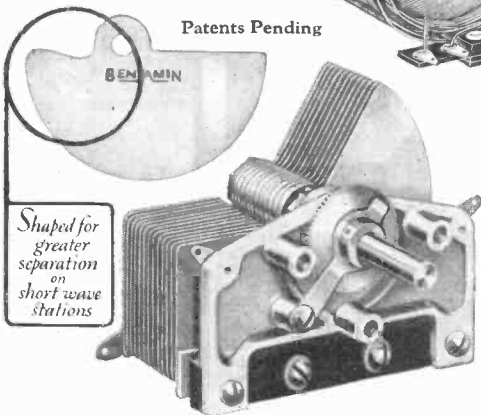
Benjamin Cle-Ra-Tone Sockets prevent the transmission of outside vibrations into microphonic disturbances. Four delicately adjusted springs support the socket—"float" it above the base—and absorb all jars and shocks. Handy lugs make soldering easy. Furnished also in gangs on Bakelite sub-panels for compact set building. *Now ready*—the new "Push" type Cle-Ra-Tone Sockets for Standard UX "Push" type tubes



Patents Pending

Patents Pending

Patented July 28, 1925; May 2, 1911



Shaped for greater separation on short wave stations



SPRING SUSPENDED SHOCK ABSORBING

## **Benjamin Electric Mfg. Co.**

120-128 S. Sangamon Street  
Chicago  
247 W. 17th St. New York  
448 Bryant St. San Francisco  
Manufactured in Canada by the Benjamin Electric Mfg. Co. of Canada, Ltd., Toronto, Ontario

# **BENJAMIN**



# No "hum" in operation but plenty to its Sales

The

APCO

"B"  
Kit



Every radio owner can bring his set up to date with the APCO "B" Eliminator Kit. He can eliminate "B" batteries forever by attaching it to a lamp socket. The cost of operation is small.

There is no "hum" when the "B" Kit is working but plenty to its sales. List Price \$30.00.

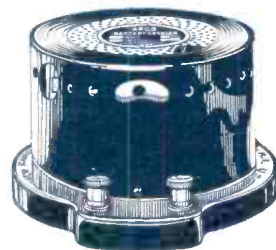
Assembled complete, in handsome cabinet, ready to be attached to lamp socket, we call the "B" Kit the Rectodyne. List Price \$44.00.

APCO MANUFACTURING COMPANY  
PROVIDENCE, RHODE ISLAND

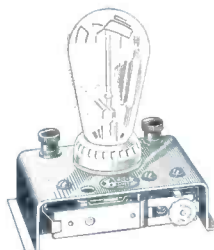
154 Nassau St. New York. 1438 S. Michigan Ave., Chicago  
2005 E. 15th St., Kansas City, Mo.



Rectodyne, No. 66  
List, \$44.00



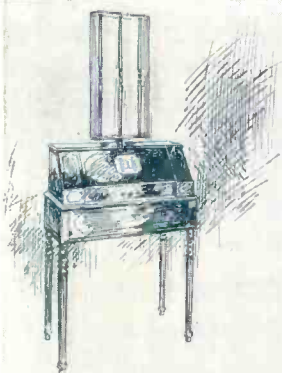
"A" Battery Charger,  
No. 77. List. \$18.50



"B" Battery Charger,  
No. 89. List, \$4.00



"A" Battery Charger,  
No. 79. List. \$12.50



Radiola 28, eight-tube uni-control Super-Heterodyne, extremely selective. It gives volume on dry batteries, or can be used with the Model 104 Loudspeaker (with an adapter), without batteries. With 8 Radiotrons \$260



Radiola Loudspeaker, Model 104, has amazing volume and acoustical fidelity. With Radiolas 25 or 28, it operates the set without batteries, from 60 cycle, 110 volt A.C. lighting circuit. With all tubes. \$245



# Permanent features of the RCA line

*Uni-control super-heterodynes*

*Power loudspeakers*

*A.C. drive*

These — backed by an advertising campaign greater than ever before — promise continuing profits in radio to the merchants who qualify as Authorized RCA Dealers.

RADIO CORPORATION OF AMERICA  
New York Chicago San Francisco



Radiola 20, an entirely new five-tube tuned radio frequency set, with regeneration. Antenna type, with the new dry battery power Radiotron. Without accessories \$102.50 With 5 Radiotrons \$115



Radiola 25, a six-tube uni-control Super-Heterodyne, that uses the new power tube. It has space in the cabinet for dry batteries, but can be used (with an adapter) with Loudspeaker Model 104 without batteries. With 6 Radiotrons \$165



# RCA Radiola

MADE BY THE MAKERS OF RADIOTRONS