

Radio Retailing



All the world buys radio—
The young, the old, the rich, the poor!

*How 25 Dealers Raised Money to Expand
Profits from Part Time Salesmen
Complete Loudspeaker Specifications*

We're telling the Public this
— you tell 'em too!

You need
a headset

- to tune-in with
- to get distant stations — both domestic and foreign
- to listen-in without disturbing others
- to shut out the noise in the room — and get all the radio fun
- to get the truest and clearest reception — always

No one realizes these facts more forcibly than the makers of the famous Radiola IIIA. They include Brandes as standard equipment.

Be sure your set is Brandes equipped



Brandes

The name to know in Radio



An Exceptional Condenser

The Bradleydenser is a thoroughbred. It is not built down to a price but up to a standard. Soldered brass plates, a new bearing, a dust shield, and other features make it a fast seller in the low-loss field. Investigate, today, by mailing the coupon for dealer facts.

Profits and Quick Turnover

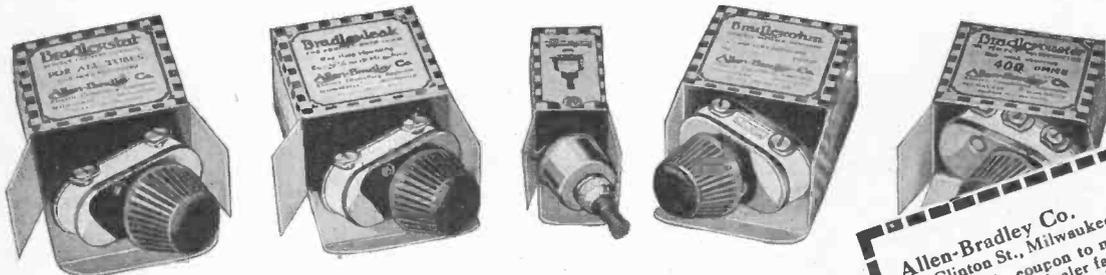
Why do leading radio dealers and jobbers sell the Allen-Bradley line?

Because each unit is a complete stock in itself. One Bradleystat can be sold for any tube. A stock of five Bradleystats is equivalent to twenty wire rheostats. Therefore, the turnover is tremendous and the profit worth while.

Do you realize the money-making possibilities of the Allen-Bradley line?

Mail the coupon for dealer facts.

Allen-Bradley Co.
Electric Controlling Apparatus
489 CLINTON ST. MILWAUKEE, WIS.



Standardize on These Radio Devices

The distinctive Allen-Bradley Checkered Carton identifies the Allen-Bradley line to the radio fan. Extensive advertising keeps Allen-Bradley Radio Devices always before your customers.

Mail the Coupon

Allen-Bradley Co.
489 Clinton St., Milwaukee, Wis.
I attach this coupon to my business letterhead, as a request for dealer facts about the complete Allen-Bradley Line, including Bradleydenser.

Name

Address



Eveready means more and easier sales

AVOID slow-moving merchandise. Handle only the best goods. Concentrate on nationally advertised lines.

"With these principles in mind," writes Mr. E. F. Hickey, of the Hickey Electric Co., Atlanta, Ga., "I decided to concentrate on one make of 'B' Battery, and my selection was Eveready.

"The results of this policy have more than met my expectations. I have sold more 'B' Batteries and with less sales resistance than ever before. It certainly pays to handle the product that is generally regarded as

being the best, that is well advertised, and then push it for all it is worth. 'B' Battery business is a substantial part of any radio dealer's business, the battery is vital to the set. . . . To build up a profitable radio battery business the first requisite is to handle the Eveready line."

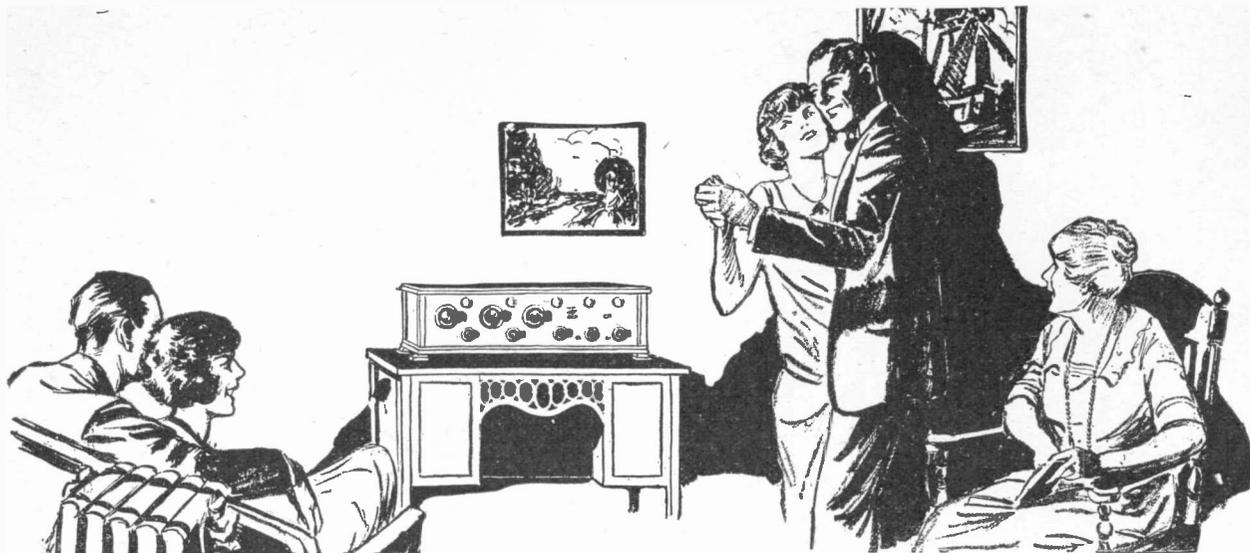
Sound merchandising principles are leading dealers everywhere to sell Eveready Radio Batteries for the satisfaction they give and the profits they bring.

Manufactured and guaranteed by

NATIONAL CARBON CO., INC.
 NEW YORK SAN FRANCISCO
 Atlanta Chicago Dallas Kansas City
 Canadian National Carbon Co., Limited, Toronto, Ont.

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
 WEAJ New York
 WJAR Providence
 WEEI Boston
 WFI Philadelphia
 WCAE Pittsburgh
 WGR Buffalo

EVEREADY
Radio Batteries
-they last longer



**The Popular Windsor Radio Console
With Its Own Loudspeaker—Concealed! Price, including
unit and inbuilt horn, \$40**

Here is the contribution to Radio that MOTHER has so patiently awaited. And every prideful housekeeper. For it restores LAW and ORDER to the living room.

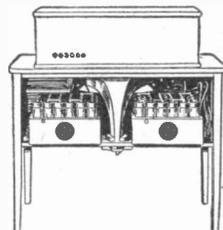
A stunning console that accommodates ALL your radio equipment. Your set goes on top. The rest of your outfit—is CONCEALED. No more clutter of equipment to clash with the surroundings.

Batteries need no longer scrape polished baseboards, nor endanger handsome rugs. There's a place INSIDE for the largest A and B wet batteries required for any home radio set, and plenty of room for a big charging outfit, too.

What about the HORN? Out of sight and out of mind! This clever console has its own loudspeaker horn, inbuilt, of resonant wood, which does not mutilate the tone as does any harsher material. With a unit selected without prejudice or preference from a score of makes. Phonographs no longer have unsightly horns. The horn is now retired in home radio reception. Equally welcome should be the news that artistic appointments of the drawing room need not be set at naught by a litter of apparatus.

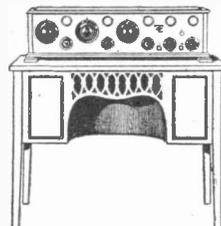
Your dealer has this console, finished in mahogany or walnut. The 38 x 18 top takes any set—with elbow room in front—knee space beneath—room for all else inside. Substantially built and beautifully finished; the product of an old and respected furniture maker. And only \$40, loudspeaker included! (West of Rockies, it's \$42.50.) Full description and name of nearest dealer on request.

Dealers: This new and useful member of the furniture family has been joyfully received into thousands of homes—and a million homes still need its orderly aid. It was designed for everyone's use—for it accommodates any outfit. It appeals to all classes—for it is a real piece of furniture.



The diagram shows how the back provides ample space for the safe storage of any home outfit. Out of the way and out of view—but readily accessible when wanted. From the front you can see only an attractive piece of furniture—such as would be bought as quickly for its beauty as for its tremendous usefulness.

Not even the artistic grill that conceals the soundbox hints of utility. An altogether graceful exterior, designed and finished with the care which has characterized Windsor furniture forty years. Strong and sturdy, too. There is no wobble or waver to this console, though laden with heavy equipment. It is 38 in. long, 18 in. deep, 29 in. high. Finish, mahogany or walnut. Sales have been phenomenal. Write for proposition.

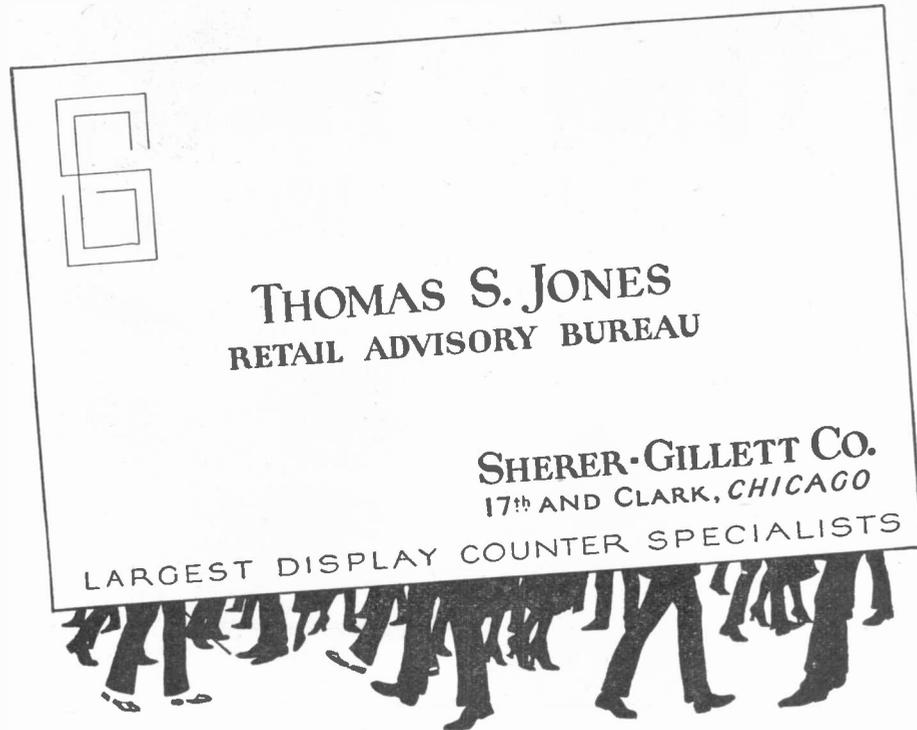


Windsor

Loudspeaker Console
Windsor Furniture Company
1430 Carroll Ave., Chicago



Pat. Nov. 18, 1924



Business for You Back of this Business Card

Your store should be the best advertisement for your goods. That's why you trim your windows. But the best window display can only bring in people. Counter display *sells* them.

The power of attraction shrewdly depended on in every famous big store works for every retailer who uses Sherer Display Equipment.

Sherer Display Cases and Counters are rated so high as profit makers, because they are sold only where they *will* make a profit!

The Sherer Retail Advisory Bureau con-

sults with merchants, gives them the benefit of display experience as wide as all business, and determines their real needs.

Everything Sherer display experts have learned in 72 years of business contact is available to you, to apply right to your own problem in speeding up turnover, reducing depreciation, building good will, enlarging net profits.

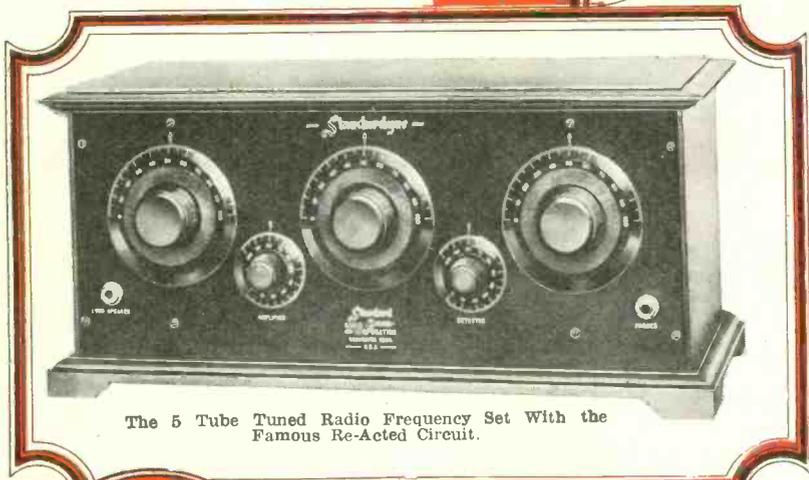
The Sherer Advisory man is a good man to talk to when he comes in. Or write now giving him an appointment. Or just ask for descriptive literature, if you want to think it over first by yourself.

Retail Advisory Bureau, SHERER-GILLETT COMPANY, 17th and Clark Sts., Chicago

SHERER
DISPLAY EQUIPMENT

Standardyne- AND THE U.S. AIR MAIL

The WORLD'S
GREATEST
DISTANCE
SMASHERS



The 5 Tube Tuned Radio Frequency Set With the Famous Re-Acted Circuit.

DELIGHTED owners of Standardyne Radio Sets all over the country look forward every night to the pleasure of listening to Far Distant Stations. And they are never disappointed.

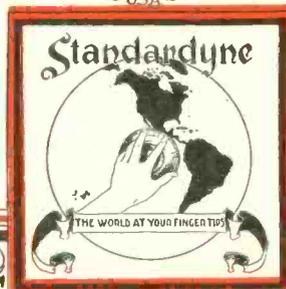
Standardyne Distance Performance is always dependable.

That's why hundreds of Standardyne fans are added to the rapidly growing list of pleased owners each week.

These owners appreciate a set which couples with Dependable Distance Performance, rare beauty of cabinet design, complete lack of annoying distortion and noise, selectivity which eliminates the undesired station immediately, and volume clear and strong.

For information regarding distribution rights in your territory write us

MANUFACTURED BY
The Standard RADIO CORPORATION
WORCESTER, MASS.
- USA -



\$60

WITHOUT ACCESSORIES

**THEY BOTH
MAKE THE
SAME STOPS**

- NEW YORK
- CHICAGO
- PHILADELPHIA
- DENVER
- LOS ANGELES
- PITTSBURGH
- CLEVELAND
- MIAMI
- OMAHA
- FT. WORTH
- NEW ORLEANS
- DETROIT
- ST. LOUIS
- KANSAS CITY



Standy Say's :-

**COAST TO COAST
IS NO IDLE GOAST
WITH Standardyne**

PREMIER

TONE—VOLUME—SELECTIVITY



The Essential Qualities of Radio are Tone, Volume and Selectivity

To the initiated there is but little thrill left in mere radio reception; already the novelty of picking something out of the air has worn off; even distance is rapidly becoming commonplace; every radio set will receive some signals and cover some distance; but the faithful reproduction of tone, with nothing added and nothing lost; an exact reiteration of every word and note; clarity of sound, with whatever volume is desired, is the quality that everyone is seeking and it is this quality that the builders of Premier Sets deliver.

Premier Reflex Sets are so carefully balanced that they possess all the essential qualities of tone, volume, distance and selectivity to an extent that meets the requirements of the most exacting, but we want to lay particular stress upon their dependability in tone reproduction, for it is in this—the rarest quality in radio—

that Premier Sets more readily show their superiority.

Premier Receiving Sets were designed primarily for volume reception on loop, but will work equally well with either outside or inside antenna. The radio buyer wants satisfactory reception; the radio dealer and manufacturer want satisfied customers. Premier demonstrations will make sales and satisfied customers.

The dealer who wants a quality radio Receiving Set to offer his trade is the one we are seeking, for we want the best possible representative in each locality and are prepared to offer such dealers an attractive proposition as well as an exclusive franchise in the territory assigned with full protection from all interference.

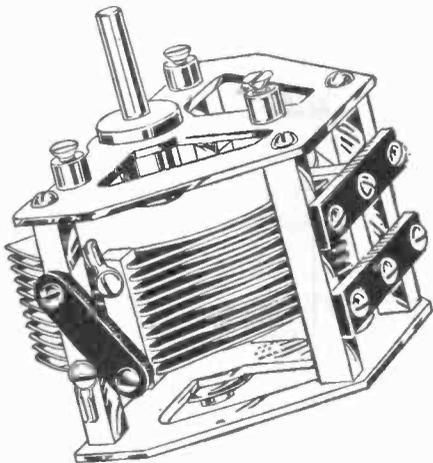
Write for full particulars to

The Premier Radio Corporation.

Defiance, Ohio

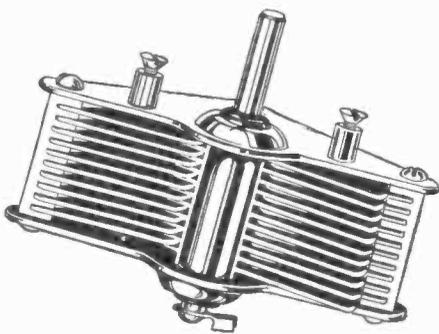
MATCHED DUPLEX STANDARD CONDENSERS

(IN SETS OF 3)



DUPLEX STANDARD CONDENSERS

SERIES FR



DUPLEX JUNIOR CONDENSERS

SERIES DR

Your Condenser Selling Problem Solved!

Your cost of selling a condenser is too high. You have to talk too much, show too many brands, and finally let the purchaser decide for himself or walk out. Because there is nothing you can say about any condenser that can't be said about several others, except—DUPLEX.

"Matched Set of Three" Argument

When you take down a carton of three laboratory matched and sealed DUPLEX Standard Condensers your prospect stops asking questions about this or that method of construction.

If he is building tuned radio frequency, you've got him on the fact that DUPLEX Matched Condensers afford uniform dial readings at all wave lengths—*real set calibration*. You also discourage his mixing new and odd-sale brands. If he is building a reflex or other set, demanding that two dials read alike, you still have him. If he wants only one condenser, or something cheaper, you have established a quality for DUPLEX no other condensers have—*factory responsibility*. This impression of quality carries right through the DUPLEX line and gives you good turnover at a good profit.

These Duplex Condensers Will Standardize Your Sales

Fill in the coupon today. We will mail you full details immediately. This is the only real condenser selling and advertising plan yet developed to increase condenser sales, decrease stocks, *maintain list prices* and increase profits for radio dealers.

DUPLEX CONDENSER & RADIO CORP.
36 Flatbush Ave. Extension, Brooklyn, N. Y.

Please send details, regarding your Duplex Condenser merchandising plan, which will solve our Condenser selling problems.

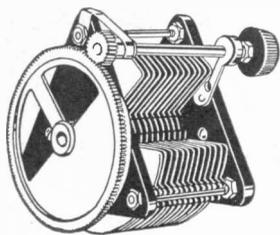
Signed _____

Address _____

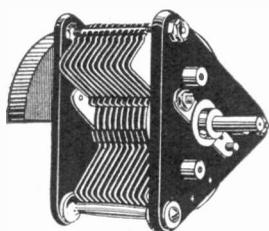
RR 325

Sell your set-building customers

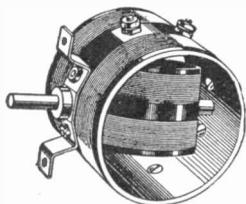
The Best



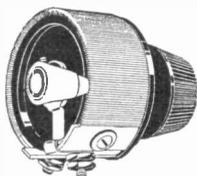
Type 247-H
Low Loss Condenser
With Geared Vernier
.0005 MF. Price \$5.00



Type 247-F
Low Loss Condenser
Without Vernier Gear
.0005 MF. Price \$3.25



Type 268
Single Tap Variocoupler
Price \$3.50



Type 301
Rheostats and Potentiometer
10 ohm.—30 ohm.—200 ohm.
Price \$1.25

In buying radio apparatus your customers know that Radio is a Science depending upon definite electrical principles. They know that to get good reception they must use instruments that are scientifically correct—electrically and mechanically.

The parts buyers today are experimenters who can intelligently compare relative merits of different parts—they are no longer "bargain hunters." Bitter experience has turned them from parts with a price appeal to reliable apparatus with a quality appeal.

The radio apparatus manufactured by the General Radio Company has been developed by experienced radio engineers after exhaustive research and careful study of actual operating conditions in well equipped radio laboratories.

All General Radio parts are constructed to meet the most exacting requirements of radio reception and are of the same high standard of material and workmanship as the laboratory precision instruments manufactured by the General Radio Company.

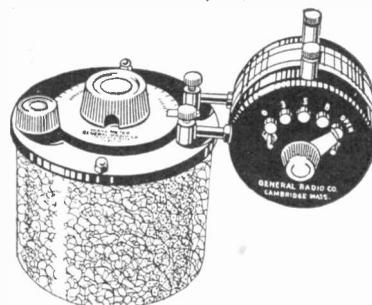
The Prices are as low as the highest quality of materials, workmanship, and efficient manufacturing methods permit.

When you re-adjust your stock of parts to meet future demands remember that since 1915 the General Radio Company has been the pace setter in advanced radio design. The General Radio Company introduced to popular use the first low loss condenser, which began the era of low loss parts so much talked of today. The first closed core audio transformer was a General Radio—and today the new type 285 audio transformer is the standard of excellence in audio amplification.

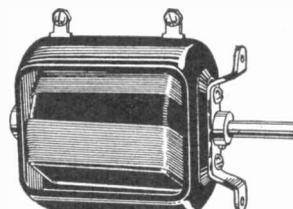
The time is now at hand for successful dealers to concentrate on a well-rounded and well-established line of parts. Why not pick a leader and a winner? Naturally, General Radio!



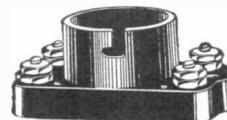
Type 285
Audio Transformer
Price \$7.00



Type 247-W
Wavemeter and Filter
Price \$10.00



Type 269
Variometer
Price \$5.00

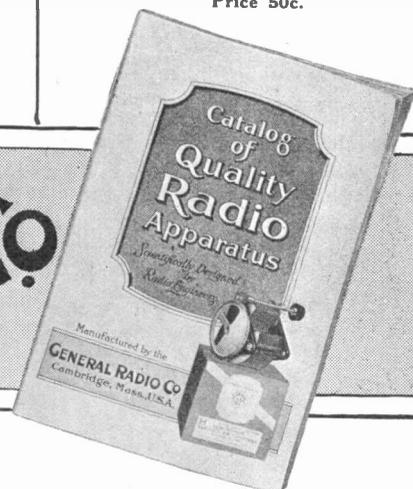


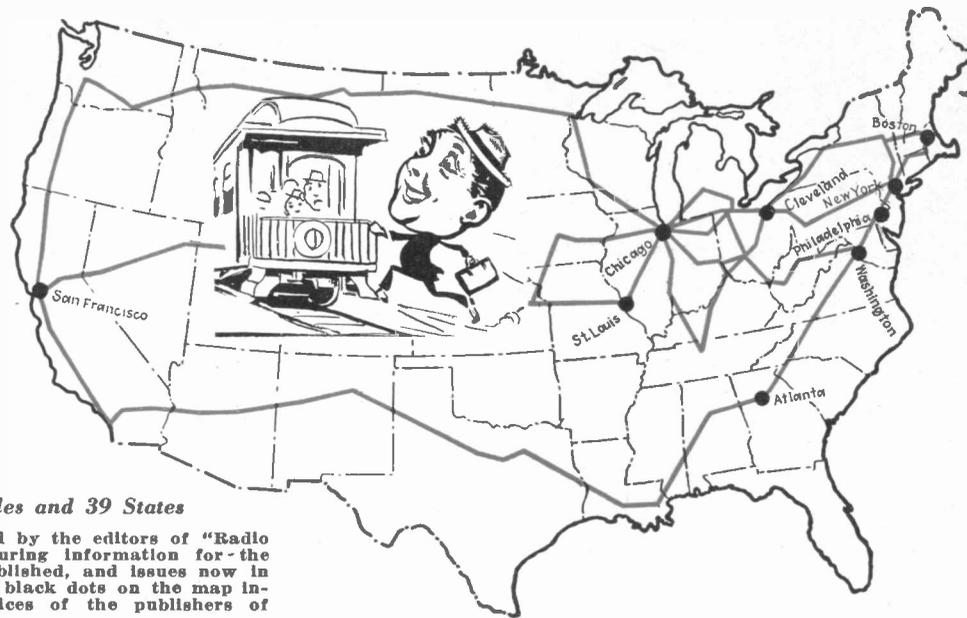
Type 299
UV-199 Socket
Price 50c.

GENERAL RADIO Co.

Cambridge, Mass.

Dealers—write for our new parts catalog 920-R
with price sheet





18,400 Miles and 39 States

have been covered by the editors of "Radio Retailing" in securing information for the issues already published, and issues now in preparation. The black dots on the map indicate branch offices of the publishers of Radio Retailing.

Radio Retailing

The Business Magazine of the Radio Industry

Contents for March, 1925

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Cable Address: "Machinist, N. Y."
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Electrical World Journal of Electricity Ingenieria Internacional
Industrial Engineer Engineering and Mining Journal-Press
Power Engineering News-Record Coal Age American Machinist
Electrical Merchandising Electric Railway Journal
Bus Transportation Chemical & Metallurgical Engineering
RADIO RETAILING
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PHILADELPHIA, Real Estate Trust Bldg.
CLEVELAND, Leader-News Bldg.
ST. LOUIS, 718 Star Bldg.
SAN FRANCISCO, 399 Mission Street
LONDON, E. C., 8 Beeverie St.
Annual subscription rate is \$2 in United States and Canada.



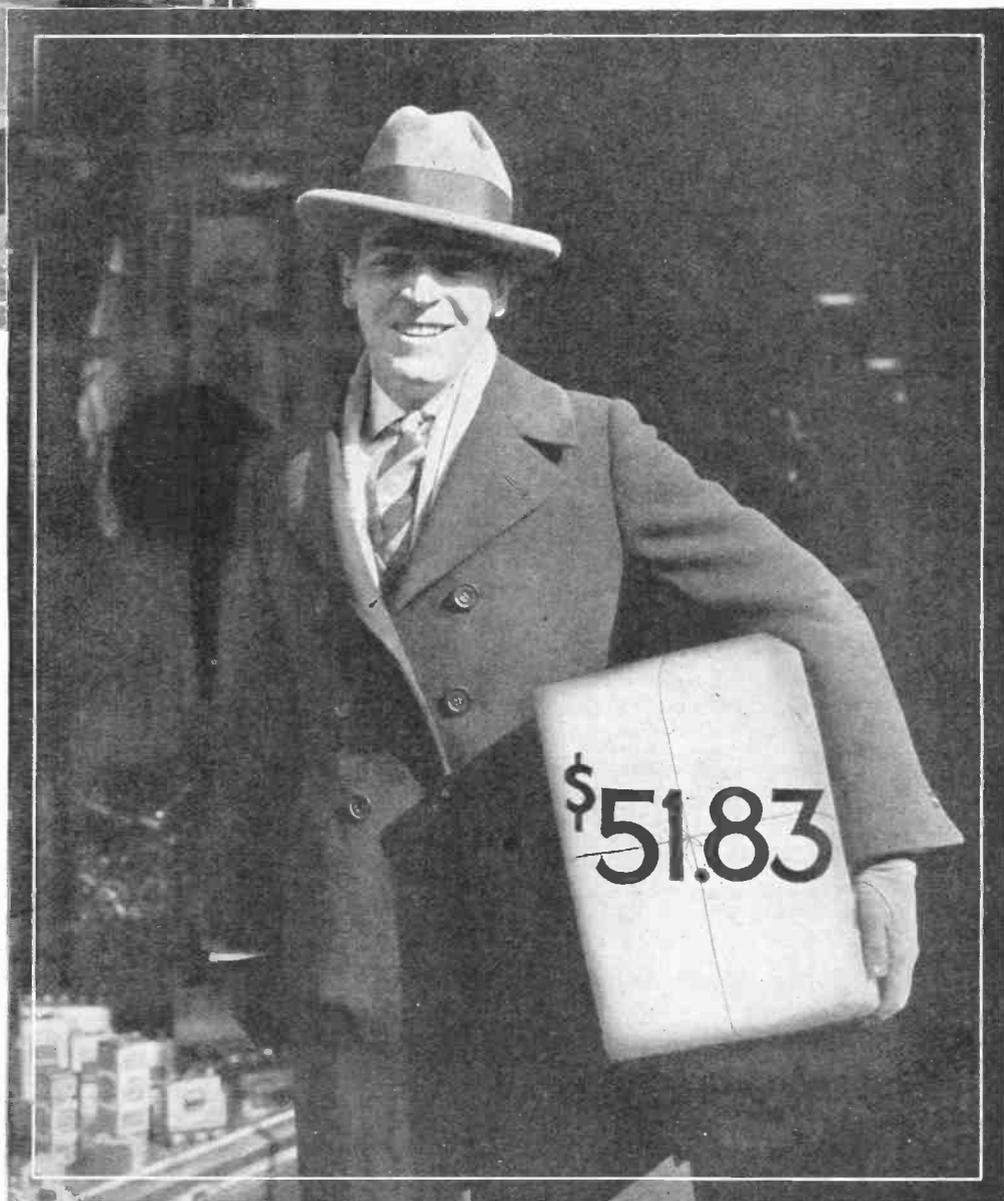
In 1923, the average radio sale was \$16.22

In December, 1923, the unit or average sale in a certain group of five radio stores that keep careful records, was \$16.22. For December, 1924, one year later, the corresponding average sale had increased to \$51.83.

This "unit sale" figure is the average of all radio sales, including sets, accessories, supplies and parts. In other words, it represents the quotient obtained by dividing the *total dollars of sales* made during the month by the *total number of sales transactions*. As the five stores studied were located two in the East, two in the Middle West, and one in the far West, the increase is probably representative of the whole country.

The striking growth in the "unit sale" shown, is undoubtedly due to the tendency of the public to buy more sets, as well as to buy more expensive sets, loud-speakers and accessories.

How the "Average Sale" in Radio Is Increasing



One year later, in 1924, the average radio sale was \$51.83

Radio Retailing

VOLUME 1

MARCH, 1925

NUMBER III

116 Readers Wrote in and Asked "Radio Retailing" for This Article—

How 25 Radio Dealers Raised Money to Expand

Expansion Is the Dream of Every Retailer, but Not Every One Has the Necessary Capital. Following Are 23 Ways in Which Recognized Dealers Solved the Problem:

Took Financial Statement to Home Banker

HERE is the financial statement that a New Jersey radio dealer took to his local banker in seeking a \$1,000 loan that would enable him to get a larger stock for his new store:

Assets	
Merchandise on hand, at cost.....	\$3,000
Cash on hand and in bank.....	1,000
Accounts receivable	200
Tools and equipment.....	100
Furniture and fixtures.....	400
Automobile, unencumbered	500

Liabilities

Accounts payable	\$600
Notes payable to bank.....	200

The banker put his hand on the dealer's shoulder and said: "That is a good statement, my boy, and radio is a great business. Yet on the basis of that statement alone I would not be justified in lending you over \$500. But I have known you a long time, I knew your people, and I watched you grow up. Because your business record has always been good, and because I have confidence in you, I am willing to put up the \$1,000." This

merchant's experience well illustrates the point that personal character, business record, local friendships and above all, personal acquaintance with the banker, count large when the dealer is seeking a loan from his neighborhood bank.

Formed a Partnership. Simple Agreement as Basis

Sometimes a question arises in the dealer's mind whether to "take in a partner," or to form a stock company and obtain money by issuing stock. By all means the simpler plan

Five Sources of Capital and Credit—

(1) Local Banks, (2) Jobbers, (3) Relatives, (4) Friends, (5) Newspaper Want Ads

RADIO is growing so rapidly that the radio dealer will find it is not always possible to finance, directly out of present earnings, such expansion of his business as he feels fully justified in attempting.

But when calm, cold judgment

dictates a better store in a better location or a larger stock, or more employees, the dealer should know that there are established sources from which to get the money he needs.

(1) His local banks, (2) his jobber, (3) relatives, (4) friends

or acquaintances, and (5) newspaper "want ads,"—these are the five main channels for getting capital for retail businesses. How radio dealers have tapped these various financing agencies is told in these 23 reports of actual experiences in "getting the money to grow on."



A Small "Want Ad" Inserted in a Local Paper Secured Enough Capital to Start a Dealer on the Road to Prosperity

is that of a partnership. This method is surrounded by the least red tape under most state laws, but has the disadvantage that in case of death of one partner, the firm is dissolved—whereas a corporation goes on.

A Chicago dealer found a man with \$3,000 who wanted to invest in a going retail radio business. A simple partnership agreement was drawn up between the two, and the \$3,000 was paid over for the right to share in the business. As this store now returns \$100 a month to each partner (after meeting all expenses and setting aside a reserve of 25 per cent), the deal proved a 40 per cent investment for the financial partner.

Jobber Is a Lender of Credit

The relation of the jobber is not that of a lender of money itself. But the jobber can grant credit for radio merchandise, which merchandise the dealer can quickly convert into cash, under the conditions of rapid turnover now prevailing in the radio field. Every jobber has a close and friendly interest in seeing his dealers grow—and in retaining their business as they grow.

Sometimes, however, the jobber has set a limit of credit on a prospering dealer—a limit which, while fair enough six months or a year before, does not represent conditions as the dealer's sales have increased. With this in mind, a Long Island dealer called on his jobber and protested that he was now entitled to a line of credit larger than the limit set early in 1924. He was asked to submit a new statement. This showed his business in good shape, and local reports indicated increasing sales and a good moral risk. The dealer had asked for \$500 credit. Ordinarily his statement as

rendered would have justified \$250, but on his pointing out that he was putting his business through only the one jobber and intended to stick to that policy, the credit manager O. K-ed the \$500 limit.

Mortgaged His Car But Kept It in Use

A St. Louis dealer found that he could raise \$250 cash on his automobile, and still keep it in daily use, making radio-set deliveries and service calls. He had answered the ad. of a financing company, and this concern offered to loan him 80 per cent of the machine's listed value in the "used-car rating book." Accepting, he paid for his loan "6 per cent interest" plus a "service charge" that brought the total cost around 10 per cent. A chattel mortgage was put on the car, and the dealer was required to take out fire-and-theft insurance to protect the lenders.

Had Wealthy Customers

A Connecticut dealer had started in a small way and had built up a nice business in installing radio sets

in a wealthy community. Certain of his customers liking him and having faith in his ability, held a meeting and advanced him \$1,000 for expansion. He paid an interest rate of 6 per cent although his backers, at first, did not want him to do this. Today he is free and clear, and is doing a nice business.

Borrowed on His Life-Insurance Policy

The dealer who has been carrying a life-insurance policy can usually turn to his insurance company for limited amounts, depending on the cash value accumulated on the policy. This plan has the advantage that such a loan is not "callable," as is a bank loan, so that the dealer is not likely to be caught short by demands falling due at embarrassing moments. A radio dealer who had been carrying a \$5,000 straight-life policy for five years, paying an annual premium of \$125, found that he could borrow \$200 on this policy. Interest of 6 per cent had to be paid annually on the loan. In the event of his death, the beneficiary would be paid the difference between the face of the policy and the loan, or \$4,800.

When Advertising for Money Paid

Doing a nice business in one of the larger Eastern cities, this radio dealer put a classified advertisement in one of the daily papers:

WANTED: Partner with \$4,000 to take active or silent interest in established, profitable retail radio business, which has opportunity to double present sales with increased capital. Address Tribune 386.

A gentleman answered who had a nephew he wanted to start in business, radio preferred. After references had been exchanged, the deal was closed on a 51 per cent-49 per cent basis, the dealer insisting on retaining control. Through keen in-



Making a Friend of Your Local Banker and Showing Him Your Healthy Financial Statement Will Aid in Getting Funds

sight he was able to invest his new capital to advantage and to-day the store has prospered and the dealer and young man with it.

Pooled Outside Interests

Three partners in a going radio concern, feeling the need for expansion, were unable to secure sufficient credit to finance the move. One of them had nearly \$5,000 worth of stock in a large corporation, another owned a fine piece of land and the third partner had some good bonds. By pooling these outside interests with a total valuation of nearly \$25,000, they were able to secure a loan sufficiently large to carry them along. The necessary papers were drawn up by an attorney for \$25 and the bank, from which the loan was made, required the usual 6 per cent interest.

Jobbers Carried Him Along

This dealer secured credits of from \$60 to \$100 with four different jobbing houses and was able to carry these along for about 90 days. He would pay off a little on each and then start all over again. Though an unbusinesslike procedure, the system worked successfully for several months—long enough for him to get the start he needed. The plan was a risky one for he might have been tripped up and put out of business. Not recommended.

Jobber's Salesman Helped

Salesmen ever on the alert for increased business, often assist in a material way the expansion of a worthy dealer. The case in question was of a rather small radio store in a town of 5,000 inhabitants. This town, however, fed the surrounding territory for a good many miles. A salesman of one of the large, city jobbing houses, kept a careful check on this dealer and was convinced that if he was assisted a little, he could greatly increase his business. Upon broaching the subject to the dealer he was met by suspicion, but this was soon allayed and the salesman turned over \$5,000 at 6 per cent to help the dealer expand.

The salesman's aggressive ideas did much to assist the dealer dispose of his stock to surrounding farmers and the small store was soon doing an excellent business. The dealer made his profits, the salesman secured a good return on his investment with the store and increased his earning powers with the jobber by augmenting the dealer's sales.



A Connecticut Dealer's Relatives, Believing in His Integrity, Loaned Him Enough Money to Make a Profitable Expansion

Clearance Sale of Obsolete Stock Raised Cash

This dealer, doing a nice business, felt that he could do better if he had larger quarters and a better stock. His store and cellar were cluttered up with a large number of old sets and parts and in order to finance his expansion, he held a big clearance sale, preceded by a big splurge of advertising. By doing this he secured new recognition in his community, and he got the money which he wanted.

The Manufacturer Helped with Credit

Co-operation between manufacturers and established radio dealers is one of the commonest forms of expansion at present. In one case the owner of a successful small store was extended a credit of \$300 by a manufacturer of parts. He was given 90 days in which to meet this obligation. Frequently in cases of this kind, friendly jobbers, upon hearing the news, will also extend credits of from \$50 to \$100, to make sure of the account.

How a Dealer Used His Lease

This owner had an annual rental which amounted to \$2,400 and, desiring to lay in a fuller line of radio materials, he was able to negotiate a loan through his bank on a 6 per cent basis, by turning his lease over to the banker. The bank loan only amounted to \$500, which the dealer had no difficulty in meeting.

Tied Up with Another Dealer

The owner of a small radio store in a side street opened negotiations with another dealer located in much the same way and through the pooling of their interests, credits and stocks, a successful store was opened

in the heart of the business section. The combined stock of the two stores together amounted to in the neighborhood of \$5,000 and together they had a cash capital of a little under \$3,000.

The extra store fixtures which could not be used in the new location, were sold for \$350—enough to pay two months' rent in the new location. The increased stock and capital gave them a greater credit with the jobbers and manufacturers and since the change, both men have made more money than ever before.

Sold His Automobile

This dealer also felt the need of expansion and he was able to dispose of his automobile for \$300 cash. By careful manipulation this money was used to buy the radio parts he wanted and today he is rolling around in a brand new \$2,000 car.

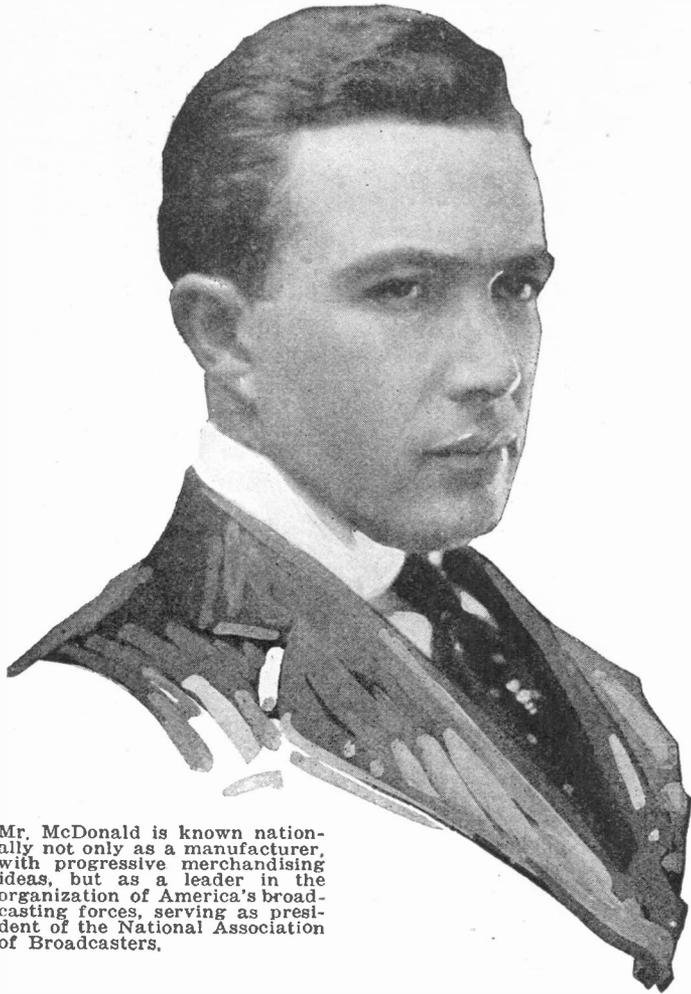
Borrowed from Rival

This store, run by a woman, was doing a fairly good business but she wished to expand a little, and was able to borrow \$1,500 from another radio dealer at 8 per cent interest, putting up sufficient of the stock to cover the sum borrowed. The woman who negotiated the loan formerly worked for the man who lent the money. Unfortunate circumstances and keen rivalry, however, made it impossible for her to meet her obligations and it was not long afterward that she was in the hands of a receiver.

Formed Corporation Among Relatives

Two young men, brothers, were doing a successful business in installing and repairing radio sets, but in

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Mr. McDonald is known nationally not only as a manufacturer, with progressive merchandising ideas, but as a leader in the organization of America's broadcasting forces, serving as president of the National Association of Broadcasters.

If I Were a Radio Dealer, I Would—

1. *Employ Salesmen—
Not Order Takers*
2. *Maintain Price*
3. *Advertise*
4. *Give Adequate Service to Customers*

By E. F. McDONALD, Jr.
President, Zenith Radio Corporation

IF I WERE a radio retailer, putting the matter naked, I should say I would—

1. Employ *salesmen* and not order takers
2. Maintain price
3. Advertise
4. Give service

Nothing new in these four points. They make up an old prescription that has been working wonderfully well in all kinds of business. It is my earnest belief that if a retail radio business is not flourishing it is because these four points have not been applied in the fullest measure.

This may seem a dogmatic statement, but I have every reason for making it,—*Radio up to the present has not been merchandised.* The business has progressed despite the dealer, rather than because of him. It has been a seller's market and the average dealer when entering the radio business was impelled by the thought that all he need do would be to put in a stock of radio and hire a policeman to maintain order in the crowd that would overrun his store. This applies to the music dealers as well as to the electrical dealers, except that it may be said to the credit of the music dealer, that when he realized his mistake, when he saw that without selling effort his radio business would be insufficient, he set about to get busy, as was his habit in the music business.

It would pay many radio dealers to spend an afternoon calling on stores handling pianos and talking machines. One experiment would be to see how long it would take for a salesman to rush up and offer service. Then watch that salesman hang on with bulldog ten-

nacity. It would not do to give your name and address unless you wanted to be hounded for months in a stretch. The average piano or talking machine salesman hates to let go of a prospect.

Then step into the radio stores of one of your competitors to determine how much sales effort would be expended upon you there. I wager it will not be much. I say this from considerable experience. I have always felt that the most fertile field for the shoplifter is the radio store. No one receives the least attention unless he steps forward with money in hand and announces, "I want a radio." Make this test and get first-hand proof of the difference between radio *salesmen* and order takers.

As to the next point—maintaining prices. Theatre ticket scalpers buy most of the seats for the opening night of the Ziegfeld Follies and raise the price per seat from \$6 to \$25. Why? Because the demand is greater than the supply. You would consider a ticket scalper crazy if instead of raising the price on the opening night he cut it to \$5.50. It would, however, be just as consistent for him to cut the price, as it is for the average radio dealer to hang a red shingle in front of his store announcing "cut prices" in glaring letters on the product for which there is a greater demand than supply.

Radio dealers can learn a great deal from the average music merchant on this point, because the music industry as a whole is pretty well committed to the policy of selling goods at a fixed price. There are price cutters among them, to be sure, but very few. One

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If I Were a Radio Manufacturer, I Would—

1. *Study Dealers' Problems*
2. *Price to Insure Fair Profit to Dealers*
3. *Advertise in Co-operation with Dealers*
4. *Select Dealers Who Can Give Service*

By JOHN W. VAN NESS,
Van Ness Electric Company, Valparaiso, Ind.

THROUGH the three years our company has been selling radio, it has been a more and more important part of our business. Our radio sales have grown steadily, being about one-seventh of our total business in 1923, and about one-fourth of our total business in 1924. Selling conditions in radio have changed and our selling problem and methods have changed to meet the condition.

There is now in our community, a marketing condition more nearly normal, more competitive, more like that which exists in other lines such as the electric appliance game.

Radio today must be sold through advertising and by direct solicitation.

The day in which anyone can be a radio dealer is passing. The real dealer has to study competition and develop selling plans to meet it—he has to create a market for the particular radio lines he is handling.

In the earlier days the manufacturer was a source of material only. If the merchandise was satisfactory and if it could be obtained, that was all the dealer expected from the manufacturer. But with present-day conditions the manufacturer's policies are just as important as his product to the dealer. The manufacturer, jobber and dealer have a common problem which they should work out together. If I were a manufacturer, I should study the dealer's problems and fit my policy to meet the conditions the dealer has to face, just as I am trying to see the manufacturer's viewpoint in my present capacity.

(1) I would price my merchandise to insure the dealer a profit. On sets for instance, the price within



In Middle West radio-trade circles Mr. Van Ness is pointed out as one of the very best small-town radio dealers in the business. The viewpoint he expresses here is one shared by many dealers in smaller communities.

reasonable limits does not affect the sale to the user if the dealer does an active selling job. The dealer must go after and develop the prospect into a purchaser. When he does this the difference of \$10 or more on a set would not affect the sale either way. But an additional \$10 or \$15 would make the difference to the dealer of a net profit or the absence of one. In the average sale of a set complete and installed, the stripped set does not come to more than half the total of the sale. The best dealer's discount on sets compares favorably with the best dealer's discounts today on electrical appliances sold at \$50 or over. This would be much more satisfactory if the whole transaction showed this margin. But it does not. The accessories that make up one-half the sale cut this discount to an average of about 33 per cent or less. Now few dealers can show an overhead of less than 30 per cent. There is, therefore, no net profit for the dealer. No manufacturer can build up a strong distribution unless his dealers are making money, and for his own profit and permanence the manufacturer should make it possible for his dealers to make a worth while net profit. This is more important than a low price to the consumer.

(2) I would not have too many dealers. Through a selected list of jobbers, I would create a selected list of dealers. By insuring my dealers a profit I would make my dealers' franchise valuable and sought after by the best class of dealers.

(3) Because radio requires servicing as well as selling, I would select dealers who can give the proper service to the user. The dealer should be accustomed

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To Earn a Salary of \$20 to \$25 a Week, a Radio Salesman Should Sell at Least \$275 Worth of Radio Goods a Week

How Much Should a Salesman Sell?

Average Wages of Retail Radio Store Clerks—Methods of Paying and Quotas Required Shown in Field Study Made by "Radio Retailing"

By LAWRENCE A. HANSEN
Contributing Editor, "Radio Retailing"

FOR the past two or three months *Radio Retailing* has been making a study of radio salesclerks in the average radio store. These were some of the things we wanted to find out:

What kind of an individual is the average radio sales clerk?

How much does he sell?

How old is he?

How much is he paid?

How is he paid? Salary or commission?

How long does he stick at the job?

All in all, just what kind of a job does he do for his employer?

We have found some interesting facts. Our investigation shows that:

The average radio salesman is 27 years of age.

He sells from \$500 to \$1,200 worth of radio a month in small towns.

He sells from \$1,000 to \$2,500 worth of radio a month in cities.

He receives from \$20 to \$25 a week in small towns.

He receives from \$25 to \$32 in larger towns and cities.

He is paid a straight salary in

most cases, sometimes also receiving a small commission.

As a general rule the average salesman selling radio behind the counter is a man close on to thirty. In practically all cases he is one who has had previous selling experience and he is personally much interested in the merchandise he sells. Indeed most store salesmen are themselves experimenters, testing this hook-up and that. In fact many of them design circuits of their own for the store. It is probably this radio knowledge, resulting in a very definite understanding of the merchandise they are handling across the counter, that enables them to sell with success.

Radio Stores Pay Chiefly Straight Salaries

Again, this interest in radio, coupled with the higher remuneration generally received (for radio clerks get very good pay as far as selling salaries go), accounts for the way the radio salesman keeps his position. He is not what one might call a roamer—that is, when compared with other types of sales clerks.

The greater number of stores reporting use the straight salary method in paying their radio sales clerks. The average salary paid was found to be \$123.70 a month. This is practically \$30 a week. The highest salary paid, in any individual instance, was \$250 a month, while the lowest was \$90 a month. One store reporting pays its sales clerks \$120 a month, with a two per cent commission on all sales. According to the average sales volume of its clerks—\$2,500 a month, the clerk receives by way of commission \$50 a month. This makes his earnings about \$170 a month—exceptionally good pay.

Those stores using the straight-commission method of reimbursing their salesmen paid a commission ranging from ten per cent for store salesmen—to about twenty per cent on gross sales for house-to-house salesmen. In no case did this commission increase with increased sales. If it was a cash sale the commission was paid in practically every instance when the sale was made. In selling a set on the installment plan, the salesman received his commis-

sion when payments were made. In only a few cases was he paid his commission at the time of a sale, or when the sale contract was signed. One concern reported a variation in the paying of this commission. It paid ten per cent on all installment sales, but twelve per cent on cash sales. The object was to urge the salesmen to get the cash whenever possible. For this reason it was willing to give an additional two per cent reward or "bonus."

Stores paying commissions and salary, a combination method were very few except in the case of those giving a bonus in the form of a one or two per cent commission on total sales. In practically all of the stores any commission given in addition to salary was very low. One radio merchant paid a five per cent commission on all sales over \$600. The practice of scaling commissions in accordance with sales volume is not common. Many other fields, do, however, especially is it true in the selling of electrical appliances, where we find it is a common practice to vary commissions with the total sales of the individual.

Salary Expense Is High, Comparatively

All in all we cannot but say that the radio salesman is pretty well paid. The total selling salary expense figures about 10.5 per cent of the gross sales.

It is interesting to compare this salary percentage with those prevailing in other fields. When studied with the following percentages for salaries paid in the different departments of department stores (compiled by the *Retail Ledger*), 10.5 per cent seems even very high.

Percentages of Total Sales Paid to Retail Clerks in Department-Store Departments

	Per cent		Per cent
Men's clothing	5	Women's clothing	4½
Men's shoes	6	Women's shoes	5½
Men's hats	5½	Millinery	6
Boys' clothing	5½	Furs	3½
Men's furnishings	5½	Jewelry	6½
Toilet goods	6	Dress goods	5½
Notions	7	Linens	4½
Gloves	5½	Hosiery	4½
Furniture	4	Infants' wear	5
Rugs and linoleum	4	Kitchen ware	5½
Groceries	6½	Luggage	5½
Sporting goods	6	Books	6½
Stationery	7½	Draperies	4½

The preceding figures, one must remember, are those of retail fields where selling merchandise has become close to a science. But they do show what good management means in terms of reducing operating costs in selling. To the small individual store, except for

this, they can mean but very little. Perhaps the better comparison would be with the percentages paid in salaries in the following types of retail establishments, compiled by the same authority.

Percentages of Total Sales Paid to Clerks in Retail Stores

	Per cent		Per cent
Groceries	7	Furniture	7
Hardware	6½	Shoes	9
Drugs	8½	Jewelry	11
Clothing	7½	Dry goods	6½

The salary percentage of 10.5 per cent paid to the radio sales clerk is higher than in most fields, but it can be readily understood. It takes a different type of salesman to sell radio than it does to sell many other types of merchandise. We have already pointed out the fact that a large part of these sales people have had previous selling experience. They have a certain technical knowledge of radio. This is essential if they are to answer the many questions of the prospective purchaser intelligently. This experience, this knowledge of the merchandise, of how to sell, must be properly paid for, and it is very doubtful if any merchant can operate a radio store profitably without this type of salesman. Competition is creeping into the market. An extensive amount of national advertising is going on. People are reading more and more of the merits of this set and that. They therefore enter the store with some idea, hazy though it may be, as to what type of set they want. It is then, that the sales clerk's job begins. It takes real selling and a real knowledge of the set being sold before a customer can be convinced to buy, especially if it is a different set than that which the customer had his mind set on.

That the sales clerk is successful is beyond question. There was no store that showed a smaller average

monthly sales volume for each clerk than \$500. For the most part, the total individual monthly sales volume reached a figure of from \$1,000 to \$2,500, while the average sales were about \$1,428 a month.

This volume had its usual variations on account of store location, but it ran fairly evenly throughout all the stores. Seasonal variations in sales volume was also very marked. It is this fact that shows the real value of knowing how much your sales clerks are selling.

Boosting sales is not enough. I know "increase sales volume" is the rule of the day. But there is a limit. Increasing sales volume is a good thing only, and only, if done with a definite knowledge of what it is costing to accomplish this increase. There would be fewer merchants coming to grief if they would give more attention to the relationship between expense and sales. If they would give more attention to what it cost to produce the sales by way of salesmen's salary expense.

Breaking Sales Records Caused a Failure

Let me illustrate this point. Some time ago I visited one radio merchant who apparently was setting a city agog breaking sales records. Other's sales were going down hill, yet this store was enjoying a phenomenal success in selling. "How does he do it," went up from all sides. "He sells at list, he has no location advantages that we do not have, to be sure he advertises very heavily, he spends a lot on window trimming, yet how does he make such sales and the profit he claims to get?"

After several months I visited the store again, but never to get inside. The padlock was on, the sheriff had made his visit, and the store had broken sales records only to face

Selling Expense and Salesmen's Salaries

run high, especially for the radio merchant. They should be carefully watched. Figures that are too high in these two departments are the chief reasons for the failure of many radio stores.

For example—a sales volume of \$9,000 a month, a total sell-

ing payroll of \$1,080 a month—and the store went on the rocks. The cause—failure to set sales quotas, failure to keep selling salaries in proportion to individual sales volume, and failure to keep other overhead expenses within proper relationship to total sales.

ruin, and the sales were the cause. Here again was the cause—the merchant did not know his cost of doing business, he could not set a definite sales quota to cover the cost.

Knowing the cost and setting a sales quota to cover this cost and bring a profit should have been his goal, not just sales, then more sales. In his zealousness to make sales, lick everyone else in the town, he had lost sight of his operating cost. He certainly did advertise, he certainly did spend money on window trim. But, though he brought sales to the store, expense grew larger and larger, and then—then the tragedy, another business failure.

Watch the Relation of Selling Salary Expense to Sales

This store's total volume of sales was \$9,000 a month. Its total salary payroll for salesmen alone was \$1,440 a month. Add to this, the manager's salary of \$250, bookkeeper's salary of \$115, and there was a total payroll of \$1,805. There were eight salesmen being paid a weekly salary of about \$38 to \$40, producing on an average of about \$1,125 in sales a month, per man. In other words, sixteen per cent of the gross sales were spent for salesmen's salaries alone. There was little left of the margin to pay the other high expenses of operating the store and which were soaring in the owner's effort to increase sales.

Knowledge of these facts could have saved this business. If a sales volume of \$9,000 was reached, the next question should have been: what

can I afford to spend for salesmen to continue this sales volume, or increase it? Let us say he could afford to pay twelve per cent of the gross sales for selling salaries, then he could pay out each month \$1,080 for sales clerk hire. If the type of man needed could not be hired for less than \$38 to \$40 a week (which is extremely high in itself) this store could only afford six men. Each of these six men should have produced about \$1,500 a month, in terms of sales. This is, measuring production, setting production sufficiently high so that the total gross margin would cover the total operating expenses and leave at least something as profit.

Four million radio sets have been sold during the last four years. Nine million phonographs have been sold during the past twenty years. Here is an interesting comparison. It shows not only a popularity in the radio sets, far in excess of the phonograph, but there is also a lesson that may be drawn from such a phenomenal growth.

Hectic Conditions Make Planning Difficult

Any merchandise selling this fast is very apt to be attended with all the evils of a trade in the desperate attempt of merchants in general to make a "killing while the killing is good." Stores are very apt to fall all over themselves in an effort to reap a harvest, in terms of sales.

It's a good idea to first, definitely know the expense of operating the business. Then plan for a sales vol-

ume to cover that expense. Every retail merchant should do it. Plan the sales for the store. Know what volume must be reached to cover all expenses of the business. Then, allocate the proper proportions of the total sales volume to the individual salesmen.

Radio Dealer Pays Little Attention to Selling Costs

This is what many term "budgeting sales," not alone for the entire store but for the sales people individually. Perhaps there is no type of merchant that should keep a closer eye to his selling cost than the radio dealer. Yet, it is this very merchant who, it seems, pays little attention to the subject. There can be little doubt, the one main objective seems to be, sales. Many may find in only too short an experience, that it would do well to give more thought to *management* details. It would be well to know the cost of running the store, the cost of selling the merchandise. Keeping these costs in their proper relationship to the sales volume should be the objective.

Planned sales is the only way to accomplish it. Planned sales for the store, and setting sales quotas for the individual sales people is the surest way to profit. This is important—sales quotas must not alone be planned but plans must be put in practice. These quotas of sales must be the goal of each salesman, and they should be reached.

If they are not reached something needs adjustment.

Thirteen Rules to Foil the Check Raiser and Forger

By JAMES E. BAUM
American Bankers' Association

1. Never write checks with a pencil. Use pen and ink or, if possible, a check protector.

2. Fill in all blank spaces.

3. Don't erase. Errors should be corrected by writing a new check and destroying those incorrectly written.

4. Strangers are not always crooks but crooks are usually strangers. Never give a blank check to a stranger and never cash a stranger's check without an indorsement which you have positively verified.

5. Make checks payable to "cash" or "bearer" only when you personally present them at your bank. Otherwise use the name of the person you intend shall receive payment.

6. Never place your signature alone as an indorsement on checks you intend to deposit. Write above or below your signature the words "For deposit only."

7. Never sign blank checks. If you expect to be absent any length of time open a separate account subject to check of your employee or agent.

8. Guard your cancelled vouchers as you would a valid check, leaving none where they may be easily taken.

9. Keep your check books securely locked up and be careful how and where you sign or exhibit your banking signature.

10. Beware of the magic of the word "certified." Scrutinize all "certified" checks carefully. Ordinary certification

stamps can be duplicated almost as easily as any other rubber stamp.

11. Watch checks which apparently bear the makers' "O. K." or other form of approval. They are more easily forged than the full signature.

12. Safeguard your checks as you would your money for they represent money.

13. Deposit slips provide space for your name, usually upon the upper lines. Those written incorrectly should be destroyed as otherwise your signature will be available for fraudulent use. You can prevent loss by first writing the detail of amounts deposited and then *printing* your account name on the deposit slip.

"Don't Undervalue the Market"

Connecticut Contractor-Dealer Makes Quality Pay in Town of 25,000 Population by Creating a Demand for Better Merchandise

THE purchaser of radio equipment today demands quality merchandise. He wants results from the set he buys and he is willing to pay for it. The trend to higher class products has been felt for some time in the larger cities and it is now being clearly shown in the smaller towns of the country as well.

The Bruce Electric Company, of New London, Conn., a city of 25,000 population, has carried out the "quality only" idea since its entrance into the field of radio retailing in the fall of 1923.

A background of ten years as an electrical contractor-dealer in New London gave B. F. Bruce, owner of the business, the necessary technical and merchandising foundation, so that when radio began to assume large proportions as an industry, the Bruce Electric Company was in a strategic position to sell radio products successfully.

But his experience and knowledge would have been useless, Mr. Bruce declares, if he had committed one very great, and very common, mistake. And that is, undervaluing the local radio market.

In order adequately to convey Bruce's policy of "quality only" and his idea of creating and satisfying the demand for the highest type of radio merchandise, it is necessary first to give a short review of radio conditions in New London.

The owner of a competitive radio store had made the statement, often heard in other towns also, that "you can't sell anybody in New London a set that sells for more than \$100 complete."

Bruce built his business on the opposite basis. There was a local market for Packards, Pierce Arrows and Cadillacs, as well as flivvers, so why, if the market for quality auto-

mobiles was there, could not a market for quality radio sets be developed? Bruce asked himself the question and proceeded to answer it himself.

He studied the situation over a year before making his final decision. And when he reached a decision, it was to sell only radio products of the highest standard. That was less than a year and a half ago. Today, when you go to New London and ask any radio man who is doing the best radio job in New London, the answer is, "Bruce Electric."

"Take It for Granted They Want the Best"

"I have never agreed with the idea that those who buy radio sets and parts must be considered essentially as 'cheap skates,' and sold the cheapest possible merchandise," Mr. Bruce says. "There are in New London, just as there are in every town, men whose incomes range from \$10,000 to \$15,000 and more a year, and who can afford to spend two or

three hundred dollars for the better line of sets. I went into the radio business with that idea in mind—to sell a high grade of sets and parts and make it appear that I took it for granted they wanted the best and would pay for the best."

Following along those lines, Bruce installed a "sideline" of radio parts, sets and accessories, a "sideline" which has already walked away with the yearly gross and which Bruce describes as being better than the sale of electrical supplies and appliances.

He stocked a wide variety of the better sets and specialized in the more expensive outfits, with prices based on complete installations. Within a year of the inauguration of his radio department, Bruce found it necessary to double his floor space, taking the store next door and breaking down the intervening wall.

Service and the necessary facilities to give service, Bruce has found indispensable in conducting a radio business. It has become such an

How Bruce Sells Radio—

Stock carried: Highest grade of sets, parts and accessories, specializing in higher price sets completely installed.

Selling methods: Store only. Features quality, service and satisfaction and reputation gained from ten years in electrical trade. Full list prices.

Advertising: Small newspaper space, tending rather to store "exhibitions" and displays at local industrial shows.

Service and repairs: Featured. Two men kept busy and large department recently installed. Full service given and reasonable charge made.

Sales talks: Founded on reputation of set, its quality and performance, integrity of Bruce's, and policy of service and satisfaction with every purchase.

Time payments and trade-ins: Sells on partial payment plan if customer wants it. No trade-ins accepted and none planned.

important factor to the Bruce Electric Company that a complete service and repair department, fully equipped, has just been installed.

Every possible article needed in building, repairing or testing a radio set may be found in this department. It is Bruce's idea to give his customers as complete and modern a repair service as is possible to give.

In addition to two repair men continually busy, Bruce plans to permit his customers to use the service department to build or repair their own sets, supplying them with all the necessary tools and equipment and the advantage of working under the supervision and with the expert technical advice of his regular repairmen. In this way Bruce believes he is building customer satisfaction and making his shop the radio headquarters of New London.

An unusual feature of this unique service department is the fact that it is furnished with a number of tables so that each set sent in for repair will have a table to itself, thereby effectively preventing loss of parts or mixing them with parts from any other set.

Each Table Is a Miniature Workshop

Also, this individual table idea is convenient for customers who use the workshop, as each builder is assigned to a table and his work remains untouched until he is finished. Each table has its own batteries, soldering iron, wires leading to aerial and ground, etc., so that every table is an individual workshop complete in itself.



A glance at the stock of sets Bruce carries will show that each one is the product of a standard, well-known manufacturer. While a wide variety is carried and

a large range of prices provided, this company specializes on the more expensive installations, appealing to the man whose income gets up into five figures.

Radio Buyers Want Quality

The success of the radio department conducted by the Bruce Electric Company, New London, Conn., in handling only radio products of the highest class, clearly demonstrates that the smaller towns are following the bigger cities in the trend toward more expensive radio apparatus.

The Bruce Electric Company made it a point not to undervalue its local market and the success it has achieved bears out the claim that the demand for "the best there is in radio" is daily becoming greater in city and small town alike.

The laboratory is also equipped with tube testing instruments, battery testers and other necessary instruments and tools used in repairing or building.

Bruce believes in advertising, not so much in newspaper space, although the Bruce company is always well represented in local papers, but in such stunts as making exhibits at local "Home Products" shows and having "radio displays" of several days' duration at the store, when no sales are made, new sets and models only being on display.

A striking way of presenting the success attained by Bruce in selling

radio is as follows: it has been estimated that every person in the United States has \$3 a year to spend on radio, this figure being based on the 1924 population and the 1924 gross radio sales. Bruce, last year, averaged \$1 of the three that every resident of New London was supposed to have spent on radio, using New London's population and Bruce's radio gross as the basis of the figures. In other words, his 1924 gross was approximately the same figure as the city's population, which seems to be hitting a pretty good stride when you take into consideration the fact that Bruce makes his big play to the man who has several hundred dollars to spend on a radio set.

"Don't undervalue your market," is the lesson which may be learned from Bruce's success.

Studied Radio a Year Before Deciding

"I studied radio a year, technically and industrially," Bruce says, in parting, "before I decided what stock to buy and what policies to follow. I asked my customers in electrical supplies what they wanted in radio, what they would like to have me put in stock. The answer, invariably, was, 'The best there is.'"

"I followed that advice and what success I have attained is due to the fact that I have sold only reliable and standard radio products."

Wisconsin Dealer Uses Radio "Log Contest"

A "Log Contest" was an interesting stunt recently used by a Wisconsin radio shop. The contest consisted in offering a prize of \$5 to the radio fan turning in the log listing the greatest number of stations heard by the contestant.

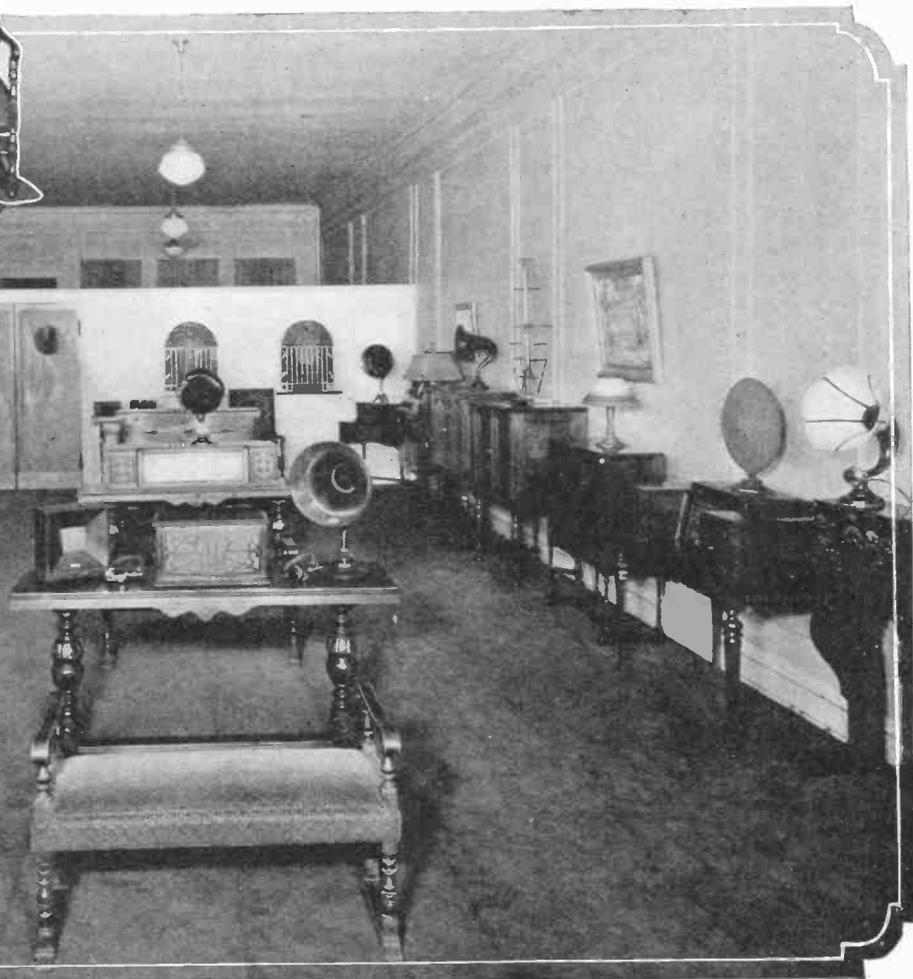
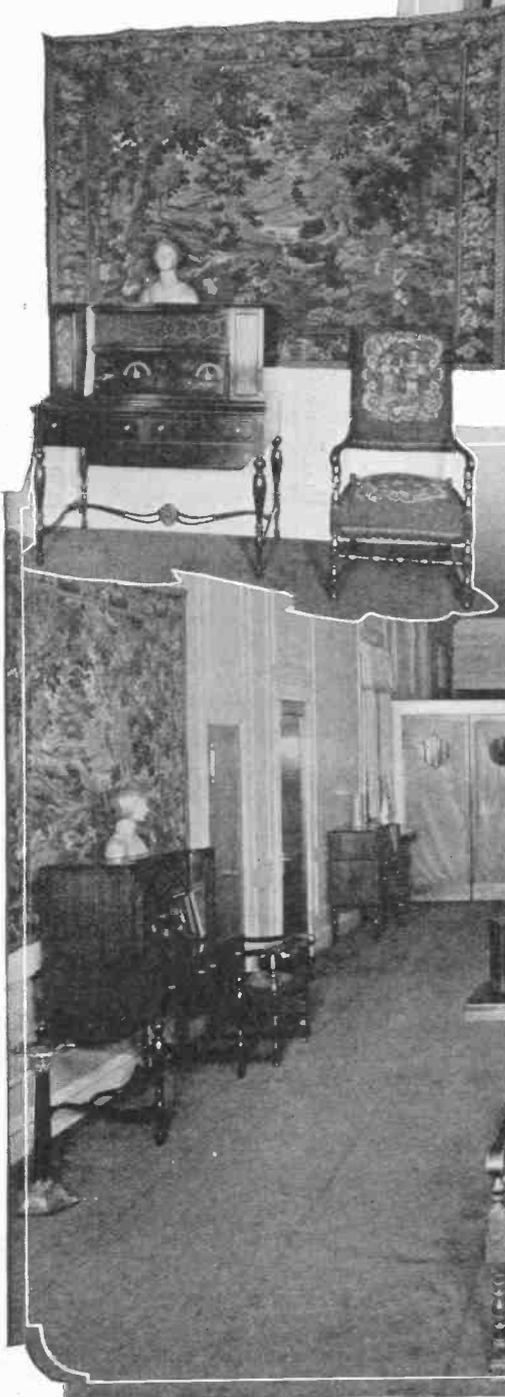
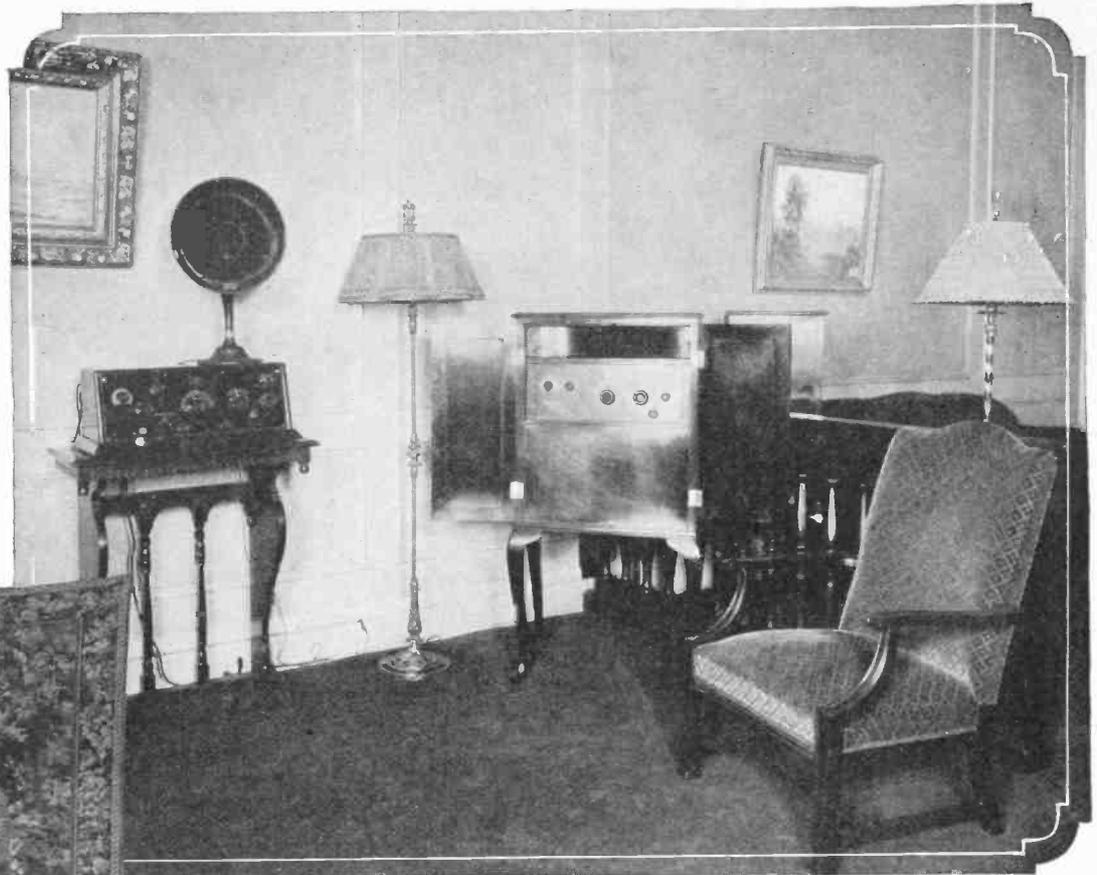
Of course, in putting on this contest the dealer was forced to rely on the honesty of the contestants, but he felt that mighty few would be so eager for the money that they would try to "put over anything" that wasn't absolutely true.

All of the logs entered were given a good display in the show windows of the store and attracted a great deal of attention. Also, to add interest to the display, a card was attached to each log turned in by a single contestant, stating whether or not the set used was of home manufacture or was of standard make.

Luxurious Displays Are Becoming the Vogue

The Kimberly Radio Corporation, Michigan Boulevard, Chicago, provides its radio displays with luxurious surroundings and its success amply justifies the necessary expenditure. Compare these photos with your memory of the first radio supply stores back in 1921 and you will get an idea of the great progress radio has made in four short years.

Tapestries, paintings, easy chairs, art objects, and standing lamps give a home effect and provide rich surroundings in which radio may be heard at its best.



Opera Singers Open Up Huge

Just as Caruso and Other Artists Lifted the Phonograph from a Mechanical Curiosity to a Musical Instrument Desired by Millions of Discriminating Buyers

BROADCASTING by John McCormack, Frances Alda, Florence Easton and other famous opera singers has infused a new and golden quality in the ether waves. The surrender of the great artists of the phonograph disks to the microphone is destined to have an important effect upon the radio industry. It has created a new era in broadcasting and a decided increase in the sale of receivers is foreseen.

The effect these artists are going to have upon the radio trade is similar in character to the growth of the phonograph business. A contrast of the practically parallel conditions in these two closely allied achievements reveals what radio retailers may expect and what they must do to profit by the high calibre concerts.

A new opportunity is open to radio dealers as it was to the music stores when Caruso first recorded his immortal voice. Phonographs were not in great demand and were not recognized as a medium of high class entertainment until artists of distinction recorded their voices. Phonographs then became popular. Now the music by the world's best musicians is wafted freely through space and is accessible to every home. Already a stimulating effect has been

noticed by manufacturers and dealers, although only a few of the leading opera stars have appeared before the microphone.

One New York dealer sold forty sets in a single day after the radio debut of McCormack and Bori. Calls were received from out-of-town dealers for stock to supply the newly awakened demand.

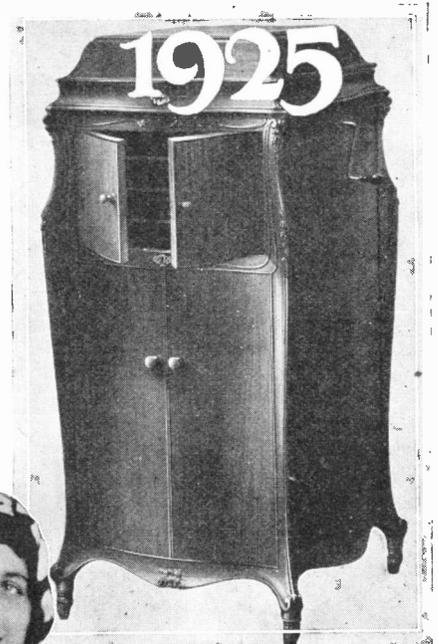
There are 26,000,000 homes in the United States. It is estimated that only 4,000,000 are equipped with receivers. The Department of Commerce calculates that 375,000 farms have radio sets. Why have comparatively few placed their homes in tune with the ether?

Worth-While Programs Have Been Long Awaited

It is true that many have hesitated because they have anticipated radical improvements; others caught their first impression of radio at its worst, through big tinny horns protruding from store windows in the early days of broadcasting, and it is difficult for them to conceive that radio can faithfully reproduce music. Some are waiting for static to be eliminated, but there are millions

who have not purchased because they have been waiting for worth-while programs.

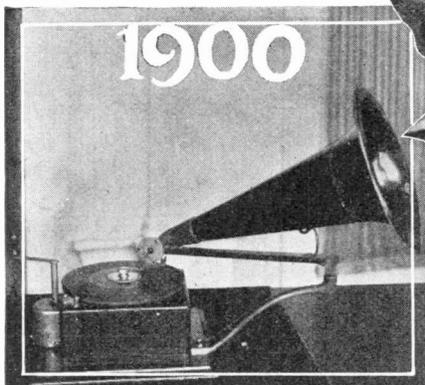
Thousands have heard radio in the homes of their friends and in many instances they have been convinced that the apparatus has passed through the experimental stage and is now of high quality. The question that has remained unanswered in their minds has been "When will the quality of programs improve to warrant the expenditure of one hundred dollars or more for a radio set?"



1908



The early phonographs, such as the model shown below, first made their appearance about 1890, reaching the peak of their popularity in 1900. From then to 1906, the only improvement in design was to make the horn larger. Records had announcers in those days, too. How well do you remember the famous line, "This is an Edd-ee-sohn R-R-R-Reck-ord."



Then, in 1904, Enrico Caruso (center) made his first record, the demand for operatic records reaching its greatest from 1908 to 1910. Mme. Ernestine Schumann-Heink (left) and the popular Geraldine Farrar (right) also had a large share in quickening the phonograph's development from a toy to a recognized musical instrument. Recordings by famous operatic stars played a very great part in putting the phonograph industry among the world's commercial leaders. Were it not for the recording of these great artists it is doubtful if the music stores would have been able to sell 10,000,000 phonographs to the homes of this country.

In 1906, the Victor Phonograph Company brought out the first console model, which created a sensation in phonograph circles, and, except for a few refinements, is practically the same as the phonograph console in use today. However, it was not until just before the World War, about 1914, that the sale of console phonographs began to reach any great heights.

This question has been answered by the world's great voices.

How can the golden tones in the ether lanes be transformed into gold by the radio retailer? There were thousands who refused to listen to a phonograph in its early days and it was a most difficult job to get permission to place a machine in a home for a demonstration. The present position of the radio retailer is not

New Radio Market

So Recent Operatic Concerts Are Creating Demand for Superior Radio Outfits in Countless Homes of Culture and Taste

half as difficult. Radio never received the "black eye" that distorted voices and popular songs gave the phonograph because of its early imperfections and tinny horns. Broadcasting developed for twenty-five years under the name of "wireless," and in that period many of the im-

Why not have a set, for a few more dollars, that will reproduce all the

1925



What part these improved radio programs, with recitals by opera and concert stars, will play on the development of radio, remains to be seen. Already, months before they began to send their golden voices through the air, the radio set had developed into the complete console model, a type of which you see above. No longer a toy, or a new thing for experimentation, concerts by these artists prove that radio is recognized as an artistic and recreational necessity in every modern home.



Paralleling the phonograph's development, but much faster in its progress, is the history of radio. Broadcasting on its popular large scale began in 1920, impetus being given to wireless telephonic communication by its wide use in the War. In 1921, the outfit shown above was typical of radio reception conditions. The party most interested was the "Penrod" of the family and his receiver a mess of wires and batteries he put together himself was usually relegated by an irate father to the cellar or the attic.

perfections were ironed out. When the big companies started to broadcast in 1920 and 1921 they had fairly good transmitters and before the audience numbered several hundred thousand, many improvements had been made. Until recently it was merely a question of getting the best voices and music on the air.

The demand for high priced receivers is expected to increase, because many feel that expensive sets are necessary to reproduce the voices of great artists. Comparatively there is not such a big difference between the price of a good set and a poor one. A hundred dollars makes a big difference in a radio purchase, while it takes several hundred dollars or even a thousand to make a vast difference in the quality of automobiles. Then, why spoil good music with an inferior receiver?



By 1925, father had become a more rabid fan than his son ever was and demanded a factory-built, complete-in-itself instrument that was as easy to operate as a phonograph and which he wouldn't have to wind up at the end of every selection. Then, in 1925, artists of such world-wide fame as John McCormack (left), Mme. Frances Alda (center), and John Charles Thomas (right), made their first radio broadcasts.

fine shades of the voice and music with the utmost fidelity?

The radio retailer has a good selling point in the fact that every one of the millions who have tuned in the noted artists have enjoyed the opportunity of hearing them at short range, which is very rare. When singing in the opera house the singer is obliged to vibrate a large volume of air and force his voice to reach all sections of the auditorium. The finer shades of the tones are sometimes lost. In singing before the microphone the artist finds his audience, so to speak, but a few feet in front of him. He is able to give the best of his art to the invisible audience, which hears him as distinctly and intimately as though they were in the same room.

Demonstrate in the Home During Concerts

Actual demonstration of radio sets in homes, while the opera singers are on the air will do much to increase sales. One Long Island retailer used this method and capitalized on football broadcasting by

sending a return postal card to 600 people in his town, who did not own radio sets. On the card he listed the important gridiron contests scheduled for broadcasting and at the bottom of the card he said, "Mail the return card, which is a free ticket for any game. We will gladly install on approval and demonstrate any type of receiver you wish in your home without charge or obligation on your part." He realized over \$650 profit from the cards, which cost him about seven dollars.

The same plan can be made attractive to music lovers. Undoubtedly, there are more broadcast listeners who like good music than those who would sit all afternoon and listen to the description of a football game. The football appeal is limited over a period of several months but the music appeal can be featured throughout the year. The opera singers and musicians under contract with the Victor Talking Machine Company broadcast every other Thursday night from 9 to 10 o'clock Eastern Standard Time, through station WEF, New York; WCAP, Washington; WEEI, Boston; WJAR, Providence; WDBH, Worcester; WGR, Buffalo and WCAE, Pittsburgh. Talent controlled by the Brunswick-Balke-Collender Company entertains every Tuesday night from 10 to 11 o'clock, through station WJZ, New York; WRC, Washington; and WGY, Schenectady. Incidentally, the Army, Navy and Marine band concerts and the New York Philharmonic orchestra may attract

Other Famous Stars Who Are Giving Their Talents to the Millions of Radio Set Owners



Renée Chemet



Mario Chamlee



Florence Easton



Emilio de Gorgorza



Elly Ney

some people and stimulate them to hear a demonstration.

Simplicity of operation is a good selling point for any radio set. Where a receiver is installed for a special demonstration, during a feature concert, it is a good idea to place the set in the home the day previous and let the household become familiar with its operation. To have a service man in attendance creates an impression that the set is difficult to tune and that it requires the attention of an expert. On the other hand if the housewife or one of the children turns the dials and perfect reception results, it will be a difficult job to remove the set after the demonstration. A good radio set sells itself in such a case. The main problem for the retailer is to create interest and get permission to install the set for a demonstration.

It is a good plan to call up on the phone and inquire during the feature concert if it is being received clear and satisfactory. If not a service man should be sent to the home to rectify the trouble, which will probably be a slight misunderstanding of the tuning adjustments. In many instances it will be found advantageous to leave the set a day or two after the concert because the special feature will not always have the flavor expected and perhaps if the set is left for several days, a jazz band or a talk will strike the fancy of someone in the home and the sale will be made.

Stores that have demonstrating parlors will find it advantageous in many instances to stay open during important broadcast events. Extra chairs will turn the store into a radio "auditorium." The public can be invited to attend the concert by cards, letters or by advertise-

ment in the local paper. In some cases it will be possible to make arrangements with school or civic authorities to use an assembly hall or classroom for a radio event of community interest, such as the inauguration of President Coolidge. The sales force should be on hand to look after the comfort of the audience and to answer questions.

Good Music Has a Universal Appeal

Programs of a feature concert can generally be obtained at least a week in advance from the broadcasting station or newspaper radio editor. This affords the dealer plenty of time to have a program printed, similar to the program of a regular musical concert. Several pages of the program should be devoted to advertising for your store, the apparatus you sell, and the service rendered. Window displays should feature the invitation to the public and the program of the event.

Everyone who attends such a radio performance is a potential buyer.

Golden Voices Will Pour Golden Dollars

into the pocket of the radio dealer who is wide awake to the opportunities operatic concerts are putting within his grasp.

With these stars of high magnitude the dealer has a point of entrance to the homes of people in all classes, rich and poor alike, music lovers or not, to whom, otherwise, radio might mean little.

He should be followed up with personal calls and if possible a demonstration in his home.

Clubs offer an excellent opportunity for demonstrating a radio set, during a concert by opera stars or any other interesting broadcast. The best set and clearest loudspeaker should be used, because upon the success of the demonstration will depend the sales. When a demonstration is made in a club it is a good idea to have a salesman there to operate the set, otherwise everyone will take a turn at the dials to "tune it in better," and the set, in the hands of many, will not have a fair chance to show what it can do.

What type of audience listens to the opera singers? To whom should the new appeal be directed? Some believe that the concerts by the great artists will stimulate only the sale of the expensive sets, because the well-to-do will be attracted to the opera broadcasts. True, there is a golden horseshoe in the Metropolitan Opera House, where the wealthy sit in lavishly decorated boxes to hear the opera, while the poorer classes stand throughout the performance.

Broadcasting by the renowned singers will attract rich and poor and the Hertzian waves are within range of them all. In the new market for radio receivers will be found many foreign born now in America. In their native lands they were often accustomed to hear famous singers frequently and at little expense. Now radio gives them the opportunity to hear the best music in their homes. These people who stand in the opera house will not be in the market for radio sets in elaborate cabinets but they will want a machine that will faithfully reproduce the music they have loved since childhood.

Getting Teamwork in the Store

The Boss Shouldn't Have to Do Most of the Radio Selling

THE traffic policeman waved his hand to the waiting line of vehicles. A big handsome pair of draft horses attached to a coal wagon in the lead, stirred, seesawed, slipped and seesawed again while auto horns honked and motorists swore. Finally the coal rig moved on. "That," remarked the driver, disgustedly as he slapped the near horse with the reins, "is the most willing team I ever saw. One horse is willing to pull the whole load and the other one is willing he should." Much the same thing is happening every day in hundreds of retail stores, not excepting radio stores either.

The proprietor has usually served an apprenticeship in selling radio himself. It is second nature for him to hustle out to the front the moment a customer enters. Now that he has the responsibilities of a store of his own, he is more than ever anxious that no sale worth while shall be lost.

He feels pretty sure of his own ability to land his customer, but he is nowhere near as sure of the capabilities of his clerks. So he takes on all the "tough ones" himself and his clerks sit back and let him. Also he is given to cutting in and helping out on most other sales of any size. From this some of his clerks get the habit of becoming very busy at nothing in particular when they could be really useful.

By this process the boss is eventually carrying most of the load and if some of his clerks are not soon telling the "fellers" that working for him is a cinch they will probably be thinking it.

All this is the proprietor's own fault, of course. He thinks he is a very busy man, which is true, but he is placing limitations on his chances for growth. The only way he can hope to handle more business, beyond a certain point, is to develop some good helpers, men who can carry a share of his responsibilities, who know enough about the goods and about selling so that they can take a good part of that end of the business from the proprietor's shoulders.

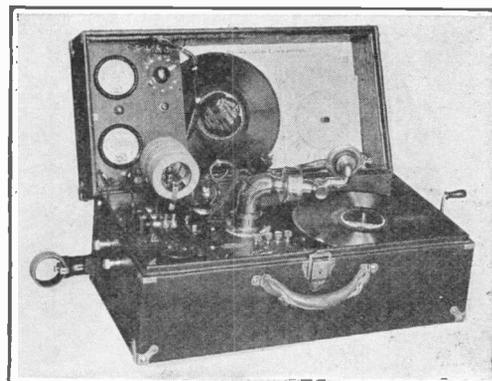
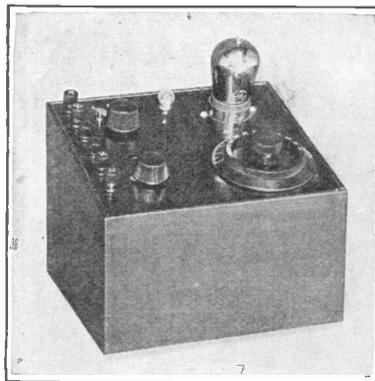
As it stands he has the opinion that good clerks are scarce. He may have some men working for him

who, because of tastes and disposition, are not cut out for salesmen. If the dealer has a mind to take his working force in hand, he can in a short time train them into just the kind of men he wants, if they are of the sort worth having to begin with. He does not have to be a college professor to do this. Straightforward talks, giving his ideas as to the most effective way to handle store problems, to make sales and to do the various things that fall to a clerk, are what is wanted. The clerks will get it if you will give it to them.

They need to be taught to take responsibility much as they are taught anything else. Gradually responsibilities can be delegated and if you show faith in the clerks' ability to come through they will try hard to come up to your estimate of them. "Now go after this just as if this business were your own," we once heard a proprietor remark to an employee. The latter did and made good.

A "First Aid" Kit for Radio Troubles

In radio, as in all other types of intricate repair work, before any adjustments can be made, the trouble must be located. In too many cases, it takes a much longer time to find out what is wrong with the health of the radio set than it does to apply the remedy. Many dealers have assembled their own testing apparatus but there is still a great demand for reliable testing equipment that the dealer can successfully operate.



The test unit illustrated is made for either shop work or for the "radio doctor." It is finished in a special case similar to a suit case, covered with leather. The smaller unit is used for testing tubes for

The portable testing outfit illustrated is made by the Radio Headquarters Laboratories, 403 Alder Street, Portland, Ore. All tests that can be made by a small shop test-set are incorporated in this instrument as well as a number of additional tests which include testing inductances of coils, wave lengths of resonant circuits, phones, loudspeakers, condensers from .000040 to .006. For checking tubes, the following values may be secured: tube oscillations, filament current, plate current, grid and plate characteristics.

By simply placing a special socket attachment in a set brought in for repair the circuit of each stage may be tested with this "Trouble Shooter." If any of the circuits are not correct it will show up at once on a meter. After the trouble is located and corrected, by starting the phonograph included in the outfit, a broadcast station is available with which to test the set.

Holds Race Between Best Radio Sellers

A Minneapolis radio store recently staged an interesting window display in which the ten articles of radio equipment which it sold in the largest quantities were attractively displayed. Cards were used with the articles for the purpose of telling how the articles ranked in the point of sales.

Many people found it interesting and entertaining to look at this window display and they also commented on it to friends and relatives, thus giving the concern a splendid amount of worth while word-of-mouth publicity which, of course, was the object sought.

Profits from Part-Time Salesmen

Youngstown, Ohio, Dealer Uses Men with Good Positions and High Community Standing to Sell Radio Sets in Their Spare Time

BUILDING a business on a policy of selling the customer in his home means building a business on the salesman that go into the home to do the selling job. Getting the right kind of salesman and holding him in line is all important. Just as the approved recipe for rabbit stew starts with the direction, "first catch the rabbit," the success of the dealer who features home demonstrations depends on first getting the right kind of a sales force. First catch the salesman.

A good radio salesman should know radio and be able to answer the questions he is asked. He is a real radio enthusiast and most of all he should know the people of the town where his work is to be done.

As most radio selling in the home must be accomplished in the evening, it may easily be an extra job,

an additional income for the man with a good daytime job. That this method can be most successful is shown by the success of one radio shop using the part time salesman.

Choose Men with Many Friends and Acquaintances

The Youngstown Radio Shop, Youngstown, Ohio, is advertised as "Youngstown's Exclusive Pioneer Radio Store," having served that community for more than three years. The owners of this business, Bob Phillips and Jack Burson, have pioneered in selling ideas as well as radio products, and their experience with the part time and the full time salesman contains suggestions of value to other dealers.

"Not just anybody who wants to pick up some extra money will do to sell radio in addition to his other work," says Mr. Burson. "He should

have a wide acquaintance or his regular work should bring him in contact with a number of people. For it is in the selling approach that this type of salesman excels.

"First of all our part time men are radio enthusiasts. They became interested in selling radio sets because so many of their friends, knowing they were radio fans, kept asking them what kind of set they should buy, where they should buy it, if they should buy now or wait awhile and all the usual line of things people want to know.

"They were always being asked to drive over and look at a set and see what was wrong with it, or having people come to their homes and look their receiving equipment over to get points on what they should have. This type of man, with many acquaintances and friends, spends a lot of time in what amounts to selling, so why shouldn't he actually sell and make a profit out of it?

"Of course, this type of salesman does no canvassing. He doesn't have to. His time is taken up following first class leads. One of these salesmen of ours has sold a set every evening for three weeks which shows how much business there is in selling to personal acquaintances and their friends."

"This particular salesman," Mr. Burson explained, "is a superintendent in a manufacturing plant and among the many customers he has sold are a number of the men who work with him and under him. The big thing is that they trust his judgment as to the proper set to buy. He knows radio and recommends the set that best suits their conditions. The result is perfect satisfaction to the buyer and a strong recommendation to the buyer's friends."

Another one of these salesman of



The second-floor location of the Youngstown Radio Shop has been no obstacle to an active parts business. The gentleman

in the white shirt behind the counter is Jack Burson, one of the owners of this live-wire concern.

Mr. Burson's is an automobile salesman, who knows the people who buy cars and who have the money for radio or anything else they want. A third is an executive in a local company who has contact with the society set. With all these men, the difficult first part of selling, the approach, is made easy through acquaintance. Many of their customers come to them as a source of radio information that can be relied on.

"In selling through this type of salesman," said Mr. Burson, "the element of service is of special importance. These salesmen will take every precaution to see that their friends get satisfactory service. We are successful in getting such high class men to work with us because they know we will go to any lengths to keep their friends and customers satisfied.

"We have sold our customer," continued Mr. Burson, "not only a set, we have sold him the pleasure and benefit of good reception. If the customer does not get absolutely satisfactory reception they look to us to make it satisfactory. It is part of their purchase and we must make good on it. We feel that an argument with a customer is one thing we cannot afford and we go to any length in the way of service to maintain customer satisfaction.

"Free Service" Costs \$100 a Month

"This pays us or we wouldn't do it. Our free service costs us about \$100 a month and is more productive of business than the same amount spent in advertising. We take care of our customers and they do the advertising for us."

That this works was brought out when Mr. Burson explained that the regular, full time salesmen develop many prospects. These men do no canvassing as a large number of leads always come in from old customers.

"As an example, from my work in the last few days, I have gathered 26 leads, names and addresses which I will follow up in person, or turn over to the salesmen. A radio salesman who is seeing that his customers get good reception with their sets need not worry about leads. They will come into him in such numbers that he will have difficulty in following all of them.

"My sales theory and method is first of all to sell myself and my firm to my prospect. With radio,

the public is buying a highly technical article of merchandise and the greatest factor in the sale is the confidence they must have in the man and the firm they are buying from.

"We have found it the best policy to concentrate on one make of set. After adopting a set that will give the most perfect results in our territory, we put our sales effort behind it. We do not leave the selection of the set up to the customer, we try to sell the customer the set we believe is best for his purpose. On the whole this makes for customer confidence. They are uncertain as to just what they want. They cannot have the knowledge of radio equipment which we have and after we have sold ourselves to them and obtained their confidence they are ready to take our word for the set

Home Demonstrations

will be most successful if the part-time salesman possesses these four qualifications:

1. A good position
2. High community standing
3. A large circle of acquaintances
4. Recognized knowledge of radio.

By securing salesmen who combine these four qualities, the Youngstown Radio Shop, Youngstown, O., has built up a big outside sales business.

they should buy and to rely on our guarantee that they will be satisfied with the result."

The Youngstown Radio Shop occupies a second floor location in the heart of Youngstown's shopping district. Although the store is small the display of a complete stock draws not only regular customers, but also the set-building fan and the radio shopper. Parts and accessory sales across the counter demonstrate that while the second floor is an economy on rent charges it is no bar to an active store business and has other minor advantages as well.

If Burson and Phillips concentrated their business philosophy into a sentence it would read something like this: "A second-floor location keeps overhead down and an outside sales force keeps sales volume up."

How Rickard Sells Radio in Rural Community

J. E. Rickard, of Rolfe, Iowa, doesn't consider that his responsibility stops once the set is installed and paid for. He calls up the purchaser every so often and asks him how the set is working.

That this procedure is profitable is proved by the fact that most of Rickard's sales come from friends of people he has already sold. He continues the friendly interest in the purchaser, who, in turn, boosts the service and interest which Rickard makes a part of the sale.

Rickard's "method of approach," he says, is merely an opportunity to install a set in a prospect's home for a few days. Being in a rural community, he is personally acquainted with most of the residents for many miles around and so has a wide field to cover.

"My customer must be satisfied before I accept his money," Rickard emphatically states, "and the people here know it, and know when they buy from me they won't 'get stuck.' I want satisfied customers or none at all."

That last line of Rickard's is a philosophy that many retailers can cut out and paste in their hats, or paint it big and display it conspicuously — "We Want Satisfied Customers or None at All!"

"Learn to Arbitrate" Is Advice from Washington

A practical safeguard that costs nothing and may be the means of saving much expense and trouble is afforded by the arbitration clause which may be inserted in all sorts of contracts and documents in the course of dealings with either business concerns or individuals, according to the U. S. Department of Commerce "Commerce Reports."

"The arbitration clause is finding its way into letters of credit, bills of lading, real estate leases, and contracts for supplies of commodities both at home and abroad," it states.

"A nation-wide educational campaign is being arranged by the Arbitration Society of America for the week of April 20-26, 1925."

Expenses of litigation usually can be avoided when proper steps are taken by retailers, jobbers and manufacturers to arbitrate.

"Radio Retailing's" Complete Specifications of

By referring to these lists of radio products, which will be a monthly feature of *Radio Retailing*, the dealer will have at hand a complete reference library of radio equipment and accessories of every description, with full specifications, prices, etc. The list of Radio Sets appeared last month, and other lists will be published in rotation.

For Radio Sets

See February issue (Pages 154 to 159)

For Batteries, Chargers and Current-Supply Devices

See next month's issue—April.

Loud Speakers:—

Manufacturer's Name and Address	Trade Name Model No.	List Price	Style of Loud Speaker	Height Width of Bell	Weight Lb.	Volume Ad-just-ment	Horn Material	Kind and Size of Diaphragm	Max. Plate Voltage	Type of Mechanism
Ackerman Bros., 301 W. 4th St., N. Y. C.	"Aristocrat"	\$12.50	Bell	H-25 B-11	4½	No	Fibre	Metal—2½ in.	120v.	B. P. M.
	Model-2V	9.50	Bell	H-21 B-11	6	No	Metal	Metal—2½ in.	120v.	B. P. M.
	Model-10	10.00	Bell	H-22 B-10	4	No	Fibre	Metal—2½ in.	120v.	B. P. M.
	Model 12	15.00	Bell	H-25 B-12	7	No	Fibre	Metal—2½ in.	120v.	B. P. M.
	Model 14	18.50	Bell	H-22 B-14	8	No	Fibre	Metal—2½ in.	120v.	B. P. M.
Amplion Corp. of Amer. 280 Madison Ave., N. Y. C.	Model 102	13.50	Bell	H-9 B-5½	1½	Yes	Metal	Metal	135v.	B. P. M.
	Model A-R-19	42.50	Bell	H-20½ B-14½	5	Yes	Wood	Metal	135v.	B. P. M.
	Model A-R-114	27.50	Bell	H-15½ B-10	4½	Yes	Wood	Metal	135v.	B. P. M.
	Model 111	24.00	Bell	H-15½ B-10	4	Yes	Wood	Metal	135v.	B. P. M.
Ajex El. Spec. Co., St. Louis	Marvelton Type-B		Bell	H-16 B-10	7½	Yes	Vulcanized Rub.	Ferrottype—2½ in. dia.	120v.	B. P. M.
American Art Mache Co., 345 West Austin Ave., Chicago, Ill.	"Clear-Speaker"	15.00	Bell	H-12 B-10	3½	No	Die-Cast Wood			B. A.
	"Clear-Speaker"	17.50	Bell	H-23 B-10½	4½	No	Die-Cast Wood			B. A.
	"Clear-Speaker"	20.00	Bell	H-20½ B-11	5	No	Die-Cast Wood			B. A.
Amer. Elect. Co., Chic., Ill.	"Burns"	20.00	Bell	H-22 B-10	3	Yes	Paper Felt			B. P. M.
Atwater-Kent Philadelphia, Pa.	Model-R	15.00	Bell	H-16½ B-12½	8	Yes	Steel Bell	Silico Steel	Any	B. P. M.
	Model-I	29.00	Bell	H-19½ B-14½	13	Yes	Steel Alum. Neck	High Silico Steel	Any	B. P. M.
	Model-M	28.00	Bell	H-22½ B-14½	16	Yes	Steel Alum. Neck	High Silico Steel	Any	B. P. M.
Auth El. Spec. Co., N. Y. C.	"Auth Room Talker"	10.00	Bell	H-22½ B-10	3	No	Pressed Felt	Ferrottype—2½ in.	130v.	B. P. M.
Nathaniel Baldwin Salt Lake City, Utah	Concert Grand	35.00	Bell	H-23 B-15	10½P	No	Rubber	Aluminum—2½ in.	200v.	B. A.
	Standard	25.00	Bell	H-21½ B-13	11½	No	Hard Rubber	Alum. Corruqa.—2½ in.	200v.	B. A.
	Symphony	17.50	Bell	H-17½ B-10	7	No		Alum. Corruqa.—2½ in.	200v.	B. A.
G. Brandes, Inc., N. Y. C.	Table-Talker	10.00	Bell	H-22 B-10	2-6 oz.	No	Fibre	Ferrottype	120v.	B. P. M.
The Bristol Co., Waterbury, Conn.	"Baby"	12.50	Bell	H-22 B-10		No	Hard Rubber	Alloy	Any	B. P. M.
	"Baby Grand"	15.00	Bell	H-24 B-10		No	Hard Rubber	Aluminum Alloy	Any	B. P. M.
	Model J	20.00	Bell	H-26½ B-12		Yes	Hard Rubber	Aluminum Alloy	Any	B. A.
	Model S	25.00	Bell	H-29½ B-14½		Yes	Hard Rubber	Aluminum Alloy	Any	B. A.
	Model C	30.00	Cabinet	17x10x10½		Yes	Wood	Aluminum Alloy	Any	B. A.
Cannon & Miller Co., Springwater, N. Y.	Camco	9.50	Bell	H-22 B-10	3½	No	Raon Fibre	Japanned—2½ in.	90v.	B. P. M.
Compressed Wood Corp., 345 W. Austin Ave., Chicago, Ill.	Model No. 804	15.00	Bell	H-12 B-10	5	No	Compressed Wood	Corrugated Aluminum	150v.	B. A.
	Model No. 806	17.50	Bell	H-23 B-10½	6½	No	Compressed Wood	Corrugated Aluminum	150v.	B. A.
	Model No. 807	20.00	Bell	H-20½ B-11½	8	No	Compressed Wood	Corrugated Aluminum	150v.	B. A.
	Model No. 810	25.00	Cabinet	H-14	10	No	Compressed Wood	Corrugated Aluminum	150v.	B. A.
Chas. Cory & Son, 183 Varick St., N. Y. C.	Coryphone B-529	18.00	Bell	H-19½ B-6½	3½	No	Enamel Finish	Metal—2½ in.	135v.	B. P. M.
	Coryphone B-530	35.00	Bell	H-16½ B-6½	8½	Yes	Enamel Finish	Metal—4 in.	135v.	B. P. M.
Cos. Rad. Ap. Co., N. Y. C.	Cosmopolitan Type-A	10.00	Bell	H-22½ B-10	10	Yes	Fibre	Metal	100v.	B. P. M.
Elect. Ind. Mfg. Co., N. Y. C.	Ultra	35.00	Bell	H-16 B-9	9	Yes	Bronze	Special Steel	300v.	B. A.
Elect. Prod. Mfg. Co., Prov.	Dymac Standard	10.00	Bell	H-24 B-10	6	Yes	Hard Fibre	Special Metal	150v.	B. P. M.
Farrand Mfg. Co., Newark	Farrand-Godley	32.50	Cone	17 diam.	8	No	Treated Paper	Same	150v.	B. A.
T. H. Gold't Corp., N. Y. C.	N & K Model-W	27.50	Sound. bd.	14x12x7	5	No	Burtex	Metal—2½ in.	165v.	B. P. M.
Grigsby-Grunow-Hinds Co., Chicago, Ill.	G-G-H									
	Model-WG	12.50	Bell	H-22 B-13	6	Yes	DuPont Pyralin	Ferrottype—2½ in.	150v.	B. P. M.
Halliwell El. Co., Inc., N. Y.	Halliwell	10.00	Bell	H-30 B-11	5½	Yes	Fibre	Ferrottype	130v.	B. P. M.
Hamburg Bros., Pitts., Pa.	Pennsylvania	10.00	Bell	H-24 B-12	4	No	Fibre Rub. Comp.	Metal	130v.	B. P. M.
Hardsocg Mfg. Co., Iowa	"Hardsocg" Model-10	10.00	Bell	H-10½ B-11½	32 oz.	No	Wood Pulp Paper	Metal—2 in.	120v.	B. P. M.
The Hart & Hegeman Mfg. Co., Hartford, Conn.	After Dinner Speaker	25.00	Bell	H-24½ B-15	9	Yes	Composition	Mica—2½ in.	150v.	B. A.
Herald Elect. Co., N. Y. C.	"Herald" Model-B	12.00	Bell	H-29 B-12	6	No	Fibre	Metal—2½ in.	350v.	B. P. M.
Herbert H. Frost, Chicago, Ill.	Musette—12-S	20.00	Bell			No	Bakelite	Aluminum	150v.	B. A.
	Musette—10-B	12.50	Bell			No	Bakelite	Aluminum	150v.	B. A.
	Musette—13-B	20.00	Bell			No	Bakelite	Aluminum	150v.	B. A.
Holtzer-Cabot Elect. Co., 125 Amory St., Boston, Mass.	Universal	25.00	Bell	H-28 B-14	10	Yes	Hard Rubber	Ferrottype—2½ in.	150v.	B. P. M.
	National	12.00	Bell	H-22 B-12	8	Yes	Hard Rubber	Ferrottype—2½ in.	150v.	B. P. M.
Jolley Radio Co., 23 Washington St., N. Y. C.	No. 1020	37.50	Bell	H-29½ B-12	9½	No	Brass	1½ Jolly	300v.	B. P. M.
	No. 1225	27.50	Bell	H-29½ B-12	8	No	Vul. Rubber	1½ Jolly	300v.	B. P. M.
Jewett Rad. & Phonograph Co., Detroit, Mich.	"Super-Speaker"	30.00	Bell	H-30 B-14		Yes	Pat. Composition	Metal	150v.	B. P. M.
C. B. Kennedy, St. Louis	"Kennedy"	25.00	Bell	H-25 B-10	4	Yes	Black Fibre	Metal	130v.	B. P. M.
Kirkman Eng. Corp., N. Y.	K-E	18.00	Bell	H-28 B-14	8	Yes	Alum. and Steel	Steel Alloy—4 in.	150v.	B. P. M.
Kilbourne & Clarke Mfg. Co., Seattle, Wash.	Kilbourne & Clarke	30.00	Bell	H-24 B-15		No	Rubber		90v.	B. A.
Kor-Rad Co., N. Y. C.	Lafayette	28.00	Bell	H-25 B-15		Yes	Hard Rub. Comp.	Bakelite Linen—2 in.	150v.	B. A.
Macy & Co., N. Y. C.	Maco SR Type-D	25.00	Bell	H-27 B-14	5	No	Fiberoid	Metal—2½ in.	120v.	B. A.
Magnavox Co., Oakland, Cal.	Magnavox	50.00	Bell	H- B-18	20	Yes	Leaded Steel	Corrugated	300v.	E. D.
	Model Magnavox D	35.00	Bell	H-28½ B-15	13½	Yes	Fibre Bell	German Silver	500v.	P. D.
	Magnavox	30.00	Bell	B-14	4	No	Fibre Bell	German Silver	150v.	B. A.
	Model Magnavox A	25.00	Bell	H-18½ B-11	2	No	Brass	Mica—2½ in.	150v.	B. A.
Manhattan Elect. Supply Co., 17 Park Place, N. Y. C.	Cabinet	30.00	Cabinet	16x11½x8	16P	Yes	Wood	Steel—2½ in.	120v.	B. P. M.
	Manhattan	25.00	Bell	H-30 B-14	16P	Yes	Fibre	Steel—2½ in.	120v.	B. P. M.
	Junior		Bell	H-22 B-10	5½P	Yes	Fibre	Steel—2½ in.	120v.	B. P. M.

Loudspeakers, Head Sets, Phonograph Units

(Loud Speakers Continued)

Manufacturer's Name and Address	Trade Name Model No.	List Price	Style of Loud Speaker	Height Width of Bell	Weight Lb.	Volume Adjustment	Horn Material	Kind and Size of Diaphragm	Max. Plate Voltage	Type of Mechanism
Mercury Radio Corp., 87 Duane St., N. Y. C.	DeLuxe	12.00	Bell	H-22	9	No	Composition	Metal	120v.	B. P. M.
	Grand	8.00	Bell	H-22	7	No	Composition	Metal	120v.	B. P. M.
	Junior	7.00	Bell	H-21	5	No	Composition	Metal	120v.	B. P. M.
Metro Elect. Co., 67 Globe St., Newark, N. J.	"Metro"	15.00	Bell	B-14		Yes	Fibre	Metal	135v.	B. P. M.
	"Metro"	10.00	Bell	B-10		Yes	Fibre	Metal	135v.	B. P. M.
The Mozart-Grand Co., Newark, N. J.	Baby Grand	12.00	Bell	B-12		No	Metal	Metal	120v.	B. P. M.
	Baby Grand	10.00	Bell	B-11		No	Metal	Metal	120v.	B. P. M.
Multiple El. Prods. Co., Newark, N. J.	Atlas-101		Bell	H-21½ B-10½		Yes	Fibre	Compound	150v.	B. P. M.
	Atlas-102		Bell	H-24½ B-13½		Yes	Fibre	Compound	150v.	B. P. M.
Music Master Corp., 10th and Cherry Sts., Philadelphia, Pa.	Music Master VI	30.00	Bell	B-14		No	Wood-Metal	Metal	150v.	B. P. M.
	Music Master VII	35.00	Bell	B-21		No	Wood-Metal	Metal	150v.	B. P. M.
	Music Master VIII	35.00	Cabinet			No	Wood Horn	Metal	150v.	B. P. M.
Nat. Rad. Out. Co., N. Y. C.	"Kleertone"	15.00	Bell	H-21 B-14	7½	Yes	Metal	2½ in.	110v.	B. P. M.
O'Neil Mfg. Co., West New York, N. J.	Audiphone	28.00	Bell	H-28½ B-12	12	Yes	Fibre	Mica—2 1/8 in.	410v.	B. A.
	Audiphone	30.00	Bell	H-31½ B-14	15	Yes	Fibre	Mica—2 1/8 in.	410v.	B. A.
Pathe Corp., Brooklyn	"Pathe"	17.50	Cone	Diam -15		Yes	Parchment Paper	Same	135v.	B. P. M.
Potter Tool & Machine Works, N. Y. C.	"Potter Precision"	10.00	Cabinet	15x8x9	3	No	Wood	Metal	120v.	B. P. M.
Perfectone R. Corp., N. Y. C.	Perfectone—A-1	15.00	Bell	H-22 B-10	4½	Yes	Fibre	Silicon Steel—3 in.	120v.	B. P. M.
Racon Elect. Co., N. Y. C.	"Serenada"	12.00	Bell	H-26 B-12	10P	No	Impreg. Tertile	3 in.	135v.	B. P. M.
Radio Lamp Co., N. Y. C.	"Radio Lamp"	25.00	Lamp	H-18 B-14	9	No	Bronze, Parch't	Metal	135v.	B. P. M.
Rad. Corp. of Am., N. Y. C.	"Radiola"	18.00	Bell	H-23 B-12	9	Yes	Composition	Metal	150v.	B. P. M.
Radio Industries Corp., 133 Duane St., N. Y. C.	Grand Opera	15.00	Bell	H-23 B-12	4	Yes	Cloth	Metal	120v.	T. P. M.
	Melotone	35.00	Cabinet			Yes	Wood			T. P. M.
Radiotive Corp., N. Y. C.	Silvervoic Type-W	45.00	Bell	H-15 B-14	8	No	Felt Fabric	Silk Corrugated	135v.	B. A.
Reichmann Co., 1725 W. 74th St., Chicago, Ill.	Thorola-4	25.00	Bell	H-23 B-14½	15	No	Thorite Comp.	Mica—1 1/8 in.	135v.	B. A.
	Thorola-3	20.00	Bell	H-21 B-12	12	No	Thorite Comp.	Mica—1 1/8 in.	135v.	B. A.
	Thorophone—S-5	45.00	Bell	H-25 B-14	35	No	Thorite Comp.	Mica—1 1/8 in.	135v.	E. D.
	Angelus-421	12.00	Bell		7	No	Thorite Comp.	Mica—1 1/8 in.	135v.	B. A.
	Thorola-9	40.00	Cabinet		25	No	Thorite Comp.	Mica—1 1/8 in.	135v.	B. A.
The Remo Corp., Meriden, Conn.	Remo Trumpet	12.50	Bell		6	No	Aluminum	Metal	135v.	B. P. M.
	Remo Adj. Trumpet	15.00	Bell		6	Yes	Aluminum	Metal	135v.	B. P. M.
	Remola	25.00	Cabinet			No	Wood	Metal	135v.	B. P. M.
	Remo Console	50.00	Console			No	Wood	Metal	135v.	B. P. M.
Rice & Hochster 132 Wash. Pl., N. Y. C.	Reflectone-A	8.00	Reflected	H-4½ B-3	10 oz.	Yes	Celluloid	Metal	90v.	B. P. M.
	Reflectone-C	12.00	Cabinet	H-4½x6½	1	Yes	Celluloid	Metal	90v.	B. P. M.
The Rola Co., Seattle, Wash.	Rola	36.00	Bell			No	Metal	Metal	150v.	B. P. M.
H. G. Saal Co., 1800 Montrose Ave., Chicago, Ill.	Symphony Grand-1	35.00	Bell	H-21½ B-13		No	Bakelite, Alum.	Aluminum	150v.	B. A.
	Symphony Grand-2	35.00	Bell	H-21½ B-13		No	Bakelite, Alum.	Aluminum	150v.	B. A.
	Concert-Grand-4	25.00	Bell	H-21½ B-13		No	Bakelite, Alum.	Aluminum	150v.	B. A.
	Stipple Junior-21	25.00	Bell	H-18½ B-11		No	Bakelite, Alum.	Aluminum	150v.	B. A.
	Stipple Junior-22	25.00	Bell	H-18½ B-11		No	Bakelite, Alum.	Aluminum	150v.	B. A.
	Black Junior-24	20.00	Bell	H-18½ B-11		No	Bakelite, Alum.	Aluminum	150v.	B. A.
Son. Phono. Co., Inc., N. Y.	Sonora DeLuxe	30.00	Cabinet	16½x9½x9½	10½	No	5-ply Wood	Mica—2 1/8 in.	160v.	B. A.
Signal Elect. Mfg. Co., Menominee, Mich.	Amplion Dragon	46.00	Bell	H-20½ B-14½	5½	Yes	Mahogany	Metal	300v.	B. A.
Spartan El. Corp., N. Y. C.	Spartan Speaker	10.00	Bell		4½	No	Cloth & Fibre	Metal—2 in.	150v.	B. P. M.
Splitdort Elect. Co., 392 High St., Newark, N. J.	Splitdortone Type-A	19.50	Bell	H-24		Yes	Composition	Metal—3 in.	112v.	B. P. M.
	Splitdortone Type-B	10.00	Bell	H-21		No	Composition	Metal—2 in.	112v.	B. P. M.
	Splitdortone Type-C	35.00	Cabinet	H-		Yes	Composition	Metal—3 in.	112v.	B. P. M.
Standard Metal Mfg. Co., Newark, N. J.	Cygnat—2144	20.00	Bell	H-26 B-14		No	Metal	Mica	160v.	B. A.
	Standard—1144	17.50	Bell	H-24 B-14		No	Metal	Mica	160v.	B. A.
	Standard—188	10.00	Bell	H-20 B-8		No	Metal	Metal	130v.	B. P. M.
	Standard—155	8.00	Bell	H-14 B-5		No	Metal	Metal	130v.	B. P. M.
	Gem	12.00	Bell	H-14 B-11		No	Metal	Metal	130v.	B. P. M.
Stanley & Patterson, N. Y.	Concert Grand	30.00	Bell	H-24 B-14	8½	Yes	Aluminum	Metal	150v.	B. P. M.
Starr Piano Co., Rich., Ind.	Starr	25.00	Cabinet			No	Wood-Spruce	Metal	130v.	B. M. P.
Star Radio Co., 800 Pine St., Seattle, Wash.	Star O'one	30.00	Bell	H-23 B-14	8	No	Aluminum	Mica—2 1/8 in.	160v.	B. A.
	Gold Star	18.00	Bell	H-20 B-10		No	Aluminum	Mica—2 1/8 in.	160v.	B. A.
Stromberg-Carlson Tel. Mfg. Co., Rochester, N. Y.	Stromberg-Carlson-1-A	17.50	Bell	H-26 B-13	4	Yes	Fibre	Metal	135v.	B. P. M.
R. E. Thompson Mfg. Co., Jersey City, N. J.	The Thompson Speaker	28.00	Bell	H-28½ B-14½	7	Yes	Rubber Comp.	Bakelized Linen—2½ in.	150v.	B. P. M.
Timbretone Mfg. Co., Hoosick Falls, N. Y.	Timbretone	20.00	Bell	H-12 B-8½	1½	No	Wood	Cloth—2½ in.	135v.	B. A.
J. S. Timmons, Germantown, Pa.	Timmons Talker	35.00 25.00	Cabinet Cabinet	H-10 H-10		Yes No	Metal Metal	Metal Metal	150v. 150v.	B. P. M. B. P. M.
Triangle Electro Trading Co., 632 B'way, N. Y. C.	Berwick Supreme	15.00	Bell	H-24		Yes	Fabric Comp.	Metal—3½ in.	120v.	B. P. M.
Trimm Radio Mfg. Co., 24 S. Clinton St., Chic., Ill.	Homespeaker 20	10.00	Bell	H-22 B-10	7	No	Volconite	Ferrotone—2 in.	150v.	B. P. M.
	Concert 80	25.00	Bell	H-22 B-15	15	Yes	Volconite	Ferrotone—2½ in.	150v.	B. P. M.
True Tone Radio Mfg. Co., Chicago, Ill.	"Concert Grand"	10.00	Bell	H-15 B-9½		No	Composition	Metal	135v.	B. P. M.
Tel. Main. Co., Chic., Ill.	Telmacophone	15.00	Bell	H-11½ B-11	4½	No	Metal	Metal	135v.	B. P. M.
United Rad. Corp., N. Y.	Peerless & Davis	8.50	Bell	H-22½ B-10	3½	No	Fibre	Metal—2 in.	120v.	B. P. M.
Utah Radio Prods. Co., Chicago, Ill.	Utah	25.00	Bell	H-21½ B-13½	11	No	Rubber	Aluminum	135v.	B. P. M.

(Loud Speakers Concluded)

Wm. A. Welty Co., 36 S. State St., Chicago, Ill.	Welty-A Welty Type-B	25 00 18.75	Bell Bell	H-21 B-13½ H-21 B-13½	6 6	No No	Fibre Fibre	Metal—2½ in. Metal—2 in.	150v. 120v.	B. P. M. B. P. M.
White Beauty Elect. Co., Chicago, Ill.	White Beauty No. 143	12 00	Bell	H-24		Yes	Fibre	2½ in.	160v.	B. P. M.
Williams Radio Co., Detroit, Mich.	Echo-Tone Model-A	25 00	Bell	H-24 B-16	6	Yes	Aluminum	Steel—3 in.	135v.	B. P. M.
Western Elect. Co., Front St., N. Y. C.	14-A 540-AW 521-CW	140.00 35.00 18.50	Cabinet Cone Bell	15½x18½x18½ H-21 C-18 H-23 B-10	20 5 4½	Yes No No	Wood Parchment Paper Black Fibre	Metal Same Metal	300v. 160v. 160v.	B. A. B. A. B. P. A.
Wilson Uten. Co., Day., O.	"Moon"	7 50	Bell	H-15 B-10	6		Aluminum	Unit not furnished		

"Radio Retailing's" Listing of Head Sets

Manufacturer's Name and Address	Trade Name and Model Number	List Price	Weight	Direct Current Resistance	A. C. Impedance 1,000 Cycles	Kind and Size of Diaphragm	Type of Mechanism
Ajax Elect. Specialty Co., St. Louis, Mo.	Ajax—R-22	4.25	11 oz.	2,000 ohms.		Iron—2½ in.	B. P. M.
Auth Elect. Specialty Co., N. Y. C.	Auth—Type-DA	5 00	1 lb.	2,200 ohms	18,000 ohms	Ferrotypes—2½ in.	B. P. M.
Nathaniel Baldwin, Salt Lake City, Utah	Baldwin—Type-C	12.00	18½ oz.	1,300 ohms	22,000 ohms	Mica—2½ in.	B. A.
	Baldwin—Type-D	13.00	14 oz.	1,625 ohms	16,500 ohms	Mica—2 in.	B. A.
	Baldwin—Type-E	12.00	18½ oz.	1,300 ohms	22,000 ohms	Mica—1½ in.	B. A.
	Baldwin—Type-F	13.00	14 oz.	1,625 ohms	16,500 ohms	Mica—1½ in.	B. A.
	Baldwin—Type-G	13.00	18 oz.	1,300 ohms	22,000 ohms	Mica—1 in.	B. A.
Briggs & Stratton Corp., Milwaukee, Wis.	"Basco"	6.00	13½ oz.	2,000 ohms		Metal—2½ in.	B. P. M.
	"Basco"	7.50	13½ oz.	3,000 ohms		Metal—2½ in.	B. P. M.
Brandes, Inc., 237 Lafayette St., N. Y. C.	Superior Navy	6.00 8.00	11½ oz. 11 oz.	2,000 ohms 3,000 ohms	@ 800 cycles 11,000 cycles 14,000 cycles	Metal Metal	B. P. M. B. P. M.
Cannon & Miller Co., Springwater, N. Y.	Cannon Grand Cannonball	4.75	10½ oz.	2,200 ohms	23,000 cycles	Japanned—2½ in.	B. P. M.
		3.50	10 oz.	2,000 ohms	20,000 cycles	Japanned—2½ in.	B. P. M.
Dictograph Prods. Corp., N. Y. C.	Aristocrat—R-3	6.00	10 oz.	3,000 ohms		Metal—1½ in.	B. P. M.
Electrical Prods. Mfg. Co., 69 Sprague St., Providence, R. I.	Dymac—Type-A	6.00	12 oz.	2,200 ohms	20,000 cycles	Ferrotypes—2½ in.	B. P. M.
	Dymac—Type-G	5.00	11 oz.	2,200 ohms	20,000 cycles	Ferrotypes—2½ in.	B. P. M.
	Dymac—Type-E	3.00	10 oz.	2,200 ohms	20,000 cycles	Ferrotypes—2½ in.	B. P. M.
Elect. Industries Mfg. Co., N. Y. C.	Ultra, Marconi Type	8.00	12 oz.	2,100 ohms	22,000 cycles	Metal—2 in.	B. P. M.
Herbert H. Frost, Chicago, Ill.	Frost—No. 161 Frost—No. 171 Frost—No. 172	4.00		2,000 ohms	12,000 cycles	Ferrotypes	B. P. M.
		5.00		3,000 ohms	15,000 cycles	Ferrotypes	B. P. M.
		6.00		3,200 ohms	16,000 cycles	Ferrotypes	B. P. M.
Globe Phone Mfg. Co., Reading, Mass.	Globe—500	5.00	14 oz.	2,200 ohms		Metal	B. P. M.
T. H. Goldschmidt Corp., N. Y. C.	N & K	8.50	12 oz.	4,000 ohms		Metal—2½ in.	B. P. M.
Hamburg Brothers, 619 Grant St., Pittsburgh, Pa.	Pennsylvania—Type-E-25 Pennsylvania—Type-L-32	3.50	12 oz.	2,500 ohms		Metal	B. P. M.
		5.00	12 oz.	2,500 ohms		Metal	B. P. M.
The Hart & Hegeman Mfg. Co., Hartford, Conn.	H & H W613 H & H W614		9 oz. 9 oz.	3,000 ohms 2,200 ohms		Metal—2 in. Metal—2 in.	B. P. M. B. P. M.
Holtzer Cabot Elect. Co., 125 Army St., Boston, Mass.	National Universal	6.00	16 oz.	2,200 ohms	12,000 cycles	Special Ferrotypes	B. P. M.
		9.50	12 oz.	2,000 ohms	18,000 cycles	Special Ferrotypes	B. P. M.
International Radio Tel. Apparatus Co., 395 Broadway, N. Y. C.	International—K-17	6.50	11½ oz.	3,000 ohms		Adjustable—1½ in.	B. P. M.
	International—K-18	6.50	11½ oz.	4,000 ohms		Adjustable—1½ in.	B. P. M.
	International—K-17-C	8.50	11½ oz.	3,000 ohms		Adjustable—1½ in.	B. P. M.
	International—K-18-B	7.25	11½ oz.	4,000 ohms		Adjustable—1½ in.	B. P. M.
Leich Elect. Co., Genoa, Ill.	Leich—1B Lark	4.00	11 oz.	2,000 ohms		Ferrotypes—2½ in.	B. P. M.
		6.00	13 oz.	2,400 ohms		Ferrotypes—2½ in.	B. P. M.
Manhattan Elect. Sup. Co., N. Y. C.	Red Seal	6.00	13 oz.	2,500 ohms	25,000 cycles	Steel—2 in.	B. P. M.
Metro Electrical Co., Newark, N. J.	Metro Unitype	5.00		3,000 ohms	15,000 cycles	Metal	B. P. M.
Moss-Schury Mfg. Co., Inc., 2013 Franklin St., Detroit, Mich.	Repeater—Type-A Repeater—Type-B	4.00	14 oz.	2,400 ohms	20,000 cycles	Varnished Steel	U. P. M.
		5.00	14 oz.	3,000 ohms	24,000 cycles	Varnished Steel	U. P. M.
Wm. J. Murdock Co., 430 Washington Ave., Chelsea, Mass.	Murdock—56-A Murdock—56-B	4.00	12 oz.	2,000 ohms		Ferrotypes—2½ in.	B. P. M.
		4.50	12 oz.	3,000 ohms		Ferrotypes—2½ in.	B. P. M.
Pacnet Elect. Co., 91 Seventh Ave., N. Y. C.	"Everytone" "Everytone"	3.50	10 oz.	2,200 ohms	10,000 cycles	Soft Iron—2½ in.	T. P. M.
		3.75	10 oz.	3,000 ohms	10,000 cycles	Soft Iron—2½ in.	T. P. M.
Perfectone Radio Corp., N. Y. C.	Perfectone	5.00	12 oz.	2,500 ohms		Taggers Iron Enameled—2½ in.	B. P. M.
Penberthy Injector Co., Detroit, Mich.	Pico	4.00	10 oz.	2,200 ohms		Enameled Steel—2½ in.	B. P. M.
Radiotive Corporation, Brooklyn, N. Y.	Silvervoice—Type-A	12.00	11 oz.	1,200 ohms	20,000 cycles	Silk Corrugated	B. A.
Roller Smith Co., 233 Broadway, N. Y. C.	Universal	8.00	1 lb.	3,000 ohms	22,000 cycles	Soft Iron—2½ in.	B. P. M.
Radio Industries Corp., N. Y. C.	Rico	2.95	12 oz.	3,000 ohms		Silicon Iron—2½ in.	T. P. M.
Royal Elect. Laboratories, Newark, N. J.	"Royalfone"	4.50	11 oz.	2,800 ohms		Japanned Iron—2½ in.	B. P. M.
Spartan Elect. Corp., N. Y. C.	"Spartan"	5.00	8 oz.	2,200 ohms		Metal—1½ in.	B. P. M.
Spitman Elect. Co., N. Y. C.	"Seco"	5.00	11 oz.	2,400 ohms	18,000 ohms	Metal—2½ in.	B. P. M.
Splitdorf Elect. Co., Newark, N. J.	"Splitdorfone"—Model-F	6.50		3,000 ohms		Metal—2 in.	B. P. M.
Trimm Radio Mfg. Co., 24 S. Clinton St., Chicago, Ill.	Dependable—No. 60 Professional—No. 70	5.00	1 lb.	2,400 ohms	19,000 ohms	Ferrotypes—2 in.	B. P. M.
		7.50	1 lb.	3,000 ohms	22,000 ohms	Ferrotypes—2 in.	B. P. M.
Truetone Radio Mfg. Co., Chicago, Ill.	"Truetone" "Worthmore"	4.00 5.00		2,200 ohms 3,000 ohms		Metal Metal	B. P. M. B. P. M.
Triangle Electro Trading Co., N. Y. C.	Little Gem	3.00	10 oz.	2,200 ohms		Metal—2½ in.	B. P. M.
United Radio Corp., Rochester, N. Y.	Peerless & Davis	3.75	13 oz.	2,200 ohms	14,000 ohms	Metal—2 in.	B. P. M.
Union Fabric Co., Derby, Conn.	Ampl-Tone	5.00		2,000 ohms		Metal—2½ in.	B. P. M.
Western Elect. Co., 195 Broadway, N. Y. C.	Western Electric No. 1002-C	12.00	16 oz.	2,200 ohms	@ 800 cycles 22,000 cycles	Steel—1½ in.	B. P. M.

"Radio Retailing's" Listing of Phonograph Units

Manufacturer's Name and Address	Trade Name and Model Number	List Price	Weight	Volume Adjustment	Fits A and B Phonographs	Kind and Size of Diaphragm	Max. Plate Voltage	Type of Mechanism
Ackerman Bros., N. Y. C.	Model A	\$4.00	1 lb.	No	A and B	Metal—2½ in.	120v.	B. P. M.
Amplion Corp. of America, 280 Madison Ave., N. Y. C.	Amplion No. 67	19.00	1½ lb.	Yes	A and B	Metal	135v.	B. P. M.
	Amplion No. 35-A	25.00	1½ lb.	Yes	A and B	Metal	135v.	B. P. M.
Atwater-Kent, Philadelphia, Pa.	Atwater-Kent—6-C	10.00	15 oz.	Yes	B	Silicon Steel	165v.	B. P. M.
	Atwater-Kent—5-V	10.00	15 oz.	Yes	A	Silicon Steel	165v.	B. P. M.
Nathaniel Baldwin, Inc., Salt Lake City, Utah.	Type—H-1	6.00	8 oz.	No	812 Tap	Aluminum—2½ in.	200v.	B. A.
	Type—H-2	8.00	10 oz.	No	812 Tap	Aluminum—2½ in.	200v.	B. A.
	Concert Phono	20.00	1 lb. 4 oz.	No	A and B	Aluminum—2½ in.	200v.	B. A.
	Standard Phono	10.00	1 lb. 4 oz.	No	A and B	Aluminum—2½ in.	200v.	B. A.
Cannon & Miller Co., N. Y.	Cameo—Type-A	3.00	5 oz.	No	A	Metal—2¼ in.	90v.	B. P. M.
Dictograph Products Corp., 220 W. 42nd St., N. Y. C.	Dictograph	10.00		Yes	Universal	Metal—2 in.	120v.	B. P. M.
	R-5	10.60		Yes	Victor	Metal—2 in.	120v.	B. P. M.
		11.00		Yes	Edison	Metal—2 in.	120v.	B. P. M.
Electrical Products Mfg. Co., R. I.	Dymac—Type-C	5.00	12 oz.	Yes	A, adapter for B	Special Metal—2¼ in.	160v.	B. P. M.
Elect. Industries Mfg. Co., 326 W. 41st St., N. Y. C.	"Ultra"	10.00	6 oz.	Yes	A and B	Metal—2¼ in.	250v.	B. P. M.
	"Ultra"	7.50	6 oz.	No	A and B	Metal—2¼ in.	250v.	B. P. M.
	"Ultra"	5.00	6 oz.	No	A and B	Metal—2¼ in.	250v.	B. P. M.
Herbert A. Frost, Chicago, Ill.	Musette—20-P	5.50		No	A	Metal	135v.	B. P. M.
T. H. Goldschmidt Corp., N. Y. C.	N & K Unit	7.50		No	A	Metal—2½ in.	165v.	B. P. M.
Hamburg Brothers, Pittsburg, Pa.	Pennsylvania	5.00	1½ lb.	No	A and B	Metal	120v.	B. P. M.
Hardsocg Mfg. Co., Ottumwa, Iowa	Hardsocg—Type-H	4.50	5½ oz.	No	A	Metal—2 in.	120v.	B. P. M.
Hart & Hegeman Co., Hartford, Conn.	H & H PW666	7.50	3 lb.	Yes	A and B	Mica—2½ in.	150v.	B. A.
Herald Elect. Co., N. Y. C.	Herald	6.00	5 oz.	No	A and B	Metal—2½ in.	350v.	B. P. M.
Holtzer Cabot Elect. Co., Boston, M.	Holtzer-Cabot	10.00	8 oz.	No	A	Metal—1½ in.	150v.	B. P. M.
Jolley Radio Co., N. Y. C.	Model V. C.	8.00	8 oz.	No	A and B	Jolley—1½ in.	180v.	B. P. M.
Kirkman Eng. Corp., N. Y. C.	K-E	12.00	3 lb.	Yes	A and B	Steel Alloy—4 in.	160v.	B. P. M.
The Magnavox Co., Oakland, Calif.	Magnavox—Type P-M-4 Model L-A	15.00	1½ lb.	No	A and B	Mica—2¼ in.	120v.	B. A.
Man. Elect. Supply Co., N. Y. C.	Red Seal	5.00	16 oz.	No	A and B	Steel—2 in.	90v.	B. P. M.
Metro Elect. Co., Newark, N. J.	Metro	5.00		Yes	A and B	Metal	135v.	B. P. M.
Mozart-Grand Co., Newark, N. J.	Mozart	4.00		No	A and B	Metal	135v.	B. P. M.
O'Neil Mfg. Co., W. New York, N. J.	"Audiophone"	16.00	3 lb.	Yes	A and B	India Mica—2½ in.	410v.	B. A.
Multiple El. Prods. Co., Newark, N. J.	Atlas—Type-B			Yes	Attachments	Compound	150v.	B. P. M.
Perfectone Radio Corp., N. Y. C.	Perfectone	8.00	1 lb.	Yes	A	Silicon Steel—3 in.	120v.	B. P. M.
Penberthy Injector Co., De't, Mich.	Pico	4.00	6 oz.	Yes	A and B	Enameled Steel—2¼ in. diam.	100v.	B. P. M.
Radiotive Corp., Brooklyn, N. Y.	Silver Voice—Type-F	25.00	2 lb.	No	A and B	Silk Corrugated	135v.	B. A.
Reichmann Co., Chicago, Ill.	Thorola—No. 6	15.00	5 lb.	No	A and B	Mica 1¼ in.	135v.	B. A.
J. Thos. Rhamstine, Detroit, Mich.	Needlephone	10.00	¾ lb.	Yes	A and B	Employs Phonograph diaphragm	135v.	B. P. M.
Radio Industries Corp., N. Y. C.	Melotone	10.00	1 lb.	Yes	A	Taggers Iron—2½ in.	220v.	B. P. M.
The Remo Corp., Meriden, Conn.	"Remo"	5.50		Yes	A	Metal	135v.	B. P. M.
Royal El. Laboratories, Newark, N. J.	"Rolafone"	5.00	6 oz.	Yes	A	Silicon Steel—2¼ in.	135v.	B. P. M.
Sonora Phono. Co., Inc., N. Y. C.	Sonora DeLuxe	15.00	1 lb.	No	A	Mica—2½ in.	165v.	B. A.
Spartan Elect. Corp., N. Y. C.	"Spartan"	7.50		Yes	A	Metal—2½ in.	150v.	B. P. M.
Stentorphone Co., Los Angeles, Calif.	Calif. Nightingale	18.80	16 oz.	No	A and B	Mica—2½ in.	200v.	B. P. M.
Spielman Elect. Co., N. Y. C.	Seco	3.00	6 oz.	Yes	A and B	Metal—2½ in.	150v.	B. P. M.
Splitdorf Elect. Co., 392 High St., N. Y. C.	"Splitdorf"—Model-AP	7.50		Yes	A and B	Metal—3 in.	112v.	B. P. M.
	"Splitdorf"—Model-E	4.50		No	A and B	Metal—2 in.	112v.	B. P. M.
Star Radio Co., Seattle, Wash.	Star O Tone	18.00	3 lb.	No	A and B	Mica—2½ in.	165v.	B. A.
Teagle Co., 1125 Oregon Ave., Cleveland, Ohio	Dulce-Tone—Model-S	10.00		No	B	Uses Phonograph diaphragm	150v.	P. M.
	Dulce-Tone—Model-V	10.00		No	A			
Trimm Radio Mfg. Co., 24 S. Clinton St., Chicago, Ill.	"Giant" Type 30	10.00	1½ lb.	Yes	A	Ferro Type—2½ in.	150v.	B. P. M.
	"Little Wonder"—40	4.50	½ lb.	No	A	Ferro Type—2 in.	150v.	B. P. M.
True Tone Rad. Mfg. Co., Chic., Ill.	"Truetone"	2.50	½ lb.	No	A	Metal	135v.	B. P. M.
Triangle El. Trading Co., N. Y. C.	"Little Gem"	2.00	2½ oz.	No	A	Metal—2½ in.	90v.	B. P. M.
United Radio Corp., Rochester, N. Y.	Peerless & Davis	2.50	9 oz.	No	A	Metal—2 in.	120v.	B. P. M.
Utah Rad. Prods. Co., Chicago, Ill.	Utah	10.00	1½ lb.	No	A	Aluminum	135v.	B. P. M.
Union Fabric Co., Derby, Conn.	Ampl-Tone	3.00		No	A and B	Metal—2½ in.	135v.	B. P. M.
Wm. A. Welty Co., Chicago, Ill.	"Welty"—Type-B	6.00		No	A	Metal—2 in.	120v.	B. P. M.
Western Elect. Co., N. Y. C.	No. 522-W	9.50	18 oz.	No	A	Steel—1½ in.	165v.	B. P. M.

B.A. = Balanced Armature.
B.P.M. = Bi-polar Permanent Magnet

P = Weight Packed.
T.P.M. = Tri-polar Permanent Magnet.

U.P.M. = Uni-polar permanent magnet.
E.D. = Electro-Dynamic.

A = Victor, Sonora, Brunswick, Columbia.
B = Edison, Pathe.



The modern physician is thoroughly sold on the idea of electrical equipment. He employs battery treatments, light treatments, X-ray and radium. He will use "radio treatment" to keep the patient cheerful if you show him its advantages.

Doctors Are Preferred Prospects

DOCTORS are preferred prospects! Physicians, as a class, offer unusual opportunities to the radio dealer who is keen enough to see the possibilities in this market.

As a rule, doctors possess extremely keen minds, they are quick to sense the advantages of the latest inventions, they are usually well-to-do, and aside from these considerations, they realize that a radio set will keep them in touch with the rest of the world and that they can thus keep abreast of the times without ever leaving their homes or offices.

Visit Physicians in Their Offices to Sell Them the Idea

Fortified with this knowledge, the dealer's next step is to compile a list of the physicians in his town, learn their office hours and visit them in their offices, with full particulars of what he has to sell at his fingertips. Be brief and to the point and set a definite time for a home demonstration.

Radio is becoming recognized as a curative means of no small proportions. Doctors have prescribed it for their patients, along with "shake well before using and take a complete rest." "A complete rest in the country" for nervous breakdowns and other neurotic cases is no longer complete unless the doctor includes a radio set in the prescription.

"Drugs," said one physician, recently, "cure the body. Radio cures

the mind, on which the body is dependent. As a cure for nervous disorders, and in the process of convalescence from any disease, there is nothing to equal the qualities of a radio set.

"Keeping the patient contented, and his mind at ease and free from worry over his condition is one of the chief problems a doctor must face. I dare say that ninety per cent of the factors in a patient's recovery is the patient's own mental attitude. A radio set puts him in the right mental attitude with the least effort. While listening to a talk or a concert, he forgets himself and his illness. His mind is cured and the recovery of his body is thus materially aided.

"It is the psychological effect of radio on the patient's mind that makes it such a wonderful aid to recovery. If a patient lacks the will to live or to recover, he is frequently doomed beforehand. But if he hears continually the good things that are coming over the air, although subconsciously perhaps, he will, nevertheless, acquire first the desire, then the determination, to go on living.

Radio Aids Pneumonia Victim to Recovery

"Let me quote from a letter written to me by the wife of a man whom I treated for pneumonia, and who came very near death's door. I had a radio set installed in the hospital room where he was confined. His wife says, 'The patient has been a new man since he has had the radio

set by his bed. He no longer lies indifferently staring at the ceiling, without interest in anything. He sits up, smiling, demands the set be turned on, and discusses the programs. He has developed an appetite and sleeps excellently, for the first time.

"I cannot tell you how grateful I am for the set, which has accomplished wonders for my husband. Without it, I am sure his days would not only be extremely dull but his recovery would have been greatly retarded."

"Radio Seriously Considered a Therapeutic"

"It is letters such as these which prove my contention that radio may be seriously accepted as a therapeutic. I used to be a radio nut. I am now its humble worshipper."

Considering the situation from its practical, radio dealer standpoint, the following experiences of a Brooklyn, N. Y., dealer are of extreme interest.

A chance remark by a physician started this dealer after the business of the doctors and a direct-mail campaign was undertaken as well as personal canvassing. The physician, who had spent \$2,487 in the past two years on radio in this dealer's store, told the dealer he found his radio as refreshing to him as his night's rest, and he wondered if other doctors felt the same way. The campaign was started shortly after that.

The canvassing was done first by

*Radio is "good medicine"
because it keeps the patient
entertained and quiet and
helps make him well—Do
your doctors prescribe radio?*



There is nothing more important in overcoming illness than maintaining a good mental condition in the patient. Children fret. Grown-ups lose heart. Both retard recovery. Radio at the bedside keeps the mind occupied and helps the doctor.

telephone and appointments made for salesmen to call. Demonstrations at the homes of the doctors, for in most cases medical men have their offices in their dwellings, were arranged at times suitable to the physician. This sometimes meant that it was late in the evening when the salesman with his set would be able to secure the doctor's attention but it did not take long to close the sale once the set was in operation.

The direct sale to the doctors themselves does not close the transaction. This dealer's appeal to the doctor is not limited to arguments covering his own pleasure and amusement, but he offers to cooperate in installing sets promptly and then maintaining those sets at maximum efficiency where sickness is

or has been. Doctors have come to depend on this service and even recommend the installation of sets in the homes of their patients.

This has produced a telephone sales business that has grown so rapidly that it almost equals the counter trade, for patients are quick to act on suggestions of their medical advisor and they do not wait to send a member of the family to the store but turn instead to the telephone.

Also Brings New Customers Into Store

The counter trade, however, is also increased because the customer, when he is able to get out again, naturally has a number of changes or improvements he desires to make.

It is notable that it was not necessary to offer special inducements of any nature to the doctors but the dealer made his bid for business on the strength of his service and the quality of his merchandise.

Following out the doctor-radio idea, but on a much larger scale, engineers of The Aeolian Company, New York, recently performed a distinctive feat of radio installation at the Psychiatric Institute, in Morristown, N. J. A radio receiving set was erected that permits the perfect receiving of radio programs in the rooms of fifty-eight patients.

The project was planned by Howard J. Haines, radio engineer of The Aeolian Company, and J. A. Wotton, also of The Aeolian Company,

was in charge of the installation.

The receiving set is a five tube neutrodyne, to which are connected 58 pairs of headphones and two loud speakers. One pair of headphones is placed over the bed of each patient, with sufficient extension cord to permit its use either in bed or sitting up. As practically none of the patients is bed-ridden, entertainment is also provided through the loud speakers in the recreation rooms.

The antenna is stretched between two large wings of the building and has a total length of 92 feet, with a 60 foot lead-in to the office of the Institute where the set is placed. From this point wires are run through the three floors of the building to the head phones over each bed. The installing of this large system required the work of three engineers for one week.

Doctors Find Installation a Great Benefit

The radio has been enthusiastically praised by the patients, and the doctors of the Institute are finding it a great influence for good. Programs are chosen from the different stations in the vicinity, so that from 11 a.m. until 11 p.m. all varieties of entertainment are coming in for the amusement of the patients. A printed copy of the program for the day is sent in the morning to each patient, so that he may choose his time to listen in.

This unique installation indicates

Get the Doctor's Attention

with a mail campaign and a telephone call, asking for an appointment. Follow this up with radio literature and a visit to his office.

Many doctors are so "sold" on radio that they prescribe it for their patients. One Brooklyn physician spent \$2,500 in two years on radio products. This story tells you how to get back some of the cash you have spent for doctors' bills.

something of the possibilities of the radio in similar institutions and in hotels. The engineering difficulties are all successfully met and the perfect reception through the large building helps to prove the belief of many radio engineers that in the future large buildings devoted to the service of the public will be equipped during construction with radio apparatus.

Prominent Physicians Recommend Radio

Editor, *Radio Retailing*:

Replying to your inquiry, not only have I found my radio set the source of much personal satisfaction and enjoyment in bringing to me—in the relaxation of my own home—the world's best music, but I have also prescribed sets for many of my patients. At least a hundred persons have thus purchased radios at my direct suggestion.

In my professional practice, radio programs have proven particularly valuable in building up the hearing of persons who have suffered for years from chronic deafness. Following the surgical operation, which physically restores the means of hearing so long unused—these patients need "exercise" of the auditory apparatus (just as a long-unused limb would need to be exercised), and this "exercise" the radio provides, under conditions subject to perfect control.

It is also a matter of medical observation that patients who have long been recluses due to chronic ailments are by radio brought back into the world of events, and so have their spirits and general condition markedly improved. Certainly radio is a valuable ally for the physician—whether general practitioner or specialist.

PAUL V. WINSLOW, M.D.

580 Park Avenue,
New York City.

Editor, *Radio Retailing*:

I sincerely believe that radio has been one of the greatest boons to both the doctor and the invalid. For the doctor, whose professional duties make it very difficult for him to attend the opera and concerts it is a wonderful relaxation after a strenuous day's work to sit quietly and listen to the world's best music by its best artists. For the convalescent, the bedridden, the shut-in it offers the most cheering and heartening influence.

While I am not a so-called "radio fan" I can sincerely recommend it to both doctor and patient.

MAURICE M. POMERANZ, M.D.
Hotel Ansonia, New York.

How 23 Dealers Raised Money to Expand

(Continued from Page 237)

order to increase their business and protect themselves, they decided to organize a small corporation with a capital stock of \$1,000. Necessary

papers were filed with the Secretary of State and through the agency of a friendly attorney the total cost did not exceed \$25, including the necessary stock certificates and seal. The brothers each held \$150 worth of stock and the mother \$500 worth. The remainder was not issued. In this way a successful business was expanded and as the needs of the corporation became greater, the capital stock was increased and the stock distributed through friends and relatives. In certain states "Blue Sky Laws" require a careful examination of corporations, and for this examination a fee is charged according to the law.

He Borrowed Too Much

The proprietor of two successful radio stores felt that he should increase his capital in order to redecorate and lay in a better line of goods. He made the mistake of borrowing \$25,000, when \$12,000 would have been sufficient. The burden of carrying the additional \$13,000 almost put him out of business.

Used the Curb Market

Through a financing company, stock was issued on the New York Curb Market. Arrangements with the financing company were such

that immediate money could be secured for expansion. A certain percentage of stock was later offered to the public for \$15 a share, after the finance company had given the dealer \$8 a share for it. This stock has fluctuated wildly and no dividends have been paid as yet. This special method is not recommended.

Mortgaged His Home

A small home helped this dealer finance his expansion. He was able to secure a mortgage for \$1,000 at 6 per cent from a friend. This was sufficient to cover the amount needed for his expansion. In order to protect his wife and family while this mortgage was being carried, he took out a thousand dollars' worth of term insurance. This term insurance cost him less than ten dollars and gave full protection in the event that anything happened to him before the mortgage was paid off.

Had a Windfall

Through the death of a wealthy relative, this dealer fell heir to a few thousand dollars, a part of which was used to expand a growing radio business.

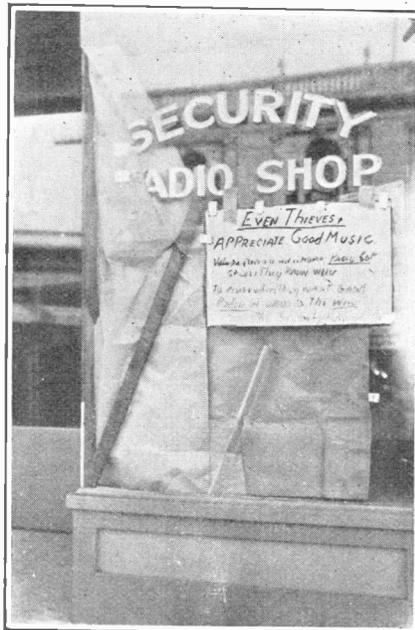
Relatives Helped

This man had been building sets for neighbors in spare time and eventually was able to open a small radio store. An uncle for whom he had built a set became greatly interested and made him a friendly offer of \$1,000 with which to be able to expand his store. In return for the \$1,000, the dealer conveyed to his uncle a 49 per cent interest in the business and both are well satisfied with the deal.

Had Difficulty Getting Accommodation from Small Bank

This dealer was in business before the radio boom started in 1922 and had always done business on a satisfactory basis with a small bank which was friendly. When the time came for expansion and his needs were great, the small bank could not handle his account as it was beyond its limit. Larger banks were appealed to but it was several months before he could make the necessary connections. In the meantime his competitors had been piling up the profits. This dealer learned a hard lesson and today he does his banking through one of the largest banks in his city.

Capitalizing Robberies



There's nothing in a name. The Security Radio Shop, Los Angeles, Cal., was recently broken into, in spite of its name, and robbed of its entire line of radio sets. The proprietor, J. L. Burke, capitalized the incident by putting a sign in the broken window, to this effect: "Even thieves appreciate good music. When they wanted a radio set without paying for it, they knew where to come to get a good one."



“Put Yourself in the Customer’s Shoes”

J. A. S. Woodrow, of Cambridge, Mass., Conducts His Radio Business on the Policy of Putting Himself in the Customer’s Place and Not Selling Anything He Wouldn’t Buy If He Were on the Other Side of the Counter

EXIT ice cream—enter radio. A sign in a Cambridge, Mass., radio store, which, in days gone by, was a drug store, reads, “Soda Fountain Closed for the Winter. Visit Our Radio Department.”

Once upon a time, before the days when music and talks were picked out of the air, J. A. S. Woodrow did a thriving drug store trade in the college town of Cambridge. He is a university graduate and a radio fan.

When radio first started to become popular, Woodrow, who, as he puts it, “played with electricity all his life,” began to experiment with the new craze. He bought parts and accessories and accessories and parts until his prescription counter took on more the appearance of a radio shop than a drug store.

Stock Valued at \$15,000

That gave Woodrow an idea. “Here I’ve been buying hundreds of dollars worth of radio parts,” he commended. “It’s time I began to make some money out of it.” That, of course, was four years ago. He invested a few thousand dollars in radio equipment and advertised it in the local newspapers.

Woodrow’s is no longer a drug store. It is a radio store and has what Woodrow considers the most completely equipped repair and service laboratories in his section of New England, and a radio stock valued at \$15,000.

There are still some traces of the drug store left. The soda fountain is open in the hot weather to ease over the summer radio slump, and a display of candy is temptingly set out on the radio counter. And prac-

tically every radio customer reaches over and invests a dime or a quarter in satisfying his sweet tooth. Does it pay to carry such a sideline in connection with radio? Emphatically yes, said Woodrow, as he invited *Radio Retailing’s* editorial representative to have a bar of milk chocolate.

In all our experience, we had never before been invited to help ourselves to anything in a radio store. Nary a condenser, nor a grid leak, nor even a piece of bus bar have we ever

two things. First, that there is big money in parts, and second, that repairs and service will do much to offset seasonal fluctuations.

Here are some of the types of service Woodrow renders his customers and the price he gets for them:

Testing tubes.....	25c.
Testing fixed condensers.....	25c.
Testing grid leaks.....	25c.
Matching super-heterodyne transformers	\$5

And another way Woodrow has of rolling up added profits is to test grid leaks and fixed condensers, stamp them with his seal of approval as being of precisely the correct capacity, and selling them at 25c. over the list price. Many of his customers will not buy grid leaks or fixed condensers without Woodrow’s approval. And they are glad to pay for the service, knowing that they are getting absolute accuracy.

“Know the Purchaser’s Viewpoint”

Coupled with his radio knowledge, Woodrow has a keen merchandising sense as well as the purchaser’s viewpoint. He has written articles on drug store merchandising for drug store trade papers and so his retail experience in other lines has aided him to retail radio.

“And then,” he declares, “I stood on the other side of the radio counter so long and bought parts that I have the ability to see things in the purchaser’s light as well as my own. I have tried to run my radio business to please myself not as the seller but as the consumer.

“I put myself in the customer’s shoes and try to satisfy myself. I have never done anything nor sold

Service and Parts

are the only things Woodrow sells and they have multiplied his original investment in radio exactly ten times in four years.

By giving a complete radio technical and testing service, Woodrow’s success has proven that service and parts must not be disregarded in the conduct of a radio business.

been offered. So we took the radio chocolate with grateful thanks.

Woodrow’s radio business has been built up on service and repairs. From three employees in his drug store, he has grown to need eleven in radio. His repair men are experts in building sets as well as repairing them, and during the hottest days, Woodrow says, there were always sets waiting to be repaired or built to order.

Woodrow’s is proof conclusive of

anything that I would not have done or bought if I were the patron instead of the retailer.

"I handle only standard merchandise that I know to be of the highest quality so that I can truthfully tell my customers that they are getting the best there is."

"I keep pounding on service, service, service. That is the small town dealer's biggest selling factor. I venture to say that three-quarters of my customers come to me because of the service I can give them. And I don't mean free service either. I charge for every kind of service.

"People are coming more and more to buying their radio products from the home town dealer. They've been gypped so often in the cities that they are beginning to have confidence in their home towns. Naturally, the dealer who has proven himself most worthy of confidence is the one who will get the trade.

"I get \$2 an hour for my service and repair work, which has always carried me over the summer, I make an installation charge of \$10 to \$15 depending on the distance from the store, and my slogan is 'You can't go wrong at Woodrow's.'"

The fame of Woodrow's service has spread throughout New England, as is illustrated by the fact that tubes are sent to him from the remotest parts of Maine, Vermont and New Hampshire, to be tested.

Asks Customers to "Tune-in and Listen"

W. C. Kaiser, of Fort Wayne, Ind., finds that it is a big help in making radio sales to ask customers to go to a receiving set, put on the ear-phones and tune in for themselves.

Mr. Kaiser declares that almost every time he asks a customer to go to the receiving set and tune in, the customer is apparently delighted and does so at once. A very good percentage of all of the customers who try out the receiving set become deeply interested in it and to some the store has made worth-while sales.

Undoubtedly one of the best methods of increasing radio sales is to permit people to try out receiving sets for themselves, Mr. Kaiser says.

Loud Speaker-Electric Sign Advertises Minnesota Store

A combination loud speaker and electric sign mounted on a touring car is the unique advertising scheme of The Radio Store of Bemidji, Minn. A. A. Lee, proprietor of the store, claims his shop is the only one in northern Minnesota devoted exclusively to radio.

The horn of the speaker is made of three-eighths inch selected pine, us-

ing a Magnavox electrodynamic loud speaker base. A "Haynes" super-heterodyne receiver pulls in the signals, and a Western Electric power amplifier gives enough volume to be heard two miles, Mr. Lee declares. Reception is clear, with very little distortion, due to the construction of the horn.

The mouth of the speaker is covered with ordinary wire screen and painted white. The letters are cut-outs and pasted on the screen. The inside of the horn is enamelled in white, and is wired for four electric bulbs. Reflectors are used to throw the light in on the enamelled inside surface. This makes an effective electric sign as well as loud speaker, the "juice" being supplied by the auto's storage battery.

Nearly every surrounding town has been visited and Lee reports a lot of good advertising from the idea. Later, it is planned to erect the speaker in front of the store, wire it more completely, and use it as an electric sign as well as a power amplifier.

"Trade-In" Values Set for Radio Receivers

The radio division of the Music Trades Association of Southern California has thoroughly investigated the local situation in regard to allowances for radio sets returned in partial exchange for new sets. The prevailing custom of doing this in the automobile, piano and phonograph business has literally driven the radio dealers to follow suit. Their recommendations are embraced under the following schedule:

- Allowance on radio set one month old—less 15 per cent today's list price.
- Allowance on radio set two months old—less 30 per cent today's list price.
- Allowance on radio set three months old—less 45 per cent today's list price.
- Allowance on radio set four months old—less 50 per cent today's list price.
- Allowance on radio set five months old—less 55 per cent today's list price.
- Allowance on radio set six months old—less 60 per cent today's list price.
- Allowance on radio set seven months old—less 65 per cent today's list price.
- Allowance on radio set eight months old—less 70 per cent today's list price.
- Allowance on radio set nine months old—less 75 per cent today's list price.
- Allowance on radio set ten months old—less 80 per cent today's list price.

After ten months the committee states that it believes that the allowance—if given at all—should be 80 per cent or more off today's active list price.

Mounts Loud Speaker on Automobile



Here is a unique combination in triplicate, the brain-child of a peppy Minnesota radio retailer. It is a loud speaker, wired electrically and used as an electric sign, and

mounted on an automobile, the current being supplied from the car's storage battery. Clear reception audible for two miles is claimed by the horn's proud parents.

Servicing Radio Sales—II

Having Analyzed the "No Charge" Service Policy Last Month, Mr. Stark Here Discusses the Merits of Three Other Plans the Dealer May Use

By KIMBALL HOUTON STARK

MY WHOLE conception of the "no charge" service proposition is that each radio retailer should ultimately reduce his general business practice to a point where he will know his exact costs—then, "sales service" can be rendered on a "no charge" basis with a just profit to the dealer and assured satisfaction to the customer, and with profit to the industry. On the other hand, the man who doesn't know his costs and who is rendering an unjustified service to the consumer at a cost to himself is not only hurting himself, but is also hurting the consumer-to-be and the radio industry that will exist tomorrow.

"One Dollar per Call" Service Plan

Another method of handling "sales service," which has been used to some extent and quite successfully, at least from the point of view of keeping the customer satisfied with both receiver and costs, is the "one dollar per call" plan. This is used by the Westburgh Electrical Service Company of Jamestown, New York. This company standardized its rates for service calls by making a minimum charge of \$1 for each call. The plan was advertised in local newspapers and service calls made on all requests, whether they came from people who had purchased their sets from the Westburgh Company or not.

The service man carries with him tubes, batteries, antenna equipment and so forth and makes complete reports on every service call. The service man was paid \$35 a week. Service calls during winter months averaged between fourteen and eighteen a day. In the summer calls averaged about ten a day.

From the analysis given in our discussion of the "no charge" plan, we can realize that if the dealer gets \$1 back for each service call made, his costs at an average of \$3 per call

are only two-thirds of what they might be under the "no charge" plan. He is thus reducing his costs per service call and getting possibly a closer, more intimate contact with the consumer than he would, were he using the "no charge" basis, for when a man pays something for either merchandise or service, he is going to be mighty sure to get as much or more in value than he paid for, and the psychological reaction to the sales talk is greater than where the consumer thinks he may be either "putting it over" on the dealer, or getting something for nothing.

This \$1 per service call plan seems to me to be logical and should work out with success, but only if part of the cost of "sales service" is charged to advertising or sales promotion.

A very similar plan which is being generally used is that which we may designate as the "cost per hour" plan. This is the same as the "\$1 per call" plan except that the time is charged for on a cost per hour basis rather than on a given \$1 per call basis.

In checking up the service reports of the dealers in the "Who Is Selling Radio Today and How" survey in the January issue of *Radio Retailing*, I find that four of the ten retailers

who are analyzed are charging for service on an hourly basis, ranging in the case of the hardware store, from \$1 an hour to the furniture store at \$3 per hour. In most cases the service charge is made if the customer and not the set is at fault.

Frankly, it is my conception that the "cost per hour" plan of being paid for service is the most desirable one as it pays the radio retailer for work which he should be paid for if the customer is at fault, and it is also fair to the customer for if he is wrong then he certainly should pay for the service work that is necessary. The question of cost seems to me to be well solved at the "\$2 per hour" rate, for it will cost any dealer approximately this amount to handle service calls and to make any money at all in extending this service to his customers.

The "Cost per Year" Plan

In the beginning of 1923 there were several plans originated for handling radio "sales service." The most important one was that which may be designated the "cost per year" plan. A radio service corporation in St. Louis, I believe, attempted to carry out such a plan, charging the consumer, on the basis of a simple service contract, \$15 per year for the service which included twelve monthly inspections of his receiving equipment and any advisory service which might go with it in the way of guidance in the purchase of new equipment or in re-installation. It seems to me that such a cost of \$15 per year is low for service calls on a receiver, at least from the service question point of view, but in all probability high enough from the customer's point of view. It is my understanding that this general plan did not work out as successfully as it was hoped it would.

When the radio boom started and,

The Cost of "Service"

should be known by every radio retailer. Only by knowing his costs will he learn whether his service policy, whatever it may be, is showing a profit or a loss.

If the service problem is worrying you, by all means take to heart the suggestions Mr. Stark offers. One of them may solve the problem for you.

in fact, after it was well under way, every radio dealer who came into the game new to radio had to depend upon buyers, managers, and salesmen who knew little of radio. In the majority of cases he recruited his personnel from the ranks of "radio amateurs." In my mind, it is also this self-same radio amateur who, because of his knowledge of technical radio, can be of as much or more assistance to the radio retailers of this country by giving his place behind the counter to the radio salesman who can be trained from the ranks of general business, and he himself taking the more important position, at least from today's point of view, and becoming the radio service and installation man, for every radio retailer needs such a man in his organization.

There are two aspects to radio "sales service." One of them is to ensure the proper installation and proper operation of every radio receiver of whatever manufacture sold by any radio retailer. Obviously this point of radio "sales service" is the more important one.

The other aspect of radio "sales service" is the contact such service enables the radio retailer to keep with his customers. The growth of volume in the sale of radio receivers has not been instantaneous. It is a pretty safe bet that every man who last year or the year before bought

a crystal receiver quickly got away from that class and purchased a regular tube set and since then in all probability has purchased or is in the market for a similar high-grade modern receiving set. Just the same as in any other line of business, it is not only the initial sale that is valuable, but also the "repeat" sale. For the radio retailer to make a customer is important, but for him to keep that customer and to make him a better customer, is more important still.

"Service Department Keeps Dealer in Direct Touch With Customers"

In the successful maintenance of an installation and service department, the radio retailer has a most effective opportunity to keep in personal contact with his present customers and to know their requirements and ways in which their sales resistance can be broken down and new sales made.

I spoke of the desirability of keeping service records of the work of the service department. This is important from the sales point of view as well as from the point of view of knowing what work the service department has done and what receiver defects have necessitated service, so that the costs and responsibilities of "sales service" can be passed back along the line to the radio jobber and manufacturer when such service conditions are directly due to the job-

ber's or manufacturer's disregard of sales conditions or to their distributing improperly designed equipment.

Every service report should include information such as is shown on the bottom of the service report illustrated with this article, so that it can be used to good effect in sales promotion work. It is the one infallible method of building a mailing list which must be the foundation of every retailer's sales department.

In summing up, the following conclusions may be arrived at:

First: Every radio retailer should sell receiving sets only on the basis of including in the cost to the consumer a sum which will cover the cost of installing the receiver. The two most logical plans for installation costs are the "cost per hour" plan and the "definite sum" plan. \$10 per installation is favorable to both consumer and the radio retailer.

Second: That after a radio receiver has been installed should trouble be encountered in operation and this trouble be due to the customer himself, the cost of service rendered should be based on a definite service charge of approximately two dollars per hour.

Third: That every radio retailer should have in his employ a technically trained man who is capable of handling installation and "sales service" on all types of radio receiving equipment and who, even with his technical knowledge, doesn't lose sight of the fact that the public doesn't want to know anything about radio receiving sets in terms of technical jargon—that diplomacy and courtesy are far more valuable and will lead to great many more sales.

Fourth: That every radio retailer should in the carrying out of his installation and service department keep a record of every service call made and that this record should be used by the salesmen daily in following-up future sales.

I close this analysis of radio "sales service" with this suggestion: Let every radio retailer who realizes the need of solving such problems as the ones discussed in this "sales service" article, tell his experiences to the editor of *Radio Retailing* and tell it wherever possible in pictures. Radio retailing can be more successful only by the elimination of pre-historic and inadequate methods and the adoption of new and better ones, and that is entirely a matter of telling one man how another man has made his success by using the more modern plan.

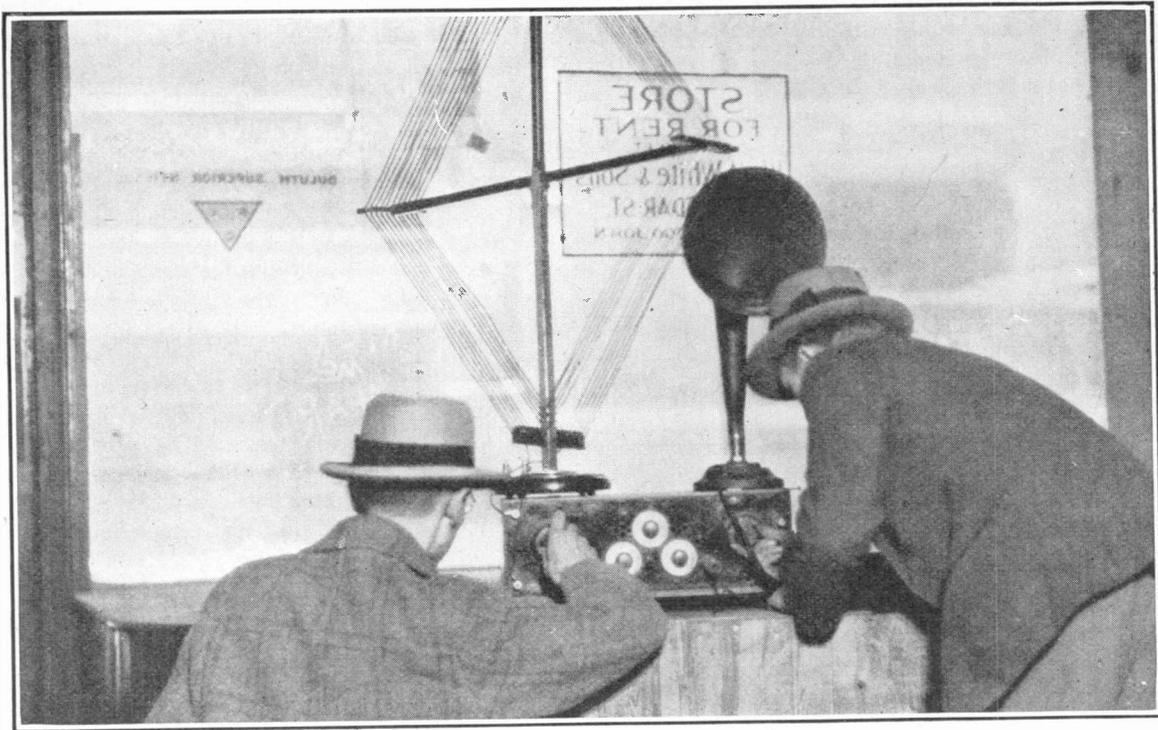
Service Report Form Which Dealer Can Adapt

OWNER		ADDRESS	
TYPE OF RECEIVER	SERIAL NO.	PURCHASED FROM	DATE
NO. AND KIND OF TUBES		JOBBER	
"A" BATTERY		ANTENNA	
"B" BATTERY			
"C" BATTERY			
DESCRIPTION OF TROUBLE		REMEDY FOR TROUBLE	

VALUE OF RECEIVER INSTALLATION		NO. OF PERSONS IN FAMILY	OCCUPATION OF OWNER	WHO MADE CHOICE OF EQUIPMENT	IF SEEN ADVERTISED IN WHAT PUBLICATION
REPORT BY	REPRESENTING	I AM PERFECTLY SATISFIED WITH SERVICE WORK PERFORMED ON MY RECEIVER.			
SALES SERVICE ENGR.		SIGNED _____			

This service report of the F. A. D. Andrea Company may easily be adapted and used as a model for a dealer's report sheet. It is essential that every dealer make use of

a form of this sort, Mr. Stark says, not only for the protection of his own interests, but also for the consumer, jobber and manufacturer as well.



Locating the Radio Store

Be Sure to Test Proposed Site for "Good Radio Reception," as Well as Merchandising Merits—Owner of Six New England Stores Tells How His Locations Were Selected

WHERE to locate a radio store and the factors entering into the selection of a location are matters in which everyone who sells radio should be interested. Perhaps, within your own knowledge, there is a radio shop that is not doing as big a set business as it should due to the fact that the reception in its vicinity is poor because of local conditions.

Possibly no one factor is more important in the demonstration of a set than the one of a locality favorable for reception. The purchaser doesn't take into consideration the fact that poor results may not be the fault of the set, but if the reception is bad, it creates a bad impression of the set in his mind.

On this point, Monte Cohen, of Boston, speaks authoritatively. Cohen is president of the Radio Equipment Company, which owns six stores in Boston and its suburbs, and whose five-story building at 20 Stuart Street, Boston, where its main store is situated, bears testimony to the shrewdness of Cohen in choosing good locations for his stores, and con-

ducting them successfully after they open.

"Twenty Stuart Street" is in the center of the Boston Theater and business district. It is just off Tremont Street, the Hub's main commercial artery, and is within stone's throw of The Commons, the historic heart of the city. It is just around the corner from the main trolley and subway terminal, which brings almost to his door, everyone coming to the shopping district not only from all parts of the city, but also from the surrounding territory.

Test Sets in the Store Before Signing the Lease

After selecting a location near arteries of heavy traffic, the matter of program reception stands next in importance, Cohen says. Test various sets in the store itself, and if the reception is not of the best, do not sign the lease. Then, select a spot where the reception is clear, without, if possible, getting too far out of the business section. It is better to pay the higher rent asked in the shopping centers than to go to a quieter

vicinity simply to save a few dollars in rent. The increased business will more than offset the extra expense.

It may readily be seen that every possible factor is taken into consideration by Cohen when he chooses a location for a new store.

"What to buy and how to sell it," are the next items in radio store management. And Monte Cohen knows. He learned it from selling radio and wireless products since 1907. His proudest claim is that he was the first in New England to handle wireless exclusively. In the eighteen years, his investment in radio stock alone has grown from a few hundred dollars to \$65,000.

"When I started, I had absolutely nothing," he says, "except my nerve, a few dollars and a supreme confidence in wireless. It took almost fifteen years before wireless developed into the present radio industry, but I knew that some day it would repay me for devoting my life to it."

Therefore, when Monte Cohen, of Boston, starts talking radio, it be-

hooves us to lend an attentive ear.

"Let's go right back to the beginning," he says, "if you want to find out how my business developed from one store eighteen years ago to six today. In the first place, every article ever sold in any of the stores has been of a standard and popular make. I have tried to build the public's confidence in the Radio Equipment Company, and I have sought the trade not by cutting prices to get it but by demonstrating that my own reputation and my desire to give service and satisfaction were uppermost in my mind.

"Price Cutting Doomed to Extinction"

"Cut prices cannot last. I cut prices occasionally, when competition demands it, but I don't like to do it. And I cut only on those things which are generally cut. Cutting price is a sales policy that gets no sympathy from me.

"The growth and expansion of the Radio Equipment Company has been due to our attempt to satisfy the customer. And no one, certainly, can

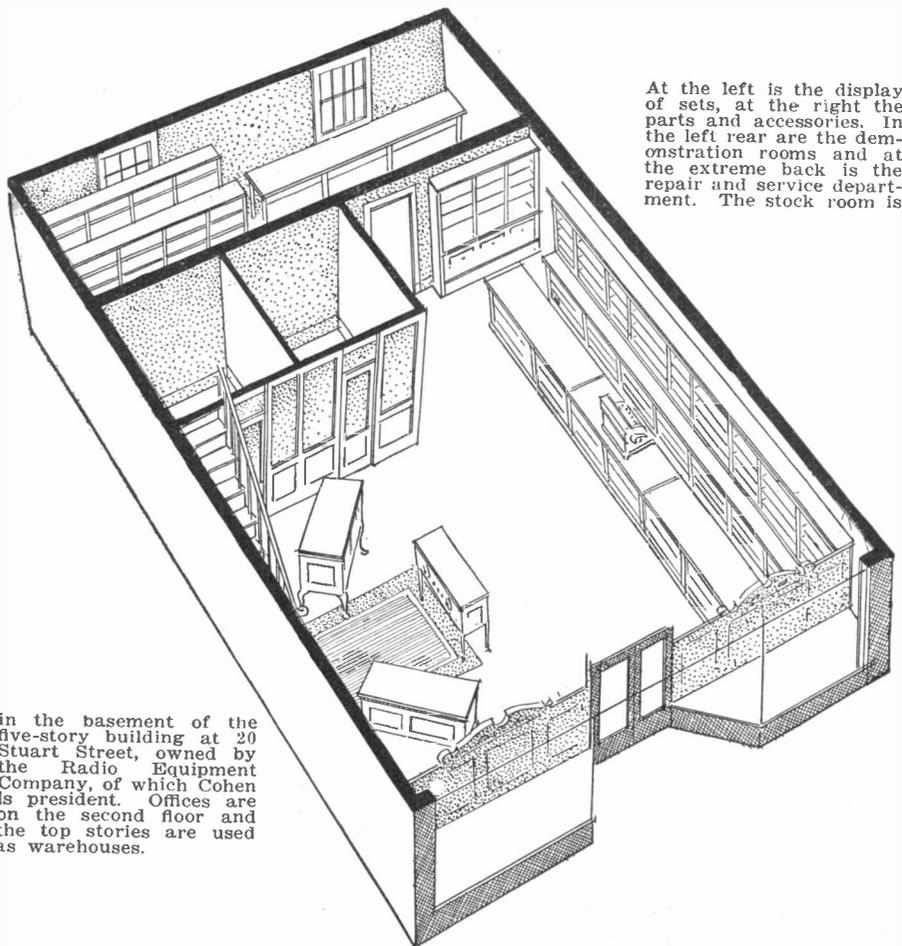
Make a Thorough Test

of receiving conditions in the store you plan to rent before you sign the lease. It is better to be safe than sorry and you may find it impossible to demonstrate a set in the locality you have in mind.

Monte Cohen, of Boston, has opened six stores and his methods of procedure before making a final decision in the matter of locality present an interesting solution to the problem.

give satisfaction at cut prices. For instance, if a customer brings back a tube or a battery that he is not wholly satisfied with, we replace it and take the loss. We couldn't have done that if we had cut prices. Our customers realize that, and know they are getting full value for their money."

Floor Plan of Cohen's Main Boston Store



in the basement of the five-story building at 20 Stuart Street, owned by the Radio Equipment Company, of which Cohen is president. Offices are on the second floor and the top stories are used as warehouses.

"To be a real radio store," Monte continues, "you can't be bothered with a sideline. Done right, radio alone is enough. It doesn't need anything to help it along and it needs your full and closest attention.

"Then, exercise judgment in purchasing stock. A wide variety is needed as well as a complete line. Don't buy a lot of this and a lot of that simply because someone says so, or offers you a good price on it. Buy small quantities of every essential radio article and make sure it is standard merchandise made by a well-known and responsible manufacturer.

"The Radio Equipment Company stocks every possible item needed in radio, for transmitting as well as receiving. It is a complete radio service from A to Z, and I believe that, as much as anything else, is responsible for our success. Anyone who is interested in any way at all in radio need go to no other type of store to purchase what he wants. We carry the complete line from bus bar and crystal detectors to transmitting tubes and microphones.

"We find that just about half our business is in receiving sets, and we stock a wide variety in this line also, from a \$3 crystal set to a \$1,000 console model. Our most popular model, though, is a tuned radio frequency set that sells for \$150 complete.

"After selecting the stock, the next step is to let 'em know you're there with everything they want to buy. Newspaper advertising helps, but it is not enough. Back it up with a direct mail campaign. The Radio Equipment Company is represented in some Boston paper every day in the week. Not a day goes by that our store is not before the buying public in some way or another. I venture to say we spend fifteen per cent on advertising. That sounds high, but I believe it's worth it.

"At any rate, backed up by our direct mail advertising and good window displays, our newspaper space is getting excellent results. And we keep plugging at it. Never let up in going after your customers. Let them know you're on the map and don't ever let them forget it. And if you carry high class merchandise, no gyp stuff, and if your service and sales policies are such that please your trade, they won't forget you.

"As to sales policies, each individual dealer, of course, must form his own. If it'll help any, I'll tell you

mine. In addition to the main one which I have already mentioned, namely, trying to give service and satisfaction rather than cut prices, I would say the next is in giving home demonstrations.

"This has worked out very satisfactorily for us. We have always been glad to install a set in the home whether it means a sale or not. Generally, it does mean a sale for once the set is working in his library, the prospect seldom lets it go back to the store.

Plans to Inaugurate Time Payment Sales

"We have not as yet had to use the time payment system, but we plan to do so in the future. I believe the radio industry is coming more and more to this plan and I think it will result not only in greatly increased sales but in the sale of higher priced models. We positively will not accept trade-ins. On the matter of installing the set, this service is free on sets totalling over \$100. Under that, we charge \$1.50 an hour. We give two months' free service on every new installation and feel it is a good investment owing to the good will it creates in the customer's mind and the fact that he may boost us and our service to his friends.

"We have complete repair and service facilities, which are absolute essentials in conducting a radio business. All our employees, store managers, salesmen and repair men are radio experts. They must know their

business, which is radio. You couldn't expect a barber or a plumber or a soda clerk or a grocery store manager to be much of a radio man, no matter how good they are in their own fields. A radio store must have specialized radio men.

Salesmen Get Commission

"Our salesmen get a salary and two per cent commission. A perpetual inventory is kept, each item being separately and continually indexed. Every sales slip is checked up at the end of the day and the store managers make daily reports."

With these policies and sales methods, Cohen has built up a business whose stock alone he values at \$65,000. In 1925 he confidently looks forward to double his 1924 business. Will he do it? He answers, "Emphatically yes!" Are you going to do it? Is your answer as positive and confident as Cohen's?

New Device Prevents Radiation

With the perfection by the DeForest Radio Company, Jersey City, N. J., of a device to stop radiation, the end of squeals and howls is foreseen. This invention is one that marks a definite step forward in the advance of the art of reception and if every regenerative set owner installs one of these devices, radio reception will be improved a hundred per cent.

Its operation is as follows:

The signals are impressed upon the grid of the audio frequency tube which then acts as a radio frequency amplifier resulting in radio frequency variations in the plate current of the audio frequency tube.

The insertion of the choke coil "A" results in the development of radio frequency potentials which are impressed on the grid of the regenerative tube through the small condenser "B."

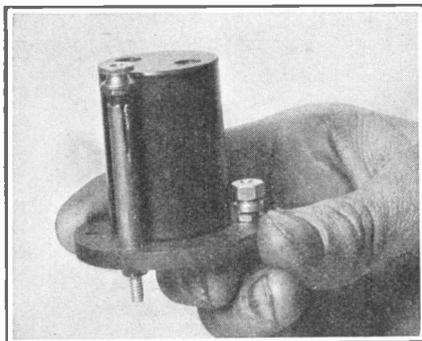
Radio Frequency Impulses Greatly Reduced

Due to the fact that the condenser "B" is very small and the capacity between the grid and plate of the audio tube is very small when the regenerative tube oscillates, a negligible amount of radio frequency goes out of the antenna, with the result that no disturbance is produced on neighboring antennas.

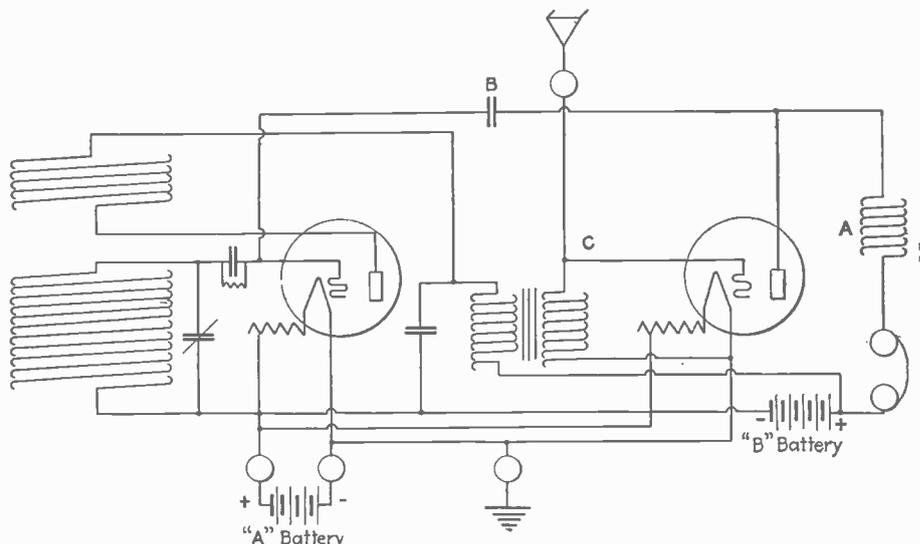
The overall result on the received signal is a material increase in selectivity and in general no loss of efficiency. When storage battery tubes are used, there is often an increase in efficiency.

The function of the choke coil "A" being to develop an "emf." over a considerable range of wave length, it is desirable to make this of several sections having natural periods say of 300 meters and 450 meters; the more sections that are used the more uniformly will the efficiency be held over the range of broadcasting wavelengths. It will apply to any set which contains two or more tubes.

Anti-Radiation Device Perfected by DeForest Radio Company



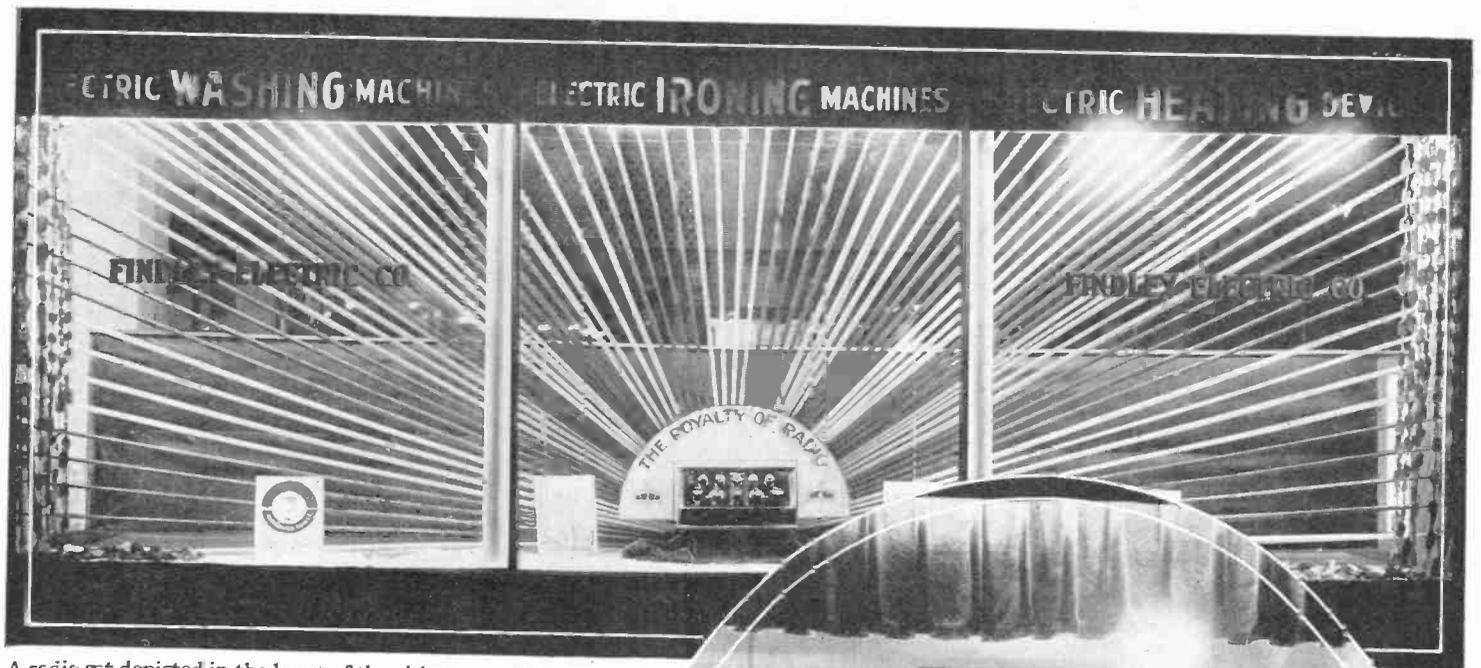
If this new invention does all it is heralded as doing, the end of much interference in reception is but a matter of getting owners of the "nuisance" sets to install the device. However, it cannot be used on one-tube sets, which are among the worst offenders. The hook-up at right illustrates the necessary connections for attaching this device to an ordinary single circuit regenerative set having one stage of audio frequency amplification. It consists of a choke coil "A" in series with the telephones and plate circuit of the audio frequency amplifier. A small condenser "B," which connects the plate of the



audio frequency tube to the grid of the regenerative tube. The antenna connection, instead of going to the usual place for this type of circuit, is connected at point "C"

to the grid of the audio frequency tube. At the left is a photograph of the device as manufactured by DeForest, showing its size in comparison with a man's hand.

Radio Dealers Attract Attention with

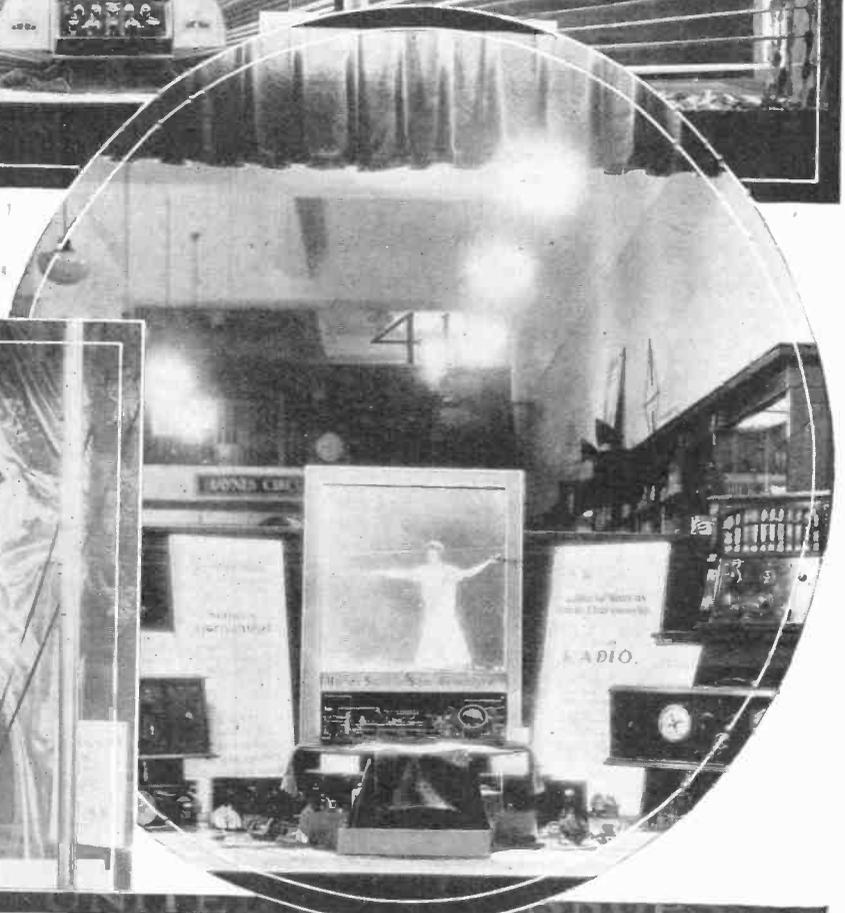


A radio set depicted in the heart of the rising sun, was one of the prize winners in *Radio Retailing's* recent sales idea contest for the Finley Electric Company, Minneapolis, Minn. At right—How Haynes-Griffin, New York, ties up its windows with sporting events that are being broadcast.

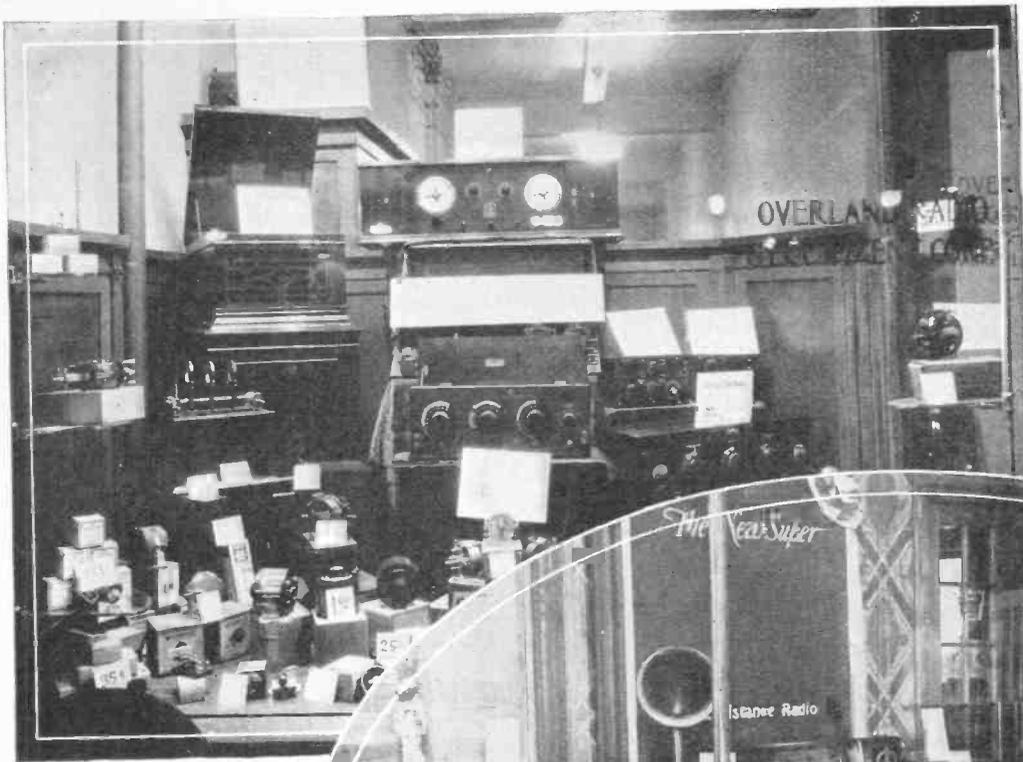


A few flowers against a background of silk draperies lent an effective Easter touch to the display of the United Electric Company, New York. An extremely narrow window was made attractive by judicious placing of sets and a light background with its Spring atmosphere.

At right—Palms and ferns against a background of portiers give this display of one of the Davez stores, New York, just the right Eastertide effect. Another small window which judicious balancing made attractive.

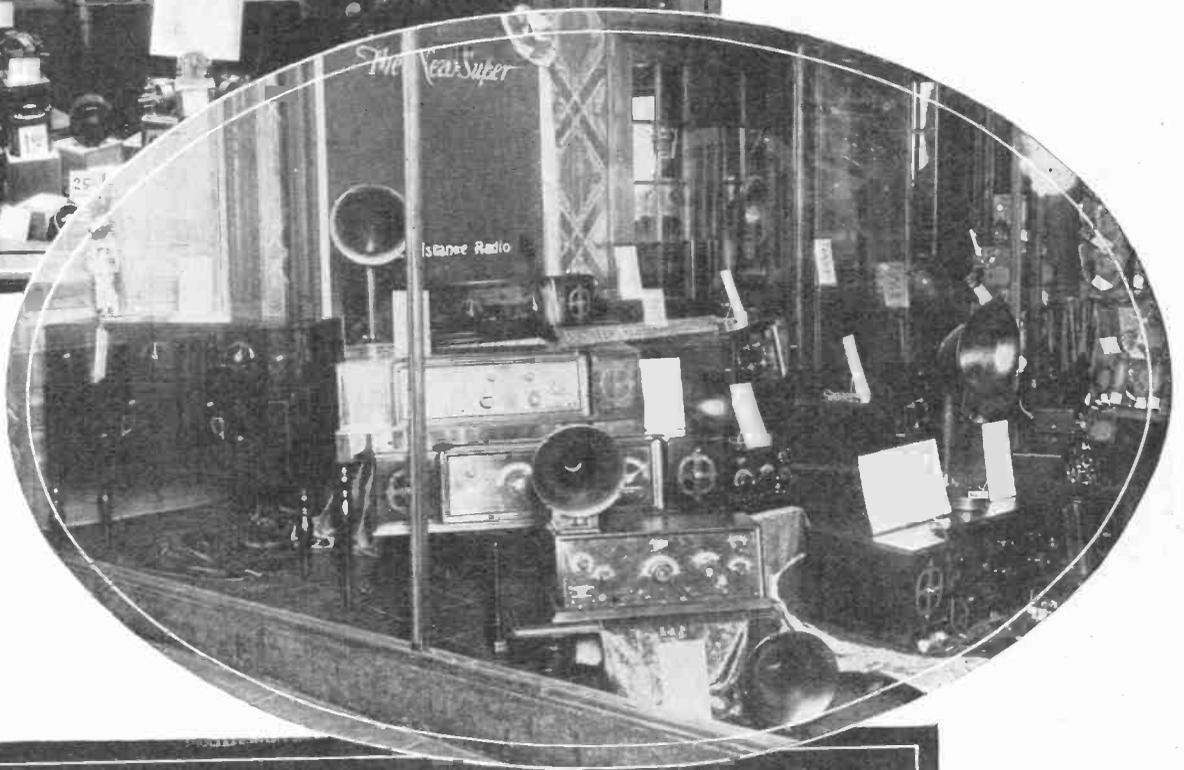


Novel and Striking Window Displays



The Overland Radio Company, New York, adheres to the policy of putting neat price cards on each article. Usually this leads to a crowded, "cheap" appearance, but this display manages to overcome the bad visionary effect of the cards to a great extent by placing as few parts as possible in the foreground.

The display windows of the Southern California Music Company, Los Angeles, Cal., give an adequate hint as to why this company has the reputation of being the most beautiful music-radio store in California. Here a number of sets are displayed with charm and dignity.



At Left—Another department-store window, using wax figures in a home setting to display only one or two receivers. Contrast this with the two above and see which you think would cause the passer-by to stop and look.

"To the Editor"

"Gypping" Tears Down Honest Standards of Merchandising

Editor, *Radio Retailing*:

I feel that the issues you have raised concerning the "gyp" are of the utmost importance, not only to ourselves, but to every distributor, manufacturer, dealer and even user of radio merchandise, and I am glad of the opportunity to state my views.

Firstly, you ask me to define a "gyp"? I would say that a "gyp," not only in radio but in any other industry, is a very un-American type of merchandiser who has contributed to the cause of ruining business in America, and who is succeeding in tearing down honest standards of merchandising without a tremendous benefit for himself.

What can the manufacturer do to eliminate this practice? What can the jobber and the dealer do? What can *Radio Retailing* do?

First of all, a manufacturer depends considerably, if not entirely, upon publicity and advertising to put his product over. I believe that there are enough honorable manufacturers in this country who prefer to see their product properly merchandised. Let enough of them band themselves together and refuse to advertise in newspapers in which their product is "gypped." Today, manufacturers advertising in our local papers exceed the amount of advertising done by the "gypps." Therefore, now is the time to act.

The manufacturer should limit his production and distribution to a limited number of distributors, and hold them responsible for conditions in their designated territory. If the line is worth while, a distributor will see to it that unfair methods are not practiced.

As an example: There are several radio manufacturers in a certain Eastern city. One of these firms I have in mind has a definite policy of *not* wanting its merchandise "gypped" and it is succeeding, almost 100 per cent. Another firm in this same city has stated a preference for "greater distribution" and as a consequence, its product is "gypped to death." Now—I ask you—hasn't the manufacturer a whole lot to do with the gypping situation?

Another cause for the unsatisfactory condition today, is the "manufacturer's agent." Some manufacturers' agents have business scruples—others are not only "gypps," but worse than this element. They extend themselves to have their accounts buy just as much merchandise as possible; simply because it means nice, healthy commissions. Real manufacturers have no need of such representations, yet, many depend upon it and of course, most times, unknowingly, are feeding their most deadly enemy.

I believe that every radio manufacturer in the country may very easily determine the origin of every piece of merchandise offered for sale by the radio gyp, and if he tried real hard,

could eliminate the practice completely.

Radio Retailing can only help to educate the manufacturer along these lines, and in doing so, it is starting something which will eventually and effectively help the jobber and dealer as well.

H. A. ABRAHAMSON.

Detroit Electric Company, Detroit, Mich.

What "Radio Retailings" Set Specifications Show

Editor, *Radio Retailing*:

I want to say that your compilation of "Complete Specifications of Radio Sets," in the February issue should be of vital interest to every retailer and you are to be complimented on the effort and foresight in working this up.

Particularly vital, from a merchandising standpoint are the "price facts" which, when analyzed as to average, show up as follows:

Number of sets listed, 313; average price of each, \$122.86. Number of neutrodynes, 31; average price of each, \$152.70. Number of Radio (R. F.) Freq., 54; average price of each, \$143.70. Number of tuned R. F., 127; average price of each, \$130.90. Number of regenerative, 36; average price of each, \$43. Number of non-regenerative, 15; average price of each, \$87.60. Number of Reflex, 12; average price of each, \$147.30.

This reveals the fact that the tuned radio frequency circuits are in the majority and average in price only \$8.04 higher than the average price of all radio receivers.

COURTLAND B. SHAW.

Cedar Grove, N. J.

Offset Price Cutting by "Controlled" Distribution

Editor, *Radio Retailing*:

We believe that sooner or later each radio manufacturer will have to appoint an exclusive distributor and in turn work with said distributor to establish exclusive dealers, each one by a number, to operate in each given town. We know of no other method which will prevent the "gyp" other than for each manufacturer to control as nearly as he can, his own products.

W. T. LEWIS,

Western Coil & Electrical Company.
Racine, Wis.

Restrict Distribution to Legitimate Classes of Trade

Editor, *Radio Retailing*:

A great danger now exists that the radio industry will stray into illegitimate channels which cannot fail to be detrimental and demoralizing to the business.

We are referring to the sale of radio sets and equipment at jobbers' prices

to those who are not engaged in business, that is, that do not operate a store and have no responsibility to stabilize them other than the small investment in one complete outfit. Such operators can and do sell on a very close margin—even below 5 per cent and consequently the more desirable accounts are refusing to handle radio as their overhead and cost of doing business in maintaining display rooms, etc., will not permit their meeting such competition.

We know of unscrupulous manufacturers and distributors who sell at wholesale prices to such (curbstone) dealers as mail carriers, truck drivers and even know of one case where the mayor of one of our smaller western cities is selling radio sets in spare time.

We urge the support of the radio industry in a movement that will correct this condition, as we see the possibility of the business drifting into channels that will in a very short time make it unattractive to the better class of business men.

GEO. L. DEGAN,
Wyeth Hdw. & Mfg. Co.
St. Joseph, Mo.

Another Answer as to "What is a Gyp"

Editor, *Radio Retailing*:

I was reading over *Radio Retailing* last evening and became very interested in your editorial "The Gyp Must Go."

On page 965 of Webster's New International Dictionary, I found the following:

Gyp (jip) noun, origin uncertain. A sharper or swindler. Especially at horse trade. Slang U. S.

I found a sharper to be: Sharper: One who bargains closely, esp. a cheater in bargains. A cheating gamester. Syn. Swindler, cheat, deceiver, trickster, rogue.

I also looked up swindler and found it to be: Swindler: One who swindles, a cheater. Syn. sharper, rogue; swindling: formerly technically called in Scots Law, falsehood, fraud and unlawful imposition.

It seems to me that a dealer who "sells below list price"—*constantly*, would according to Webster be a gyp because he is cheating himself out of a fair margin of profit or else out of a sufficient amount of advertising to build and maintain prestige for his store.

A dealer who "pushes inferior merchandise" would not appear to be a gyp unless he is using his experience to trick or deceive the public.

A dealer who "fails to back up his merchandise" I believe is a gyp not because he is cheating the public, but because he is cheating himself out of a good reputation and out of repeat order business.

According to Webster, a dealer who makes "dishonest claims concerning

"Radio Retailing's" Readers Express Opinions on Subjects of Vital Interest to the Radio Trade

what he sells," is a most obvious gyp. He is both a sharper and a swindler.

A dealer who has "two prices on the same article," it would seem may or may not be a gyp. If he is frank and candid about his two prices in offering his goods to the public, he is not a gyp. If he tries to get all he can for the goods and will sell at a cheap price if forced to, he is then obviously trying to swindle and is therefore a gyp, not so much of the public as he is a gyp of his own reputation, and of his repeat order business. The merchant who is "lacking in merchandising efforts" it would seem is very likely to be just a plain failure.

The most important point of this whole thing is that according to Webster's definition and its application to the questions you ask, it is quite apparent that the dealer who falls into the "gyp class" is nearly always gyping himself rather than the other fellow. Manufacturers are usually pretty broad-minded business men. All of them offer approximately the same discount to the dealer. This would seem to indicate that men of experience feel that the dealer must have between 30 per cent to 40 per cent off the list on which to do retailing on a sound basis.

The manufacturer's 40 per cent figures in advertising expense for the dealer, accounting expenses, general overhead and a reasonable amount of service, etc. Nearly every successful American business has these various divisions and it would seem that the dealer who drops any one of these important divisions and passes even a portion of the resulting profits on to the public, will find out in the long run that he has been cheating himself out of a reputation, out of the business prestige that comes from advertising and out of the public's confidence.

L. W. STAUNTON.
C. Brandes, Inc., New York City

Need of Industry Co-operation

Editor, *Radio Retailing*:

Mr. Alley's article in the February issue of *Radio Retailing* on the cut-price situation in this city interested me very much. . . . It seems to me that what is needed is better co-operation between the manufacturer and the distributor. Any manufacturer who makes it compulsory for a distributor to take on a large amount, either in dollars or in quantity, of his products in order to become a distributor, is aiding the cut-price game, because a jobber may become panicky when there is a slackening in demand and sell at longer discounts than would ordinarily be the case, thus giving the dealer an incentive to cut price.

If distributors would refuse to sell to known cut-rate dealers that would

be one thing, but the way they put it is, "If I don't, somebody else will."

The remedy suggested would be:

(1) Amend present laws to allow manufacturers a little more lee-way in controlling their products; (2) Manufacturers restrict their distributors to a smaller number, and limit them to those who wholesale exclusively (3) Better co-operation among the retailers through stronger associations.

I hope you will keep up the good work by giving this cut-rate situation more publicity in your excellent magazine. More power to you.

HAROLD E. PECK.

Blanding & Blanding, Providence, R. I.

Jobbers Can Lend a Hand in Ousting "Gyps"

Editor, *Radio Retailing*:

What can be done to drive the "gyp" out of radio?

My answer to this question is to confine distribution to certain legitimate classes of trade who are doing a real business not only from a marketing standpoint but also at the same time having an organization that can give the ultimate consumer real service on radio, and then tell Mr. Distributor that he is not to take on any sub-jobber or any other account except the strictly legitimate dealer in the business.

A "gyp" in my estimation is any one who purchases a standard article on which there is an established legitimate profit and puts it in his merchandise at a cut price as a leader in order to attract trade to his store and then use an effort to sell a cheaper line, and at the same time not taking into consideration that Mr. Customer needs service.

What can radio manufacturers do to eliminate "gyp" dealers?

This can be accomplished by selling his products to the legitimate trade and in turn insisting that this trade take his legitimate profit on the products so he will be in position to give the customer service and also be able to give intelligent information on all items he is selling.

What can the jobber do?

The jobber in turn can do the same. He has only one thing to do and that is to sell service to the dealer, and he must see that the dealer is thoroughly posted on the merchandise he is selling, and see that he knows how to merchandise his products at a reasonable profit, and see that the dealer knows how to give his customers service, in order to get real business.

My suggestion to the radio dealer today would be that when a customer comes in to purchase a radio set or any other apparatus of a delicate nature that he be persuaded not to take this out and attempt to operate it on his own responsibility for the first time. In other words, the dealer who is sell-

ing radio apparatus today must see to it that the customer is thoroughly posted and instructed in its use, even to the extent of sending an expert to the customer's home to see that it is properly connected and works entirely satisfactory. The dealers who are performing this service are the dealers who are paying their bills to the jobbers, and the jobbers in turn paying the manufacturers and the business going along on a basis which is extremely satisfactory to all concerned, and the customer who is receiving this service will tell his friends what a wonderful set he has and what wonderful results he is getting.

What can *Radio Retailing* do to clear away this "gyp" situation?

Write editorials to the dealers along the lines suggested above. See that the dealer in merchandising his goods gives real service to his customers—not just taking the money, but following up his sales to the extent of 60 to 90 days, and see that each customer who purchases radio sets or other apparatus is entirely satisfied even to four or five months after the sale is made.

WARNER JONES,
Sales Manager, Carbon Products Company,
Lancaster, Ohio.

Overstocking a Frequent Incentive to Cut Prices

Editor, *Radio Retailing*:

In answer to your questions we offer the following answers to the questions asked:

To drive the "gyp" out of radio, we suggest better selling methods by dealers, better policies by jobbers and manufacturers, also co-operative association by the dealers.

We consider a "gyp" a concern which sells materials at cut prices, which are retailed by men of good reputation, at advertised prices. One whose only method of getting trade is on price.

Radio manufacturers can do much in eliminating such dealers: By selling only to established jobbers who have been sufficiently long in the business to understand the results of selling to any type of dealer in order to build up their sales. By keeping the number of jobbing outlets limited so that the jobbers themselves won't cut prices. By better organization among the manufacturers to control the patent situation and take steps to prevent the growth of mushroom radio manufacturers.

If the dealers will work with small stocks and very reliable merchandise they will not be tempted themselves to cut prices in order to unload.

Radio Retailing can do much to educate the public as to the tricks played by low-class dealers. You can teach radio dealers better methods of merchandising and educate them to the best types of sets on the market.

COGHLIN ELECTRIC COMPANY,
Worcester, Mass. M. F. Goodheart, Mgr.

Newest Books on Radio

A Review of the Latest Publications, Compiled for the
Information of the Radio Dealer and His Customers

Henley's 222 Radio Circuit Designs

By John E. Anderson, Arthur O. C. Mills and Elmer H. Lewis. Norman W. Henley Publishing Company. New York City. 271 Pages. Price, \$1.00.

Contains, not 222, but 277 circuit designs, both for sending and receiving. Each wiring diagram is adequately explained, together with the method of building and the parts required. Written to appeal to the amateur or experimenter. Contains, also, instructions on how to read wiring diagrams, and a chapter devoted to an exposition of the various parts needed in set-building. Circuits of every possible description are included.

Radio Handbook

By International Correspondence Schools. International Textbook Company. Scranton, Pa. 514 pages. Price, \$1.00.

Described as "a handbook of reference for those interested in the radio art," this book is technical in nature and is designed to appeal primarily to radio operators. It describes completely the technical development of radio in simple language, and was prepared by Harry F. Dart, E. E., and Francis H. Doane, of the I. C. S.

Simplicity of Radio

By Powell Crosley, Jr. Crosley Publishing Company. Cincinnati, Ohio. 80 Pages. Paper Booklet. Price not given.

This is a "radio handbook," telling as simply as possible just what radio is and how it works. It is divided into two parts, the first, a non-technical discussion, written for the layman, and the second is more technical, delving into the construction and operation of a receiver. It does not take up transmitting.

Radio—How to Make and Operate

Goldsmith Publishing Company, Cleveland, Ohio. 63 pages. Price not given. Paper booklet.

Instructions for the beginner in operating, wiring and constructing a radio receiving set.

Radio Station Directory and Trouble Finder

By Bertram W. Downs, B.Sc. Bertram W. Downs Company. St. Paul,

Minn. 38 pages. Paper. Price, 25 cents.

This booklet consists of a complete list of broadcasting stations in North America and a guide for the location and elimination of trouble in radio receiving sets.

Radio Frequency Amplification

By Kenneth Harkness. The Radio Guild, Inc. New York. 182 pages. Paper.

This book is divided into two parts. Part I deals with the theory of radio reception as based on the elementary laws of electricity. Part II deals with the construction of radio receivers, showing their construction by illustrations and giving trouble-shooting hints.

Reflex Radio Receivers

By P. E. Edelman. Conrad Company, Inc. New York. 51 pages. Paper. Price, 25 cents.

The necessary theoretical considerations of a reflex type receiver are simply explained, with practical working examples, suited to the needs of the home radio set constructor. Reflex operation with the use of dry cell tubes is also set forth.

Radio Broadcast Listener's Book of Information

Part A by M. L. Muhleman. Conrad Company, Inc. New York. Paper. Price, 25 cents.

This looseleaf booklet gives information for the broadcast listeners, radio broadcast stations of the United States, radio broadcasting stations by states, log of broadcast stations and station log chart.

Lefax Radio Handbook

By Dr. J. H. Dellinger and L. E. Whittemore. Lefax, Inc. Philadelphia.

This handbook, written by the chief of the radio laboratory, U. S. Bureau of Standards, and the technical secretary, Interdepartment Radio Advisory Committee, is one of the most thorough works in everyday language which has been published on radio. It gives an explanation of how radio works, practical information on receiving circuits, and real facts and data of proven value. The handbook may be procured bound or in a loose-leaf form, which is kept up-to-date at a regular service price of \$3 a year.

The Radio Telephone

By Bertram W. Downs, B.Sc. The Bertram W. Downs Company. Saint Paul, Minn. 96 pages. Paper booklet. Price 50 cents.

Described as "a complete guide for those interested in the purchase, construction or operation of a radio set," this booklet is a non-technical discussion of radio theory and operation for the layman. It deals exclusively with reception.

Listen-In Radio Record

Lothrop, Lee and Shepard Company, Boston, Mass. Price not given.

Simply a group of pages, attractively bound, whereon may be listed the stations heard, the programs and date of reception. Contains a list of broadcasting stations and a short chapter by Lloyd C. Greene on "How to Receive Radio Broadcasts."

Text Book on Radio

By James R. Cameron. Peter P. Mulligan, Inc., New York. 320 pages. Price, \$2.50, cloth; \$3, flexo-leather.

This text book carries the reader through the theory of electricity and radio, and takes up its practical application. The book includes a glossary of radio words and their definitions.

How to Locate Troubles in Your Radio Set

By Thomas W. Benson. Conrad Company, Inc. New York. 46 pages. Paper. Price, 25 cents.

This book takes up in detail the various troubles that develop in radio receivers, and suggests how to remedy them.

Construction of a Modern Super-Heterodyne Receiver

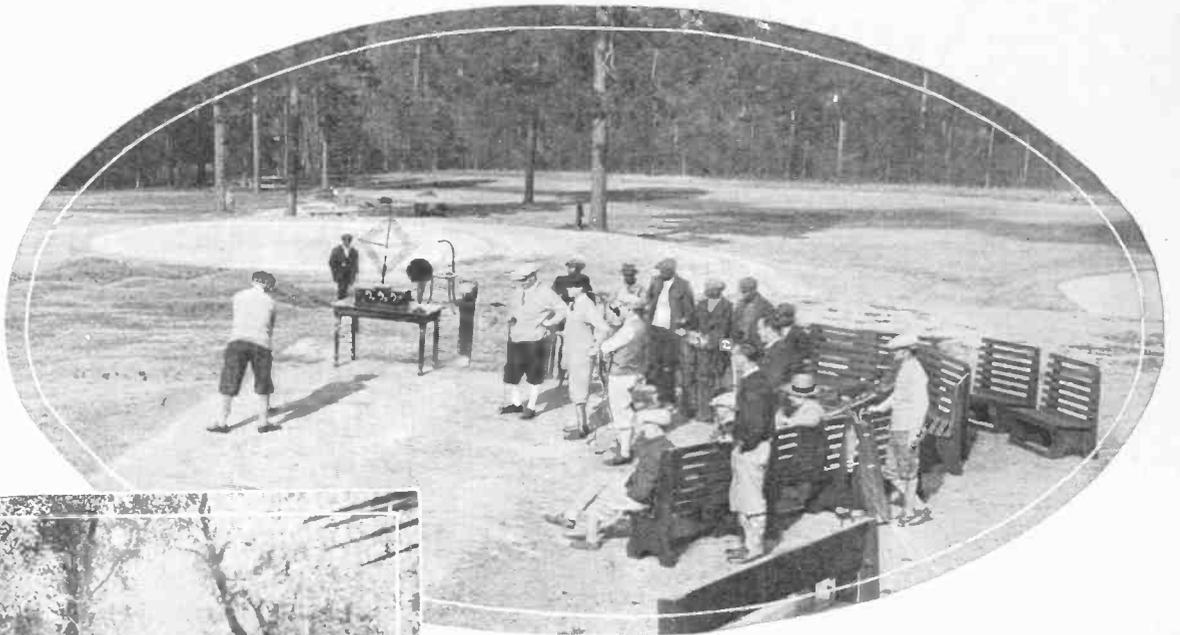
By Elmer H. Lewis and staff. The Norman W. Henley Publishing Company, New York. 31 pages. Paper. Price \$1.

This illustrated booklet is accompanied by two large charts showing the construction of a super-heterodyne receiver. All details necessary for construction are included.

Owing to lack of space it was impossible to list all books in this issue. Next month, another page of book reviews will appear.

New Radio Uses Create New Markets

Keeping waiting golfers amused while those first in line "tee off" is no longer a problem for the country club. The Augusta Country Club at Augusta, Ga., has installed a radio set at the first tee. Now, if some station will start sending out lessons in golf, the dealer will have two new markets right at hand — country clubs and golf nuts.



An advertising scheme that will make money as well has been invented by the Portland *Oregonian*, a newspaper at Portland, Ore., and which may be copied by radio dealers. A receiver, amplifier and

loud speakers have been mounted on an automobile and give music and concerts at public gatherings, in amusement parks and at private affairs. By renting it at so much an hour, it will pay for itself.

Two new practical uses for radio sets have been found. One, at right, is using radio to keep shoe-store customers happy while their shoes are being "repaired in twenty minutes," and the other, below, shows a radio set in a pool-room. Radio concerts, the players declare, help them to concentrate on their shots. How many pool-rooms in your own city have not yet been sold on radio?



"If I Were a Radio Dealer"

(Continued from Page 238)

unfailing way of securing and maintaining confidence is in upholding the selling price.

Passing along to the other point—advertising wafts me back to the days when the phonograph—then looked upon as a mere toy, was handled by the nickelodeon and corner drug store until the music dealer awoke to the fact that the toy was really cutting into his profits—it was being bought in preference to pianos. Then he annexed phonographs to his business and was so energetic in the sale of them that he fairly "hogged" the phonograph business. How did he do it? Simply by employing piano merchandise methods—he worked hard, advertised, maintained selling prices, and gave service. How much advertising would have been done had the phonograph stayed with the nickelodeon and drug store? Yet millions of dollars were spent in advertising by the music dealers. I do not mean to infer that the music dealer will be the only radio dealer of the future, but I do maintain that whoever wants to handle radio successfully must advertise in the daily newspapers.

Small Discount Doesn't Permit Much Advertising

An analysis of a recent issue of the *Chicago Sunday Tribune*, by some of the dealers handling radio, showed the following:

8617 lines of music dealers advertising (this includes both radio and musical instruments).

714 lines of radio manufacturers advertising.

434 lines of exclusive radio dealers advertising.

Of course, a radio dealer cannot advertise much when his discount is small. I believe that the time will come when all manufacturers will realize that the radio dealer needs a large discount in order to carry on a proper advertising campaign.

I will not touch on the subject of service because it is perfectly obvious that the dealer who intends getting a strong foothold in the radio business must take examples furnished by other industries such as the automobile, talking machine, piano, washing machine, etc., and give service.

In conclusion I feel perfectly safe in contending that the different degrees of radio success are directly traceable to the measure in which the four fundamentals above treated are observed. You cannot shoot ducks with your heels cocked on your desk. Just as little can one hope to sell radio without going after it. The four principles named must *all* be employed.

"If I Were a Radio Manufacturer"

(Continued from Page 239)

to thinking in terms of service as well as in terms of sales, and the class of dealers who have, for years, been an important part of an industry organized primarily on a service basis, are the electrical contractor-dealers. Probably no other merchant is required to service his merchandise to the same extent the electrical dealer is. His business is organized to give service and he has experienced men for this job, service cars, and everybody in his organization thinks in terms of service. The electrical-contractor dealer of the better class has experience with outside selling, due to the fact

that he has been selling washers, cleaners and house wiring for years through outside salesmen and on time payments. And to counteract the summer slump in radio he has in the summer season his most active wiring business.

(4) In the matter of the service which as a manufacturer I must render the dealer, I would arrange that service claims from the dealer would come direct to me and not through the jobber. Service claims usually have to go to the manufacturer anyway and bringing the jobber in simply results in a delay on service. Quick action on service from the manufacturer saves the dealer from the criticism of his customer and promotes good will all the way down the line.

Make Testing Department 100% Efficient

(5) I would see that the testing department did as close to a 100 per cent job as is humanly possible. Double the tests if necessary and make every employee in this department realize that careful factory tests will eliminate expense and trouble for the dealer and will insure consumer satisfaction and good will.

(6) In order that my dealers should be able to get a sufficient supply of merchandise at the time when they can readily sell it, I would endeavor to get these dealers to schedule their requirements with the jobbers. The dealer knows that it is unreasonable to ask the manufacturer to speculate on demand by accumulating large stocks ahead without any guarantee from his distributors that these stocks will be moved. On the other hand the dealer feels that it is unreasonable to ask him to speculate on his demand by stocking heavily in advance or in entering blanket orders with scheduled deliveries when no inducement is offered him to do so. As a manufacturer, I believe I would be justified in offering the dealer who would place his orders ahead an attractive inducement.

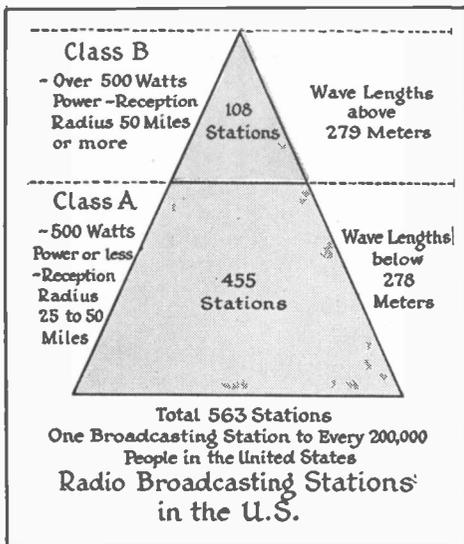
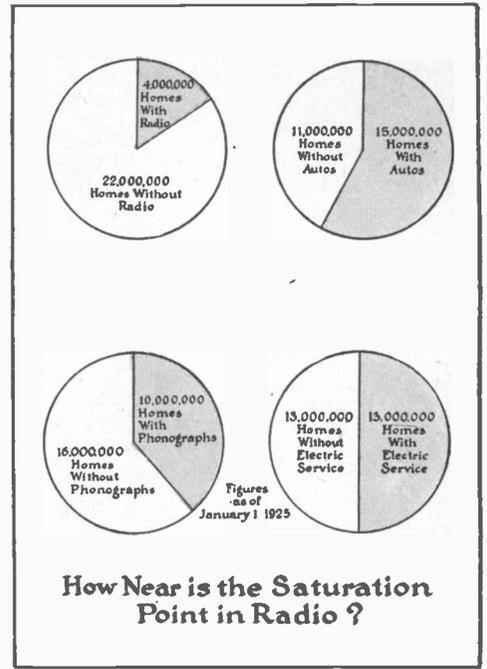
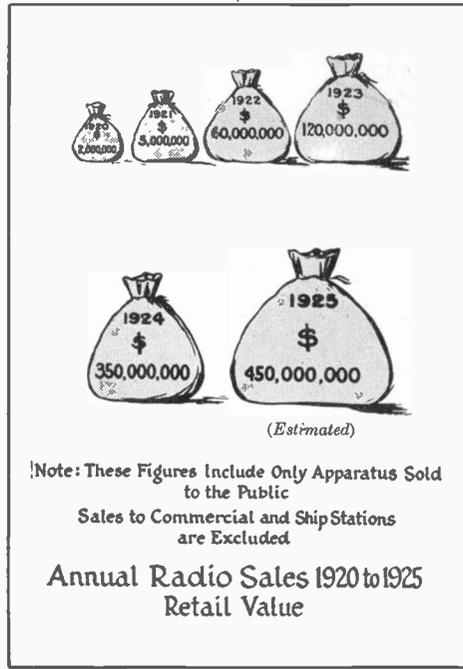
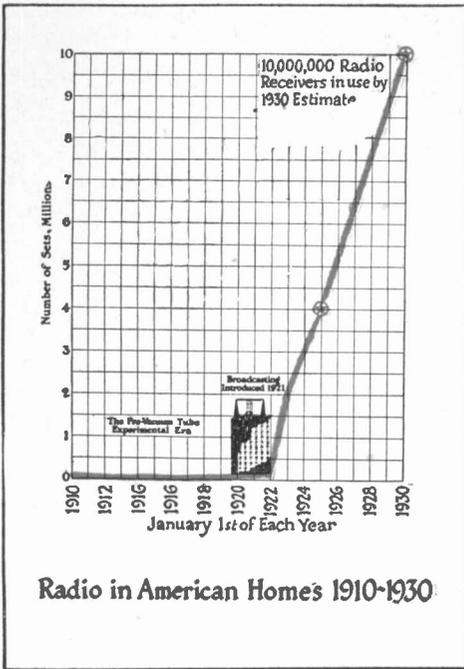
(7) In advertising my merchandise, I would seek direct results to and through the dealers. The desirable dealer spends money advertising the goods. I would place at least a portion of my advertising appropriation to be spent on a 50-50 basis with the dealers. I believe that not only does this type of advertising show direct results but it stimulates the dealer to push the particular merchandise on which he is spending his own advertising money.

Help Dealers Discount Time Payment Paper

(8) Because radio today is being sold increasingly on a time payment basis, I would make arrangements for the dealers to discount their time payment paper with a good company and on the most favorable terms.

In conclusion, I want again to come back to the essentials of what I estimate the manufacturer's selling problem to be. The dealer, as the vital point of contact with the buying public must do a selling job, he must do a service job also in order that the manufacturer's product stays sold. Furthermore by giving a maximum of satisfaction he sells other customers. Even at the present rate of growth of the radio market there is a greater potential market waiting. It is the dealer who will develop this market in co-operation with the manufacturer. Greater profit to the responsible dealer will not result in cutting of prices and a lowering of the market standard. On the contrary, the result will be an increased activity in direct sales effort which under the present conditions the dealer cannot afford.

The Progress of Radio Told by Statistics

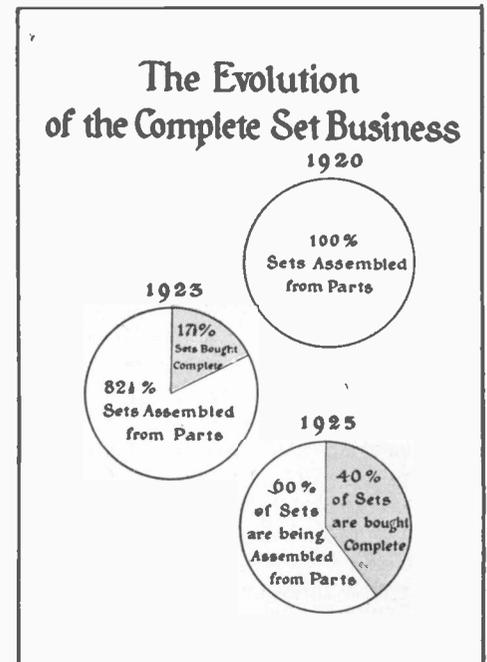
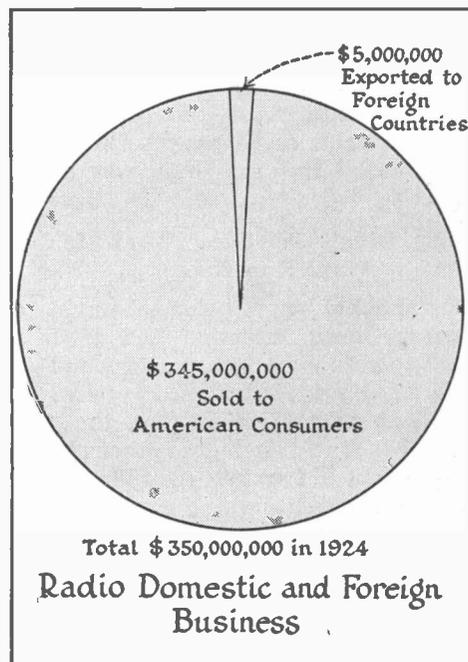
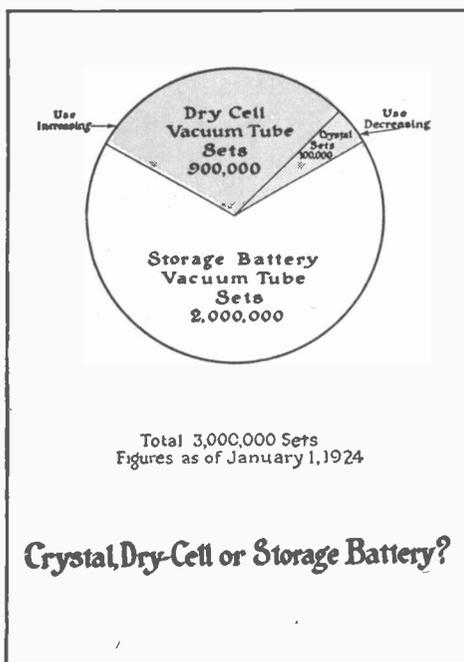
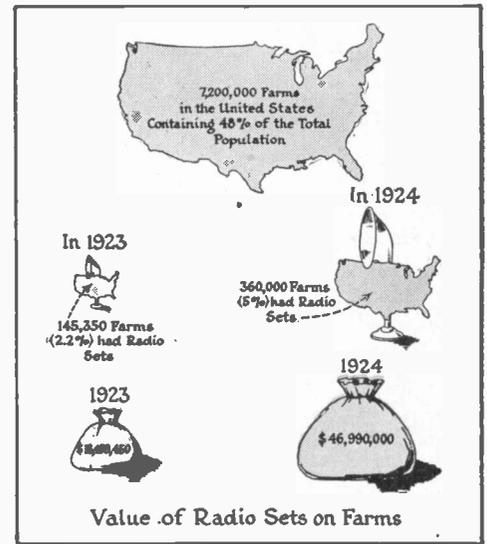


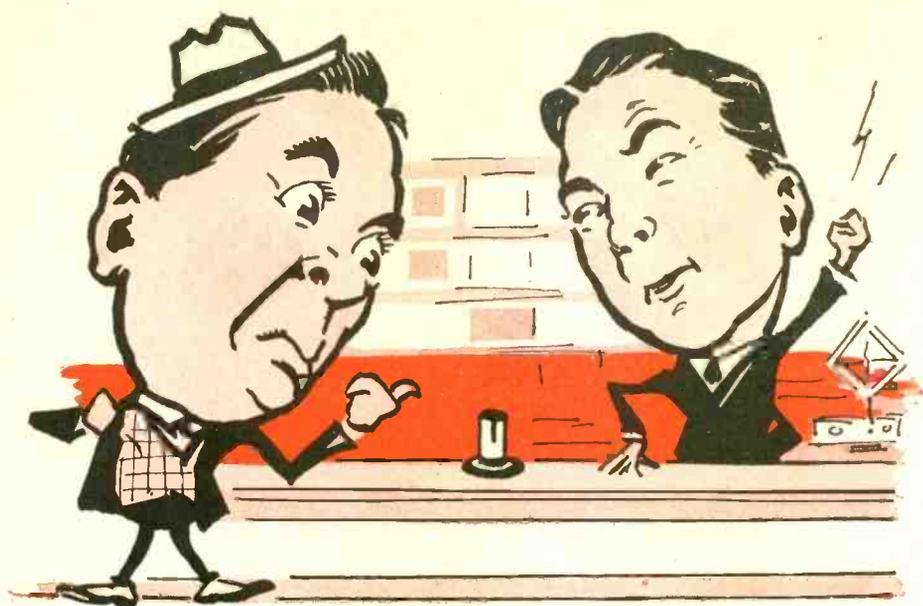
By Arthur P. Hirose
Director, Research Department,
"Radio Retailing"

THE growth of the radio industry may be adequately traced by reference to the charts portrayed on this page. The figures are as accurate as it is possible to ascertain at this early stage in radio's development and are, in many instances, the official U. S. Government figures.

The charts were compiled by several of the McGraw-Hill Company's staff of merchandising statisticians who have been placed at the disposal of the radio trade for the compilation of any figures or comparisons the industry desires to have.

Radio dealers, jobbers and manufacturers are at liberty to reproduce any of these figures in their publicity material provided credit is given to *Radio Retailing*.





McTaggart Almost Buys a Radio Set

But After Looking Through the Newspaper Ads of Radio Dealers, All He Gets Is a Headache—Public Wants to Be Told in Simple Language What Sets Will Do

Editor, *Radio Retailing*:

For two months now I have been trying to make up my mind to buy a receiving set, but I'm still undecided; and all because these so-called experts who write the radio ads persist in telling folks that this new idea is one of mystery. Not one ad that I have read talked plain English. That's why I'm sore and peeved. Why can't radio dealers tell me in simple words what I want to know?

Like many others, a few months ago I was side-tracked and sent to bed and it was only recently that the radio bug bit me. Then I made diligent inquiries about this new fascination. My doctor said radio was OK and to "go ahead and get one." Then the fun began.

I searched the magazines and had a fine time going through the pages. There were lots of radio effusions, but to me in bed they were so much Greek.

At last, thought I, here is one that will fill the bill. The price is just about right, it looks like a simple

affair to operate for it doesn't appear to have too many doohickeys on it to twist and turn. Then I read the copy! Shades of Einstein! Was I studying a chemistry book again or was I reading an advertisement supposedly for sane people? Of all the technical phrases that were thrown around in that copy—my how that writer must stick his chest out with pride as he gazes upon his handiwork. But to me it was all bunk.

They Didn't Tell Him What He Wanted to Know

I wanted to know if that set would give me good reception and if I could operate it in my own home and could I have it installed easily? Did that advertiser tell me that? Not a bit of it. He told me that if I paid so much I would get this and that, and that something else which I always thought was part of the set, would be extra. Well if that was the case I would only be getting half a set. It's the same as buying an automobile and having to pay extra for

the steering wheel, tires and fenders.

Another full page ad attracted my attention. It was well done. The art work was fine. Here was a successful man of the world enjoying a radio concert by John McCormack, in his own home. But no more information did I get there. Not one line about the results the set could accomplish nor how easily they could be operated.

I threw the magazine away in disgust and turned to the daily papers. Surely, I mused, some enterprising local advertiser will tell me something. But I looked in vain. The enterprising radio dealers talked about tubes, selectivity, relativity and goodness knows what not. Terms that conveyed nothing to me—absolutely nothing—were bandied about in a most profuse manner.

Becoming desperate I sought the advice and consolation of friend wife. She bravely started in, and admonished me for not being able to decide on a radio set. Quite a simple matter, said she. I waited. She too, became disgusted and de-

clared "Why in heaven's name don't these people talk English so we can understand it?"

There! Two minds with but a single thought; a short time ago, potential radio purchasers; now, perplexed of the perplexed, and all because of reading a few radio ads.

Sailing in a Sea of Words

I have not yet bought my radio set, much as I should like to hear the splendid and entertaining programs that are flashing through the air. I am not a dub, at least I don't think so, and my friends say I'm not, and I am one of the vast horde who have become slightly infected with the radio bug. But I am all at sea. Can't you please do something about it, Mr. Editor?

If some enterprising man would come along and say to me: "See here, Mac, you should have a radio while you're lying there in bed; it would give you no end of enjoyment. Let me tell you about them"—and then if that man would add that he could fix me up a set that I could operate as easily as I can finger a typewriter keyboard, and that I could get Portland and Los Angeles and Kansas City and several other places, and that the set would cost me \$39.95 or \$99.99 or some other price, I would grab that gentleman by the hand and say, "Old man, you're human, bring on your apparatus."

"Come Down to Earth"

Some day, perhaps, radio advertisers will come down to earth and get both feet planted right on the ground and talk to folks as one man talks to another.

But in the meantime I want a radio set—and when I do buy one it will be because some friend of mine has shopped around and got some real information and turned it over to me.

Yours bewilderedly,

W. E. McTAGGART,
Vancouver, B. C.

What an Advertising Man Thinks

It won't be long, I imagine, before I am one of the millions who spend a good part of their evenings "listening in." The virus is at work. Yet it is a fact that, thus far, no radio advertiser has made even a dent on my mind. I haven't the faintest conception of what kind of receiver I

should buy or how much I should pay for it.

I have waded through page after page of radio advertisements. Honestly, I know less about radios than when I started to inform myself about them.

In radio advertisements, I find all sorts of words and phrases which mean no more to me than if they were Choctaw—"frequency amplifi-

cation," "tickler coil," "potentiometer," "vernier effect," "variable inductance," etc., etc.

It may be that it is difficult for manufacturers of radio to tell their story in a way that the everyday man can grasp, but I should like to see one of them try it. If he did, he would have a better chance to get some of my money than he has now. —Jamoc, in *Advertising Fortnightly*.

"Follow-Up Your Radio Customers' Friends"

Selling to Neighbors of Satisfied Users, Is Theme of Prize-Winning Entry in Contest for Dealer Sales Ideas Which Closed Jan. 31

A CONTEST for the best radio dealers' sales ideas submitted to the editors of *Radio Retailing* before February 1, was announced in our issue for January, 1925. A number of responses were received from dealers, and from these entries, under the terms stipulated in the contest announcement, the judges have selected the following as the prize-winners:

First Prize, \$40

Fred D. Retallick, Fred D. Retallick & Company, Pittsfield, Mass.

Second Prize, \$20

R. D. Leffholm, Findley Electric Company, Minneapolis, Minn.

Third Prize, \$10

M. A. Schuman, Peerless Automotive Equipment Co., New York City.

Fourth Prize, \$5

Walter Jenkins, Ft. Wayne, Ind.

Following is the substance of the suggestion and plan submitted by Mr. Retallick, who has been building his own radio business soundly, by first insuring that his present customers get complete satisfaction and full service on their radio purchases, and then following up the friends and acquaintances of these set-owners for sales to fulfill their requirements.

Insisting on Customer's Satisfaction Develops Endless Chain of Prospects

BY FRED D. RETALLICK
Pittsfield, Mass.

When selling a customer we first try to ascertain his financial condition. For while one person may have \$100 to spare and another \$1,000,

the result will be the same if either buys something beyond his means, and later realizes that he is unable to pay the price. Each is likely to become unhappy and complain of minor or trivial things, thereby harming the dealer's trade and the dealer's future radio prospects with whom he comes into contact.

If a purchaser can pay only for a \$25 radio set, we give him the best \$25 radio set in the market. If he can afford a \$100 set we follow the same policy, and so on up. We take pains to explain as much as possible about the particular make of radio we have sold the customer and repeatedly ask each purchaser to come directly to us with any and all complaints and difficulties. We thus save a great deal of annoyance to both our customers and ourselves by preventing them asking others and so getting a great deal of misinformation about the radios we sell.

Makes Inquiries by Phone

We go to great lengths to make friends of our customers and to have them satisfied. From time to time we write personal letters or call by phone near neighbors of our customers and ask them to note the pleasure and satisfaction Mr. So-and-So is deriving from his radio. We then inquire if he also is in the market for something of this sort and have him get the indorsement of his neighbor as to the quality of our merchandise and our service.

This plan has developed into a sort of endless chain and the result has been nothing short of marvelous in helping to build new radio sales.

Genuine
Radiotrons
all \$3⁰⁰
for bigger radio sales

WD-11
WD-12

UV-199

UV-200
UV-201 A



*This symbol
of quality
is your
protection*

Radiot

REG. U.S. PAT. OFF.



There's Quality in everything

IN everything from a binding post to a vacuum tube, there is quality. But quality counts most in the vacuum tube. A radio set can be built for distance, for clear tone, for volume. But to get the best out of any hookup — you want to fit it with genuine Radiotrons.

No matter what type of set you have — or what type of circuit you are buying tubes for — ask for Radiotrons by name — and make sure you get the genuine by looking for the tube for the word Radiotron and the RCA mark. Quality counts!



Now \$2.00

tron

Radio Corporation of America

Sales Offices:

233 Broadway
New York

10 So. La Salle St.
Chicago, Ill.

28 Geary St.
San Francisco, Cal.



This symbol
of quality
is your
protection

The Editors Have

You Can Figure on \$3 per Capita

MANY sales managers plan national sales by population quotas. The same idea can be put to work by the retail radio store, in planning how to go after the money that will be spent on radio this year in the local community.

For on the average, from \$3 to \$4 per capita is being laid out for radio, as sales are running this year. In a town of 1,000, this means that at least \$3,000, possibly \$4,000, worth of radio will be sold during the year. In a town of 10,000, the figures swell proportionately to \$30,000 or \$40,000, depending on how rapidly the radio idea is taking hold. The \$3 per capita figure thus gives a key to the total immediate radio sales possibilities of any community, as things stand this year.

Figure it up. Multiply the population by 3, and plan on how you are going out after those radio dollars.

How Big to Grow?

WHAT is the most economical size of retail radio store?

An investigation just completed in the men's clothing field shows that the type of clothes shop manned by its proprietor and one clerk, and doing a business of \$250,000 a year, can be conducted at a lower average expense percentage than any other size. If such a store does a smaller business, its percentage of operating expense goes up. Or if it increases its volume, the expense percentage also mounts.

Here is something for the radio retailer to think about. For on at least four points the business of selling men's clothing resembles that of retailing radio. Men are the principal purchasers; the units of sales are comparable, in dollars; margins run about 33 per cent on sales; and both classes of goods have a comparatively rapid obsolescence.

Radio Retailing hopes to have corresponding figures for radio selling available later. Meanwhile we predict that, in selling radio as in selling clothes, the size of

business which gets the close personal attention of the boss himself will be found to be the one most economically run.

Keep a Perspective—and You're Safe

THE trade-in is an inducement to buy. We don't need that in the radio industry, for the popular appeal of radio is so great that there is no reason why any dealer should offer a premium.

Premiums are given by competing dealers when customers are scarce. But there are literally millions of homes still to be sold—homes that want radio, yet have never known its delights. There is no need for trade-ins in the selling of this market. The question arises only when present radio users are resold, and ask for something on the side.

Keep your perspective as to the comparative size of the new sale and the re-sale opportunities and you are safe. No dealer need start a second-hand department in his store, if he believes in radio.

It Took Ten Years to Sell the First 25,000 Autos

IT TOOK the automobile industry ten years—from 1895 to 1905—to sell its first 25,000 cars. In the twenty years since that period, sales have increased year by year, until America now has one automobile to every two families.

In three years, the radio industry has put over four million sets into operation—certainly a record for "fast getaway" in initiating a new art and industry. Of course many of these early sets will eventually have to be replaced with improved outfits, just as automobiles are being replaced with later and better models. But who, looking back on the history of the automobile's growth, can see less than a decade of active business and expansion in radio, with a vast stabilized industry ahead.



Your "Radio Retailing" seems to be the one magazine the retailer has been looking for.

F. J. MARTINE
New York City.

"Radio Retailing" surpasses them all. Splendid!

WM. F. CREAMER
Fishers Island, N. Y.

"Radio Retailing" is chuck full of good ideas. It is very helpful. L. A. HAN
Beaufort, S. C.

I like "Radio Retailing" fine. It is the best I have seen so far. But all your McGraw-Hill magazines are good.

R. I. BINDLEY
Marion, Ohio.

You are doing a good job.

R. H. SPAULDING
Boston, Mass.

I like "Radio Retailing" fine.

R. R. GREEN
McPherson, Kan.

"Radio Retailing" is the best radio magazine for the retail trade yet received. Fine!

INDEPENDENT RADIO
SALES
Sioux Falls, S. D.

"Radio Retailing" is just what we have been needing.

ROBERT E. CARTER
Bellefontaine, Ohio.

We like "Radio Retailing" fine.

HOOVER BROTHERS
Minier, Ill.

You have founded a magazine that the retailer needs, to broaden his vision.

RUCKER'S RADIO
SUPPLY STORE
Los Gatos, Cal.

"Radio Retailing" is the best magazine I have seen in print.

C. L. CLARK
Burghill, Ohio.

We like "Radio Retailing" fine.

ODEN BANGHORAN
Wardensville,
West Va.

Friendly Flashes Keep on Coming from "Radio

This to Say—

Your Hotel and Radio

NO DEVELOPMENT of radio equipment offers more possibilities for practical every-day usefulness, on the one hand, and for local publicity on the other, than the arrangement of radio loud-speakers in the public rooms of hotels and other buildings for the wider distribution of inside and outside orchestra music. The new Hotel Franklin in Philadelphia, for example, is so arranged that music can be picked up in any of eight different restaurants or ballrooms, and delivered to one or all of the other seven rooms. Thus one hotel orchestra may play simultaneously to listeners in many different parts of the building, or outside broadcasting may be picked up and distributed.

From this time on, certainly, every hotel which goes up should be wired in advance for loud speaker distribution of music and programs, to all guest rooms. It is the responsibility of the local radio dealer in his own interest to sell the radio idea to the hotel owners and so to hundreds of future guests.

"The Gyp Must Go!"

EVERY radio man who is building for a stabilized radio industry, wants to see eliminated those influences which tear down trade fabric and destroy public confidence. But the only way for the legitimate radio dealer to fight the gyp successfully, will be by studying the gyp's methods and learning his strong points and his weaknesses.

For the gyp applies many merchandising principles with a skill worthy of a better cause. He invariably picks location to catch traffic. He advertises in ways to attract attention. He arranges his store to facilitate the customer's convenience. And his ear is close to the ground to sense the public's wants. His technique as a merchandiser in these and some other directions will bear careful study by better merchants than he is.

The thinking legitimate radio dealer, we are sure, will want to benefit from—rather than close his eyes

to—even a gyp's lively application of such merchandising principles as have merit in themselves.

Sound Ideas from Whatever Source

THERE are readers of these pages who believe that *Radio Retailing* should make no mention of any radio concern whose trade practices have ever been questioned or criticized by anyone. Though the gyp is rampant in the radio trade today, these critics would have all reference to all concerns about whom there are whispers (!), wholly and teetotally eliminated from *Radio Retailing's* picture of the radio industry. With this point of view we cannot agree.

Instead, believing that the best way to arm against a skillful adversary is to know that adversary's methods, his organization, and how his forces operate, *Radio Retailing* proposes to present for the benefit of its readers, any and all business-getting and sales-building ideas which are sound and effective, drawn from whatever source—always, of course, with painstaking care that the method or idea thus reported is in itself constructive and applicable to the business of the legitimate dealer. Only by so doing, we believe, will we perform our full duty to our readers and to the radio trade.

Those Discounts to Friends

THE radio dealer who "gives a discount" to a friend or a "friend's friend," is starting a practice that may be mighty hard to stop—that is likely to be a good deal more expensive than the one "retail profit" lost.

For the act of giving away a discount is an admission that the first price is too high. Giving away the discount destroys confidence in radio prices, on the part of both the local public and the buyer who gets the discount—for you may be sure that his story is passed along to every intending radio purchaser he meets.

Giving the dealer's discount away is, in simple language, the first step toward a receivership.

Retailing's" Big Family of Dealer Readers

"Radio Retailing" is just the kind of magazine we have been looking for.

THE RADIO SERVICE COMPANY.
Portland, Oregon.

"Radio Retailing" is the best ever.

C. R. PAYTON
Smith Center, Kan.

"Radio Retailing" is just full of pep. Sure an inspiring magazine.

S. A. ZIELINSKI
Bay City, Mich.

"Radio Retailing" is certainly packed full of usable information.

M. H. SALMON
ELECTRIC COMPANY
Syracuse, N. Y.

You are to be complimented on "Radio Retailing."

CLOW BROTHERS
Angola, N. Y.

"Radio Retailing" is something that the radio retailer has

needed for a long time.

J. J. CARROLL
Ridgefield Park, N. J.

"Radio Retailing" is the best trade magazine I have ever read.

H. W. VINCENT
Pasadena, Cal.

"Radio Retailing" is just what we need.

ROCKFORD RADIO SHOP
Rockford, Ill.

"Radio Retailing" is simply fine and helpful.

ELECTRIC SERVICE CORP.
Victoriaville, Que.

"Radio Retailing" is a real trade magazine. It is just what we need.

CHAS. S. CROUSE
Tulsa, Okla.

We like "Radio Retailing" very much.

S. C. JOHNSTON
Elgin, Ill.



How Manufacturers Promote Dealer Sales

New "Dealer Helps" Offered to the Radio Retailer by the Manufacturer to Increase the Merchant's Radio Profits

A Radio Movie to Lend Your Local Theater

After the Wild West thriller or the modern society drama to which the whole town flocks whether the picture is good or not so good, you can get the theater manager to insert the short radio film, running about 300 ft., prepared by the Mohawk Electric Corporation, Chicago. The plot is extremely simple, being merely a short sketch from the life of a radio fan, but it is so true to life that it hits a responsive chord in all those members of the audience who have ever tried to take a fall as it were, out of Old Man Static.

Scene One shows the hero in front of his old-style multiple-knob set, trying to make good his boast that he gets California whenever he wants it. The more dials he twiddles the less comes out. (Here the audience is sympathetic, for who has not had the experience of everything going wrong when trying to demonstrate a real set to friends and neighbors?) The choicest bit of comedy comes when the guests gradually reach the point of exhaustion and begin to walk out on him. At

The aim and object of every radio fan, as their long-suffering families full-well know, is distance—the mysterious, enchanting, thrilling response of a far-off station. To spur radio customers on to more and more distance, the Aladdin Manufacturing Company, Springfield, Mass., has prepared the effective display illustrated, calling attention to "Na-ald" dials and sockets. The display is printed in seven colors and stands 26 in. high by 32 in. long. It is so constructed that an electric light bulb can be placed in back of the panel, illuminating the globe.

An Irresistible Appeal That Sells Radio Parts



the climax he gives a graphic account of what we would all like to do to contrary sets at times.

While his wild "Never Again" is still quivering in the air, he is introduced to the "Mohawk" and of course, his troubles cease. An educational touch is given by a slow motion picture of the operation of the gang condenser governing the one-dial control.

This photoplay is available to Mohawk dealers who can use it.

Free Advertising for the Dealer

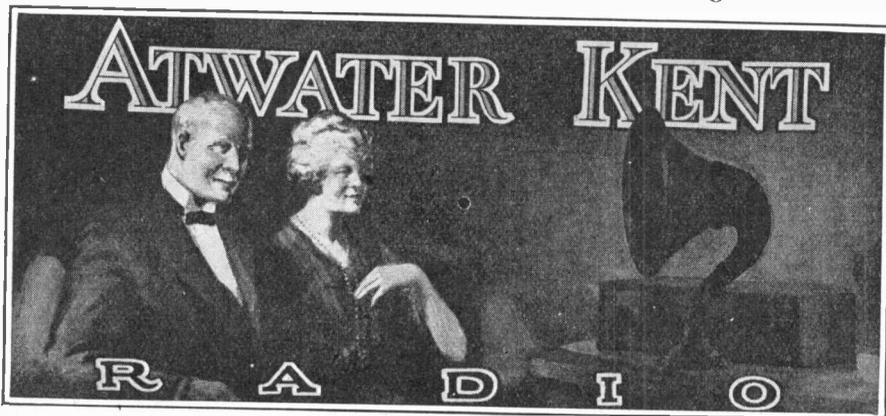
Following a new plan recently outlined by the Freed-Eisemann Radio Corporation, Brooklyn, N. Y., every authorized dealer selling this company's products is entitled to an allowance of five dollars for advertising purposes on every Freed-Eisemann receiver he signs up for, regardless of the list price of the receiver.

This money is to be used by the dealer for advertising in his local papers. For instance, if he purchases five sets, he is entitled to an advertising allowance of \$25, ten sets \$50, etc. An "Ad" book, prepared by the company, shows several complete advertisements which the dealer may use and includes, also, directions for obtaining the refund on advertising costs. This "Ad" book is available upon request. The "free advertising" offer is open until further notice and Freed-Eisemann dealers are invited to take advantage of it at once.

The Radio Supply Company, 17 South Fourth Street, Philadelphia, Pa., has issued a new catalog listing a complete line of radio equipment.

The Aladdin Manufacturing Company, Muncie, Ind., has issued three new circulars on its new "Aladyne" four-tube receiver.

Display These Outdoor Posters in Your Neighborhood



Starting with February, outdoor posters on radio subjects have been appearing here and there. These posters are the result of the efforts of the Atwater-Kent Manufacturing Company, Philadelphia, Pa., to impress upon every community the story of radio, and, incidentally, to put its name before the public, thereby co-operating with the dealer in creating more all-around radio

profits. There are four posters available, one for display until February 15, another from February 1 to March 15, No. R-5 illustrated, from March 1 to April 1, and still another from February 1 to May 1. These posters are supplied free of charge to the company's distributors and dealers who may wish to use them on their own poster boards.

Mix Sentiment with Radio Sales



An appeal to reason doesn't get very far in selling anything—radio included. But try the emotional appeal and watch the result! Which goes to prove that most folks are sentimentally-inclined and that the way to sell them is to count on their human interest and leave cold facts alone. All this was never more aptly illustrated than in the display material now being distributed by the various radio manufacturers. Take, for instance, the window and counter card illustrated, prepared by the Kilbourne & Clark Manufacturing Company, Seattle, Wash., to help its dealers sell the "Air Ruler" receiver. An actual photograph is used, delicately tinted in natural colors. In addition to this card, the company has also prepared one for its "Air Roamer" receiver.

Transformer Sales Simplified

On a background of brilliant orange is mounted a Star transformer of the Jefferson Electric Manufacturing Company, 426 South Green Street, Chicago, part of a counter card display just prepared by that company. The front of the card, directly above the mounted transformer, depicts in color a happy family grouped around a radio set.

"Many radio dealers have expressed the desire for window and counter cards to simplify the merchandising of transformers," says the company in announcing this new card, and for that reason the back of the card is arranged to give the prices, electrical characteristics and recommendation for use of each of the Jefferson transformers. As all the instruments are pictured, the dealer will have no difficulty in properly identifying them, while talking to a customer, and can give the correct prices, ratios, resistances, etc., without having to refer to the transformer cartons, as is the usual practice.

E. T. Cunningham, Inc., San Francisco, Cal., makes a suggestion for a timely radio window display. Here it is: Take the February 21 issue of the *Saturday Evening Post* and place it in the center of your window, turning to the full page Cunningham advertisement appearing therein. Then group around it the seven, nine-color, oil-painted display posters recently distributed by the company and, finally, place a radio set in the fore-ground. Each of the display posters emphasizes a different angle of radio appeal.

The Circle F Manufacturing Company, Trenton, N. J., formerly known as the E. H. Freeman Electric Company, has issued a colorful little folder on its line of "Circle F" radio devices including lightning arrester, sockets, insulators, etc.

The Millimeter Machine Works, 542 West Twenty-second Street, New York City, has prepared an applause card for distribution to the general public. "The artists who are daily on the air have no way of knowing how their efforts are being received unless the vast audience who hears them co-operates with them by sending in applause cards," says Peter A. Petroff, sales manager of the company. These cards are available to any one upon request.

The Electrical Research Laboratories, Inc., 2500 Cottage Grove Avenue, Chicago, has an attractive orange-and-black counter card on "Erla" transformers. The company has also prepared three bulletins—No. 22 on scientific audio amplification, No. 23, on Erla Supereflex Cir-Kits and No. 24, on Erla Supereflex circuits and parts.

A Realistic Battery Charger Window



There are some devices that do not readily lend themselves to artistic display without a little dressing up, and the battery charger is one of them. How a good-looking arrangement of "Unitron" chargers may be obtained is here shown in an actual display, using an effective background prepared by the Forest Electric Company, Newark, N. J. By placing the rectifier in the center of the window, and running the cord and plug to the lamp socket in the upper right-hand side of the center panel, a realistic effect of the charger in actual operation is given.

The Walbert Manufacturing Company, 925 Wrightwood Avenue, Chicago, is distributing its "Univernier Log," a small booklet arranged for complete logging of all radio stations received by any set. It also contains a page of tuning suggestions which the radio user will find of service and explains, as well, how to compile the "Univernier" log.

Fourteen Sales Appeals in One Display



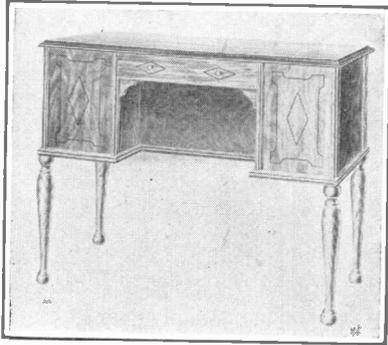
Fourteen elements of sales psychology have been combined into one attractive group in the new display of F. A. D. Andrea, Inc., New York City. As can be seen from the accompanying reproduction, the display is arranged in three panels. These are lithographed in ten colors on muslin and measure 42 in. by 36 in. Some of the fourteen points brought out in this new "FADA" group are the three models of receivers,

the use of these receivers by the different groups of people, i.e., the man of the home, the women and young folks. In the background of the panels are shown the three most popular kinds of broadcasting—lectures and sports events, musical concerts and dance music. Not the least important of the sales appeals are those emphasizing the volume, clarity, simplicity and selectiveness of the sets pictured.



What's New in Radio and

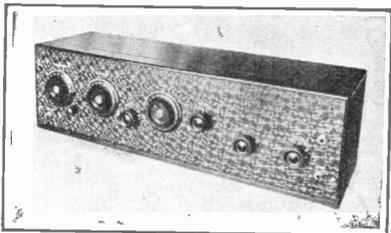
This editorial section is prepared purely as a news service, to keep readers of "Radio Retailing" informed of new products on the market.



Console with Built-in Loudspeaker

Radio Retailing, March, 1925

The doors of the "Wizard" cabinet illustrated, made by the Wizard Phonograph Company, Inc., 1977 Ogden Avenue, Chicago, besides concealing the loudspeaker, may also be used as a volume control or tone modifier. Ample space is provided for complete concealment of all radio batteries, charger and accessories. It is made of mahogany or walnut, and measures 32x19x38 in. Intended retail price, \$45.



Four-Tube Receiver

Radio Retailing, March, 1925

The "Gar-Shear-Dyne" Model DX-25 receiver, designed by A. J. Gardenhour, 7 Arcade Building, Waynesboro, Pa., is a four-tube set, consisting of one stage of variable tuned radio frequency, detector and two stages of audio frequency. It is a new circuit, the manufacturer explains, comprising a superheterodyne and tuned radio frequency, using a little regeneration to hear the carrier waves. The panel is made of special composition. Listed at \$100.

Five-Tube Set

Radio Retailing, March, 1925

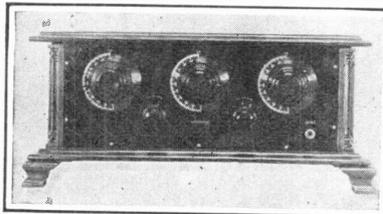
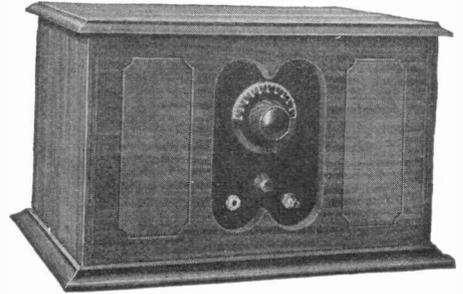
"Amerex Ace" is the name of the new receiver announced by the Amerex Electric Corporation, 232-B Greenwich Street, New York City. It is a five-tube tuned radio frequency receiver enclosed in a mahogany cabinet. Intended retail price, \$59.



Receiver with Single-Dial Control

Radio Retailing, March, 1925

Besides its one-dial control, some of the other outstanding features of the new four tube "Radisto" receiver, marketed by the Radisto Sales Company, 613 Fulton Building, Pittsburgh, Pa., are the volume control by means of the small knob placed under the large tuning dial, the "on-and-off" switch for throwing the batteries and tubes into service, and the elimination of all filament rheostats and their controls. Control of the tubes is automatic. The cabinet is made of Honduras mahogany with two-tone finish and provides ample room for dry batteries. Listed at \$85.



Two-Tube Radio Set

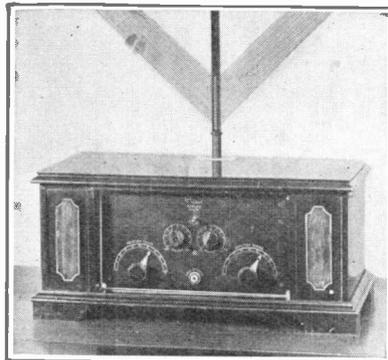
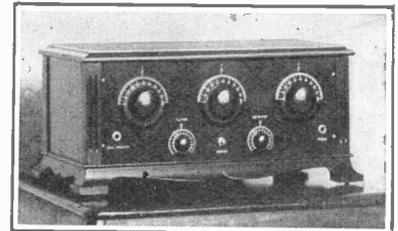
Radio Retailing, March, 1925

By means of a new principle incorporated in its "Sincroflex" receiver, the Mack Company, 1321 Arch Street, Philadelphia, claims that it is possible to use the same tubes three times. The circuit employs four stages of radio frequency and two of audio frequency. Another feature to which the manufacturer calls special attention is the selectiveness of the set. Intended retail price, \$70; three-tube set, \$85.

Five-Tube Radio Set

Radio Retailing, March, 1925

Two stages of tuned radio frequency amplification, non-oscillating detector and two stages of audio frequency amplification are specified for the "Wondertone" three-dial control receiver of the Keystone Radio Company, Greenville, Pa. Either storage or dry cell batteries may be used. Intended retail price, without accessories, \$90.



Five-Tube Reflex Receiver

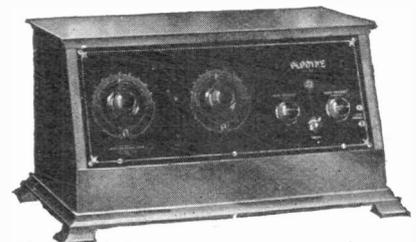
Radio Retailing, March, 1925

Three stages of radio amplification are utilized in the new PR-3 five-tube radio set brought out by Pries Radio, Inc., 695 Broadway, New York City. One of these stages is tuned to give the set a high degree of selectivity, the selectivity being further enhanced by the use of a sharp wave collection system comprising a low loss loop terminating in a low loss contacting system instead of the usual telephone jack and plug, and the use of low loss variable condensers for tuning both the loop and the amplifier systems. Two detectors are provided, one adjustable, the second fixed, followed by three stages of audio frequency amplification. Intended retail price, \$145. In console model, with concealed loop, \$225.

Four-Tube Receiver

Radio Retailing, March, 1925

The Aladdin Manufacturing Company, Muncie Ind., is the manufacturer of the "Aladyne" receiver illustrated, a four-tube set with two tuning dials. It is made to operate on either 67½ or 90 volts on "B" battery and 6 volts on "A" battery. Enclosed in mahogany cabinet, 19 in. long by 11½ in. wide by 10 in. high, with sloping panel. Intended retail price, Model RF-4, without tubes or accessories, \$75.



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

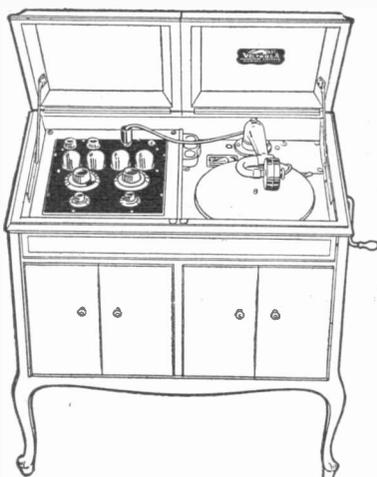
Radio Retailing, March, 1925

The specifications of the new model C-15 "Ray-O-Dyne" receiver of the Brown Radio Corporation, 301 West One Hundred and Twenty-fifth Street, New York City, describes the circuit as employing two stages of radio amplification, detector and two stages of audio amplification. Jacks are provided for headset and loudspeaker. For best results, 6 volts of storage and 90 volts of "B" battery are recommended. With mahogany cabinet it is listed at \$75.

Phonograph Radio Panel

Radio Retailing, March, 1925

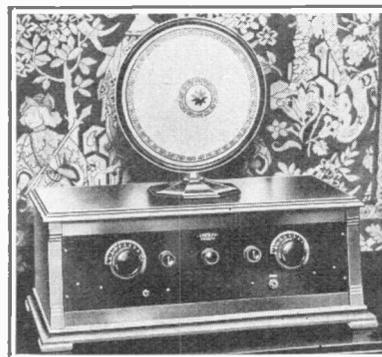
For use in console-type phonographs, to convert them into combination phonographs and radio sets, the Globe Electric Company, 14 Keefe Avenue, Milwaukee, Wis., has designed a radio panel which is made in three types, four-tube and five-tube for storage battery tube operation and four-tube for use with UV-199 tubes. The four-tube models measure 11½ in. by 13 in. and are listed at \$55 and \$60 respectively. The "DuoDyne" 5-tube panel is listed at \$80. This company has also designed a panel for use in upright phonographs.



Five-Tube Receiver

Radio Retailing, March, 1925

The Stewart-Warner Speedometer Corporation, 1826 Diversey Boulevard, Chicago, has announced its new "Aeromaster" Type TRF-5 receiver. The set consists of two stages of low-loss tuned radio frequency, detector and two stages of audio amplification. Air core radio frequency transformers are used, tuned by three condensers with plates rigidly connected together to further decrease electrical losses. The cabinet with sloping panel is finished in dark walnut.



Three-Tube Radio Set

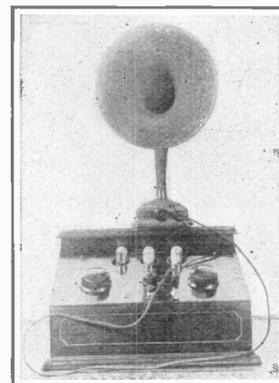
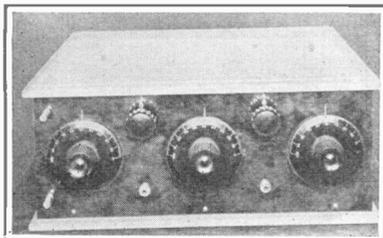
Radio Retailing, March, 1925

The receiver illustrated is known as the "Trirdyn Special" of the Crosley Radio Corporation, Cincinnati, Ohio. It is a three-tube set employing the "Trirdyn" circuit—a combination of Armstrong regeneration, radio frequency amplification and reflexed audio amplification. The "Special" model differs from the regular "Trirdyn" model in cabinet only, the former having more elaborate cabinet, with sloping panel. Both cabinets, however, are made to accommodate batteries. Intended retail price, \$65. With straight panel, \$60. The loudspeaker shown is a new Crosley product which has just been brought out. Its intended retail price is \$17.50.

Three-Tube Set

Radio Retailing, March, 1925

Ray-Dee Aircraft Products, 12 East Central Avenue, Redlands, Cal., is the manufacturer of the receiver illustrated, the Ray-Dee S3RRV, which employs one stage of radio amplification, detector and one stage of audio amplification. Its approximate detector-plate voltage is 22½ and the amplifier voltage, 90. It is designed for storage battery use, operates a loudspeaker and employs aerial and ground. Enclosed in cabinet measuring 27 in. by 7½ in. by 10 in. Intended list price, \$135.



Three-Tube Receiver

Radio Retailing, March, 1925

The Eagle Radio Company, Newark, N. J., has announced a new three-tube receiver, the "Eaglet" which employs the neutrodyne circuit. Its intended retail price is \$75.

Radio Cabinet

Radio Retailing, March, 1925

The cabinet pictured, a product of the W A L Radio Cabinet Company, Fort Lee, N. J., is made for sets with panels 7 in. high by 18 to 26 in. long. It may be obtained in two different models and with or without built-in loudspeaker and unit. All connections to "A" and "B" batteries are made in back of panel. The lower compartment provides space for the "A" and "B" batteries and is large enough for other radio accessories. Model A, with loudspeaker, is intended to sell at \$65; without loudspeaker, \$45. Unfinished, the prices are \$50 and \$32, respectively.

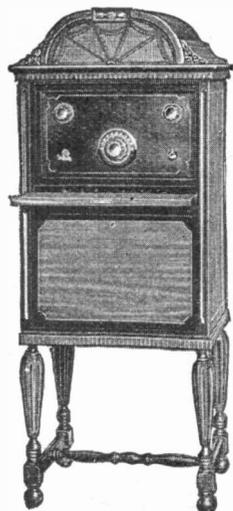


Radio Cabinets

Radio Retailing, March, 1925

The Art Novelty Company, Goshen, Ind., is making a line of radio cabinets that will appeal to the average radio user who is looking for a cabinet of good design and workmanship but who does not wish an elaborate model. There are many different styles available, and two new models will shortly be added to the line, thereby providing an assortment of cabinets ranging in price from \$10 to \$90.

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



Console-type Receiver

Radio Retailing, March, 1925

Two new models are announced by the Mohawk Electric Corporation, Diversey at Logan Boulevard, Chicago. One of the new models, the console type, is here pictured. The other is a console-type and is similar to the set illustrated, except that it is without legs and contains room in the lower compartment for "B" batteries only while the console is made to accommodate all batteries as well as a battery charger. Both models have built-in loudspeaker and have all connections made from the rear. Intended retail price, \$300 and \$250 respectively.

Five-Tube Reflex Receiver

Radio Retailing, March, 1925

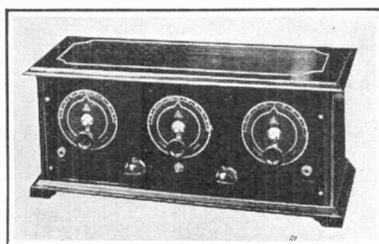
Four stages of radio frequency amplification, a crystal detector and three stages of audio frequency amplification are embodied in the new "Premier" receiver designed by the Premier Radio Corporation, Defiance, Ohio. The set is made to operate on any of the accepted types of aerials, outside or inside or loop and can be switched from outside or inside aerial to loop instantly without any change in wiring, it is pointed out. Intended retail price of 7-A console model illustrated, \$290, including loudspeaker and horn. The table-type receiver is listed at \$160.



Six-Tube Receiver

Radio Retailing, March, 1925

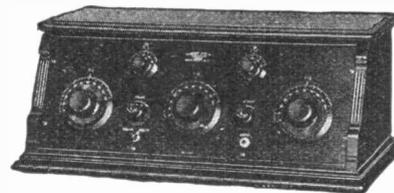
The "Naturelle" receiver brought out by the Brilliantone Radio Products, Inc., 324 West Forty-second Street, New York City, employs a resistance coupling amplification using "Daven" resistance and ballast control on detector and amplifying tubes. The front panel is made of black bakelite with gold engraving, with jacks and switch to match, while the cabinet, measuring 7 in. by 18 in., has black satin finish. Intended retail price, \$85.



Five-Tube Radio Set

Radio Retailing, March, 1925

The tube sockets (of which there are five) of the new "Melco" radio frequency receiver brought out by Amsco Products, Inc., Broome and Lafayette Streets, New York City, are molded directly into the sub-panel, upon which all of the units are mounted. The wiring is concealed under the sub-panel. Two stages of tuned radio frequency, a detector and two stages of audio frequency are employed. Enclosed in mahogany or walnut cabinet, with inclined panel. Intended retail price, without accessories, \$165.



Combination Clock, Phonograph and Radio Set

Radio Retailing, March, 1925

At any predetermined hour or minute, the electrically-operated phonograph or radio set contained in the cabinet illustrated, can be turned on automatically without any operator being present. This, of course, is accomplished by means of the clock which is built into this combination set. In the topmost compartment is the tone arm and turntable for phonograph records, with an electric motor directly below. The tone arm is made in the shape of a "Y" one leg carrying the sound-box unit for the phonograph and the other the loudspeaker unit for the radio. Below the clock is the horn compartment, and directly beneath, the four-tube radio set. Intended retail price, \$250. It is manufactured by the Pinto Speaking Clock Company, Inc., 1624 South Eighth Street, Philadelphia, Pa.

Knock-Down Crystal Receiving Set

Radio Retailing, March, 1925

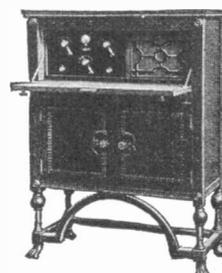
By following the instruction book which accompanies the new "Radiogem" set, made by the Radiogem Corporation, 66 West Broadway, New York City, a crystal receiver may be built, using only the hands and scissors, the manufacturer explains. The outfit comprises all the necessary wire, contact points, detector mineral, tube on which to wind the coil, etc. Intended retail price, \$1. To accompany this set the company is offering an aerial outfit and "Gemphone"—a 1,000-ohm watch-case head-phone, with wood case. The entire outfit consisting of three parts, is listed at \$2.50.



Console-Type Receivers

Radio Retailing, March, 1925

An artistic console of Adam, Italian Renaissance or Queen Anne design houses a five-tube set designed by the Hartman Electrical Manufacturing Company, Mansfield, Ohio. Two of the models are illustrated, Queen Anne to the left and Italian Renaissance to the right. Type 12 is a five-tube receiver with tuned transformer circuit with aperiodic primaries, and is especially designed for dry battery operation and the use of C-299 and UV-199 tubes. Intended retail price of 12-A, Adam period, \$245; Renaissance design, \$325; and Queen Anne, \$315.



News of Latest Products Gathered by the Editors



Cabinet with Built-In Loudspeaker

Radio Retailing, March, 1925

Ample space for all accessories is provided by the No. 732 "Consoloud-Speaker" cabinet, designed by the Udell Works, Twenty-eighth Street at Barnes Avenue, Indianapolis, Ind. The top of the cabinet is large enough to hold any receiving set. It measures 29 in. high, 38 in. wide and 18 in. deep and is finished in two-tone walnut or brown mahogany. Intended retail price, including built-in loudspeaker unit and horn, \$55.



Cabinet Loudspeaker

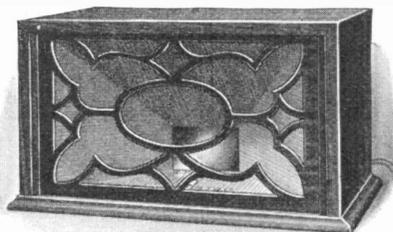
Radio Retailing, March, 1925

By merely lifting the lid of the cabinet illustrated, made by the Adler Manufacturing Company, 881 Broadway, New York City, the loudspeaker unit is instantly accessible. It is adjustable in type and is used with a wood horn. The cabinet itself measures about 15 in. wide, 10½ in. high and 9 in. deep. Furnished in either mahogany or walnut, the speaker is listed at \$30.

Cabinet-Type Loudspeaker

Radio Retailing, March, 1925

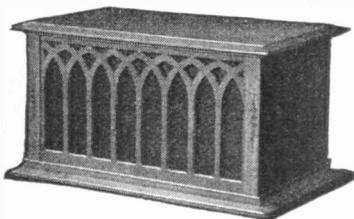
Fashioned from silver grain spruce, carved to scientific proportions, the horn of the loudspeaker brought out by the Starr Piano Company, Richmond, Ind., hangs free, suspended to allow tone vibrations to be delivered unimpeded by any metal part or connection, the manufacturer explains. The cabinet is finished in mahogany, walnut or oak. Its dimensions are: 9½ in. high, 17 in. wide and 9½ in. deep.



Cabinet-Type Loudspeaker

Radio Retailing, March, 1925

For those who wish a loudspeaker more ornamental in design than the usual horn types, the Remo Corporation, Meriden, Conn., has designed the "Re-creator" cabinet-type speaker illustrated. It is made of mahogany with soft brown finish and silk panel. Intended retail price, \$25.



Loudspeaker

Radio Retailing, March, 1925

A special adjustable unit is the outstanding feature of the new "Remo Trumpet," a product of the Remo Corporation, Meriden, Conn. By reason of this heavy-duty adjustable unit, controlled volume is obtained, making a sweeter, finer tone through adjustment. It has Adam mahogany finish. The loudspeaker unit can be used as an attachment to a phonograph and is sold separately (listed at \$5.50) for this purpose. Intended retail price of Trumpet complete, \$15.



Loudspeaker

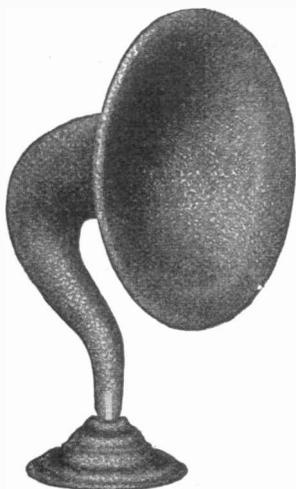
Radio Retailing, March, 1925

The new "Majestic" reproducer brought out by the Grigsby-Grunow-Hinds Company, 4540 Armitage Avenue, Chicago, has as its exclusive feature the "constant tension" diaphragm by reason of which a soft clamping method is used, thus eliminating the harshness attendant upon the "hard clamping" necessary with ordinary flat diaphragms, the manufacturer points out. The projector horn is made of Pyralin and the overall height of the loudspeaker is 22 in. The diameter of the bell is 13 in. The base is finished in crystalline lacquer and is equipped with volume adjustment control. Model WG-10, finished in ebony, is listed at \$12.50; WG-20, in shell-mahogany, \$15; WG-40, in Japanese pearl, \$17.50; and WG-50, in mother-of-pearl, \$20.

Loudspeaker

Radio Retailing, March, 1925

In describing its new loudspeaker the Kellogg Switchboard & Supply Company, Chicago, points out that the unit is of special construction, having a magnetically-modulated diaphragm of original Kellogg design. The general appearance of the horn may be seen from the accompanying illustration. It is made of composition with a bronze crackly finish. The loudspeaker is made in a senior model, with an intended retail price of \$20 and a junior model which will shortly be announced.



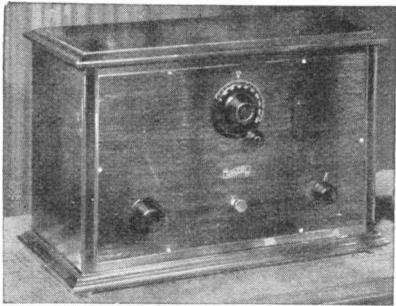
Loudspeaker

Radio Retailing, March, 1925

The Hart & Hegeman Manufacturing Company, Hartford, Conn., has added to its line of radio products its H & H "After Dinner" speaker, No. W-666, which has 15 in. bell and which is adjustable to the individual set and location conditions.



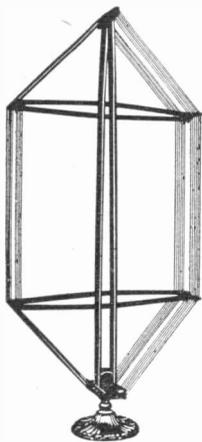
What's New in Radio and Where to Buy It—



Receiver for Phonograph Installation

Radio Retailing, March, 1925

The Appleby Radio Company, Fifty-eighth Street below Baltimore Avenue, West Philadelphia, Pa., has brought out three new models of receiver that are specially adapted for installation in phonographs of the upright or console types. One model, known as X, has built-in loudspeaker and battery compartment and is designed for the console phonograph. Its intended retail price is \$230. Other models are V, for the console phonograph and XV, for the upright type. These models are listed at \$135. All radio circuits employ five tubes and single-dial control. Model XV is illustrated.



Loop Aerial

Radio Retailing, March, 1925

The "Super-Loop" illustrated is made by the Banker Windshield Company, 5722 Ellsworth Avenue, Pittsburgh, Pa., and is a complete antenna, designed to replace the outside aerial. It is mounted on a black-enameled cast base which permits the loop to be quickly directed toward any desired station. It is wound with 100 ft. of Belden special loop wire, made of 60 strands of copper wire twisted with five strands of phosphor bronze wire, enclosed in a double covering. Its height is 44 in. and the width, 20½ in. Intended retail price, \$12.

Radio Panel for Phonographs

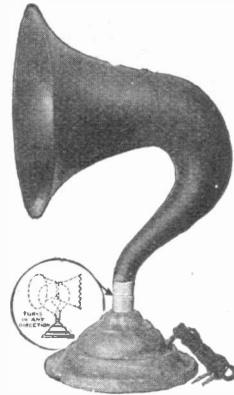
Radio Retailing, March, 1925

To convert the phonograph into a combination radio and phonograph outfit, the R. E. Thompson Manufacturing Company, 30 Church Street, New York City, has designed two types of radio panels. Both models accommodate a 5-tube Neutrodyne receiver. Type P-11-400, with gold hardware, measures 15 13/16 x 16 27/32 x 6½, listing at \$125; and Type P-11-215, which measures 14½ x 17 13/32 x 6½, has silver hardware and is listed at \$115. The panel itself is made of polished bakelite, engraved.

Loudspeaker

Radio Retailing, March, 1925

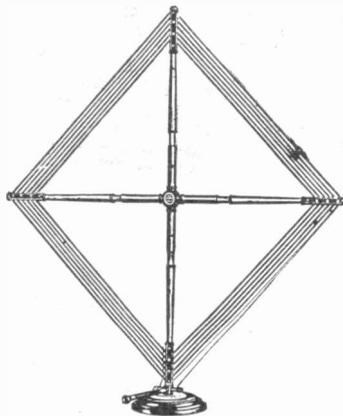
A special swivel joint, making it possible to turn the horn in any desired direction without moving the base is the outstanding feature of the new Model G loudspeaker brought out by Hamburg Brothers, 624 Grant Street, Pittsburgh, Pa. The base is made of synthetic Italian marble while the goose-neck horn is made of black composition. The manufacturer claims that it will use 130 volts without blast or distortion. Intended retail price, \$15. This company has also brought out a new Model A horn which is a full-size loudspeaker with semi-goose-neck horn. It is listed at \$10.



Collapsible and Portable Loop

Radio Retailing, March, 1925

The Bodine Electric Company, Ohio Street and Oakley Boulevard, Chicago, is announcing a new radio loop, with models for each loop circuit and receiving set. The standard model is made to fit most of the loop sets while the Super-Het Special is designed for use with the super-heterodyne circuits. Another model, the tapped loop, is fitted with a multi-tap switch so that either the whole or any part of the loop can be used. One of the interesting features of the loop is the winding, which is similar to that used in the latest types of induction coils, in which losses are reduced to a minimum, the manufacturer explains. It is fitted also with a satin silver calibrated dial so that the setting of the loop can be regulated for any station. Intended retail price of models without tap switch, \$8.50; with tap switch, \$10.



Audio Transformer

Radio Retailing, March, 1925

The General Radio Company, Cambridge 39, Mass., has brought out a new No. 285 audio transformer to meet the demands caused by recent improvements in reproducing equipment, especially loudspeakers. The transformer is designed to have an amplification curve which extends to higher frequencies and to lower frequencies. A large core of specially selected steel is used to provide improved upper and lower ends without introducing a high distributed capacity and to insure a high inductance value.



"B" Battery Eliminator

Radio Retailing, March, 1925

Operating from the ordinary 110-volt, 60-cycle a.c. house-lighting circuit, the new "Fordec" "B" battery device brought out by the Foreign & Domestic Electrical Commodities, Inc., 629 West Twenty-third Street, New York City, is designed for use with sets employing up to six tubes, whether single tube, five-tube neutrodyne or six-tube super-heterodyne sets. Any 5-volt, 1-amp. tubes may be used, the company points out. Enclosed in Fabrikoid-covered cabinet with hinged cover. Intended retail price, \$38.50.

News of Latest Products Gathered by the Editors



Console Radio Table

Radio Retailing, March, 1925

The back of the new console table brought out by the John O. Jesse Manufacturing Company, Bryan, Ohio, is open, giving free access to two large compartments for "A" and "B" batteries and battery charger. The table is made of Honduras mahogany, with dark brown finish. The front door which is trimmed with antique silver pendant pull, drops to horizontal position, providing a convenient shelf for writing. This front compartment is made to accommodate headset, programs, etc. The table is 30 in. high and the top measures 16 in. by 38 in. Intended retail price, \$35.



Radio Table

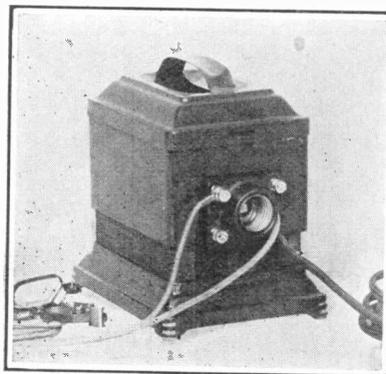
Radio Retailing, March, 1925

Made of selected hardwood, the radio table illustrated has a "Pycowood" panel top measuring 31½ in. by 17 in. It is made by the Parker-Young Company, 131 State Street, Boston, Mass., in the company's own wood-working plants. The table may be obtained in mahogany or walnut finish. Intended retail price, \$13. In addition to the table, the company also manufactures a collapsible radio cabinet made to accommodate batteries and accessories. Intended retail price of cabinet \$24.

2-Amp. Battery Charger

Radio Retailing, March, 1925

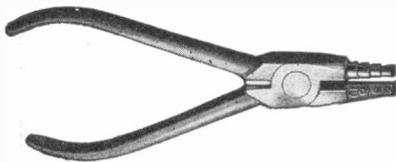
Twelve types of batteries, including 6 or 12-volt automobile lighting and starting battery, 6-volt radio "A" battery, 4-volt radio "A" battery and 24, 48, 72 and 96-volt radio "B" batteries, may be charged without auxiliary devices or equipment by the new 2-amp. battery charger brought out by the General Electric Company, Schenectady, N. Y. The charger is so compact that it can be easily placed in the radio cabinet and made part of the radio set.



Wire Former

Radio Retailing, March, 1925

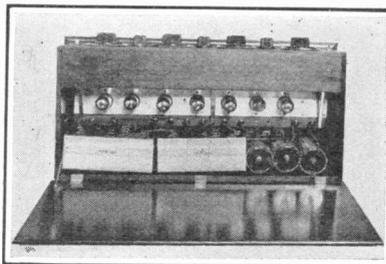
A handy tool recently placed on the market is the Windham wire former, made by the Goyer Company, Bank and Valley Streets, Willimantic, Conn. This tool is provided with anvils for turning loops for Nos. 4, 6, 8 and 10 screws, the common sizes used in electrical and radio parts. It has flat jaws, one corner of which is rounded to permit easy radius right angle bends, and a wire cutter for wire up to No. 12.



Radio Kit

Radio Retailing, March, 1925

The illustration shows the interior view of a typical set that can be built with the "Telos" kit of Danziger-Jones, Inc., 25 Waverly Place, New York City. Included in this kit are the necessary parts to build a set using up to three stages of tuned radio frequency and two or even three stages of super-imposed (reflexed) resistance-coupled audio frequency as well. A number of combinations are fully covered in the instruction book and detailed blue prints accompanying the kit. Intended retail price, \$60.



Tuned Radio Frequency Transformer

Radio Retailing, March, 1925

For use as tuned radio frequency transformers for tuned radio frequency and other circuits, the Feri Radio Manufacturing Company, 1167 Bedford Avenue, Brooklyn, N. Y., has brought out its "Lo-Loss" inductance coil which comes in a set of three. These inductances (Type R of which is illustrated), are self-balancing and are accurately and tightly wound, the windings being rigidly bound together with linen twine. Green and maroon-colored silk-covered wire is used on primary and secondary. Intended retail price, per set of three, \$6.



Type R



Radio Panel Light

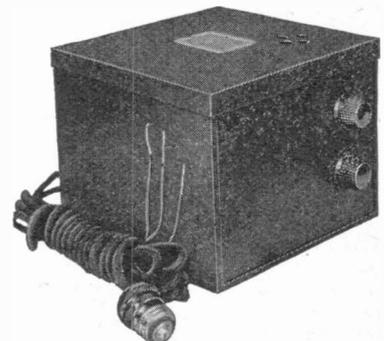
Radio Retailing, March, 1925

Whether or not the set is placed in an out-of-the-way place will not inconvenience the user of a set equipped with the new "Panelite" brought out by the Walbert Manufacturing Company, 925 Wrightwood Avenue, Chicago, for this little lamp provides enough light for tuning in. It hooks up right into the "A" battery circuit and uses the same amount of current as a 201-A tube, the manufacturer explains. Intended retail price, nickel-plated, \$1.

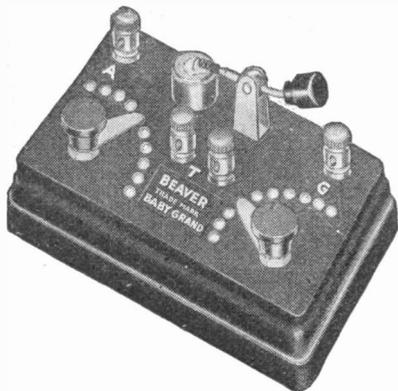
"B" Battery Eliminator

Radio Retailing, March, 1925

Operating from the lighting circuit, 110 volt, 60 cycle, a. c. current only, the "B-Power Generator" announced by MacFadden & Company, Twenty-second and Arch Streets, Philadelphia, Pa., is designed for use on any set up to ten tubes. Enclosed in metal receptacle, about 8 in. square. Intended retail price, \$35.



What's New in Radio and Where to Buy It



Crystal Radio Set

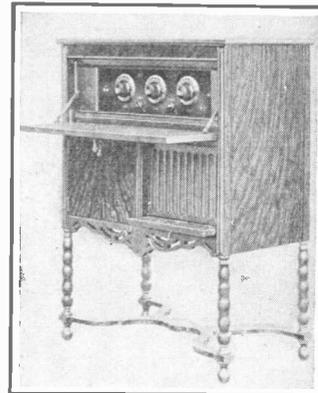
Radio Retailing, March, 1925

The Beaver Machine & Tool Company, Inc., Newark, N. J., has brought out a new model of its "Baby Grand" receiving set. The new model, illustrated, is made all in one piece, that is, the top panel corresponds to the box or cabinet all molded together, thereby presenting an attractive appearance. Intended retail price, about \$3.

Console-Type Receiver

Radio Retailing, March, 1925

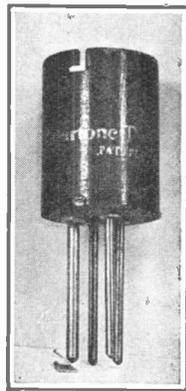
The cabinet illustrated is sold by the Mu-Rad Laboratories, Inc., Asbury Park, N. J., and is designed to accommodate either the Mu-Rad MA-15 or MA-20 receiver. It is here shown with model MA-20, a five-tube receiver with three tuning dials. The cabinet has built-in loudspeaker and provides a compartment for the set, the Mu-Rad "Recto-Filter" battery eliminator or space for the "A" and "B" batteries. The console is made of walnut and is listed at \$160. The intended retail price of the MA-20 receiver is \$185.



Adapter for WD-11 Tubes

Radio Retailing, March, 1925

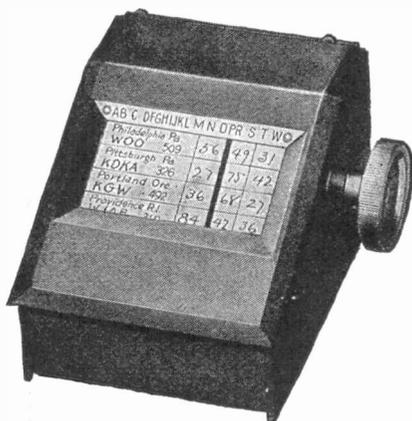
To permit the use of standard tubes in sets (like Radiolas No. III and III-a) employing WD-11 tubes, the Cleartone Radio Supply Company, 70 Audubon Avenue, Providence, R. I., has designed an adapter which, it is claimed, will greatly increase the volume of these sets. Intended retail price, \$1.



Five-Tube Receiver

Radio Retailing, March, 1925

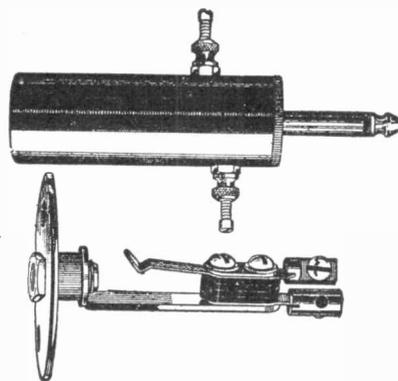
The "Superfive" receiver designed by the Precel Radio Manufacturing Company, 714 Monroe Street, Toledo, Ohio, has five tubes, operating on the tuned radio frequency principle, providing two steps of tuned radio frequency, non-regenerative detector and two steps of power audio frequency amplification. A jack connection for using loop aerial when desired is provided. Walnut cabinet, 14½ in. by 20½ in. Intended retail price, without accessories, \$130.



Radio Index

Radio Retailing, March, 1925

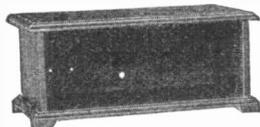
A practical method of recording dial readings is provided by the radio index designed by the Bates Manufacturing Company, Orange, N. J. The index strip is 10 ft. long and lists 320 of the principal broadcasting stations (with call letters and wave lengths) in the United States, Canada, Cuba and Porto Rico. Finished in copper green. Intended retail price, \$3. Memoranda pad attachment, specially made, can be supplied at a nominal price.



Jack and Plug for Loop Aerial Use

Radio Retailing, March, 1925

The ordinary type of jack designed to be used on panels with a thickness up to ¼ in. is difficult to use through the lid of the radio cabinet, which is generally ½ in. thick, explains Herbert H. Frost, Inc., Chicago, in introducing a new jack and plug designed for use with a loop aerial. This new device can be used on the lid of the cabinet by simply drilling a single hole. The plug is extra large and long and the bottom end of the loop frame can be easily inserted and firmly held. To disconnect the loop, it is necessary simply to pull out the plug. The jack allows the loop to be rotated in any direction without breaking contact or twisting up the connections.



Radio Cabinet

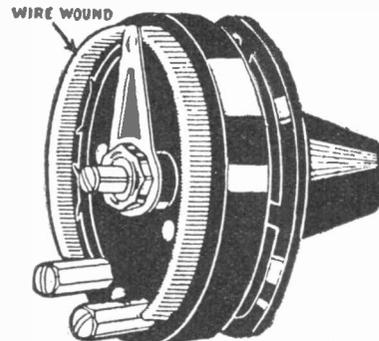
Radio Retailing, March, 1925

The cabinet illustrated, made by the Specialty Display Case Company, Kendallville, Ind., may be obtained to fit any panel. It has an inside depth of 8 in. and is made of poplar or any wood desired. It can be furnished in imitation dark brown mahogany or any color wanted. This company also makes other types of cabinets to fit all sizes of panels.

Variable Resistance

Radio Retailing, March, 1925

The new "Royalty" variable high resistance brought out by the Wireless Products Corporation, 136 Prince Street, New York City, is described by its manufacturer as being wire wound and as having a contact lever bearing against a wire winding as heavy as that used in a filament rheostat. As the lever moves from one wire to the next, there is a change in resistance value exactly as there is in an ordinary rheostat it is explained. The resistance is made in two types to conform to all requirements. Type B has a range of 1,500 to 100,000 ohms and type C ranges from 500 to 50,000 ohms. Intended retail price, \$1.50.



News of Latest Products Gathered by the Editors



Radio Insert for Phonograph

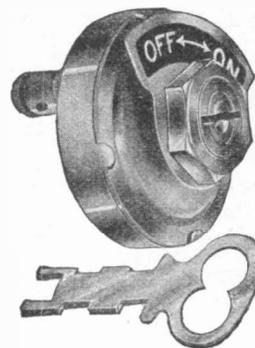
Radio Retailing, March, 1925

A complete five-tube receiver, called the XL-5 Phono-Set, has been announced by the A-C Electrical Manufacturing Company, Dayton, Ohio, for installation in a phonograph of either console or upright type. When installed in the record compartment of the phonograph, the set is completely enclosed within the cabinet. A speaker unit, with universal attachment to fit any make of phonograph, permits the use of both phonograph and radio set without impairing the regular use of the phonograph in any way. Intended retail price, including loudspeaker unit and attachment, \$120.

Phonograph Radio Panel

Radio Retailing, March, 1925

The console panels made by the Mohawk Electric Corporation, Diversey at Logan Boulevard, Chicago, are furnished in two sizes, measuring respectively, 15 $\frac{3}{8}$ in. by 16 $\frac{27}{36}$ in. and 14 $\frac{1}{2}$ in. by 17 $\frac{3}{8}$ in. The first model is designed for use with Victrola models No. VV-S-400, VV-S-405 and VV-S-410, while the second model is made to fit the Victrola No. VV-S-215 console phonograph. These units can, however, be installed in other standard console phonographs also. Intended retail price, \$125.



Locking Battery Switch

Radio Retailing, March, 1925

"Keelok" is the name of the new safety battery switch, made by the Metro Electric Manufacturing Company, 121 Prince Street, New York City. It operates with a key and locks and unlocks the battery circuit, acting on the same principle as the ignition switch of an automobile. Intended retail price, 75c.

Vernier Knob

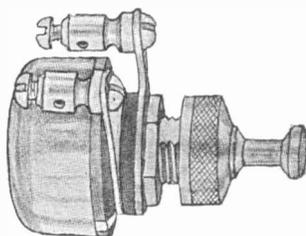
Radio Retailing, March, 1925

For revolving radio dials with a slower motion than is possible by revolving the dial by hand, the Allen-Bradley Company, Milwaukee, Wis., has introduced its "Bradleyknier," a recent addition to its line of radio equipment. It can be applied to any radio set and provides vernier control without the use of vernier dials. A unique feature of the device is the back-panel mounting. The knob moves to and from the panel. Intended retail price, 50c.

Battery Snap Switch

Radio Retailing, March, 1925

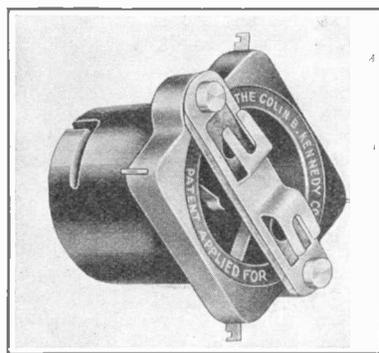
The outstanding point of the new battery snap switch brought out by the Millimeter Machine Works, 542 West Twenty-second Street, New York City, is the hinge arrangement, a patented feature. Non-magnetic material is used, bakelite insulation, 8-point self-cleaning spring contact and phosphor bronze spring. The switches are made in four different types. Intended retail prices are 40 to 50c.



Tube Socket

Radio Retailing, March, 1925

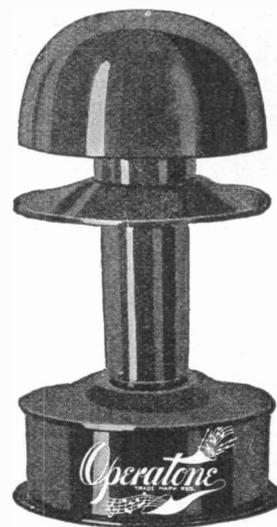
The Colin B. Kennedy Company, St. Louis, Mo., is announcing a new flexible, cushioned, non-microphonic vacuum tube socket which will be used in the company's own sets and will also be marketed as a part for amateur set builders. One of the most important features of the socket is the mounting bracket used to take up vibration. It is held in place by two aluminum rivets with extended heads so that the socket cannot be forced down enough to damage it. A piece of insulation is placed between the flexible mounting and the tube contacts to eliminate the possibility of contacts touching the mounting. Intended retail price, 85c.



1½-Volt, Cylinder-Type Storage Battery

Radio Retailing, March, 1925

The Helios Battery Corporation, 71 Chestnut Street, Boston, Mass., is bringing out a "Wonder-Cell" battery which is rechargeable with Joyce Bros. rectifier. With reasonable care, the manufacturer claims, the battery will last at least five years. Its charging rate is 1 amp. and its capacity is 12,000 milli-amps.



Loudspeaker

Radio Retailing, March, 1925

"Operatone" is the name of the unusual-looking device illustrated which is a loudspeaker, designed for operation with any standard receiving set. The diaphragm of the unit is made of a special heat-treated metal and the cap is equipped with a special composition gasket which absorbs the heavy shock that the diaphragm is forced to take when highly-amplified signals are passing through the set. Made of a highly-polished "Piroxloid" tortoise shell material, the loudspeaker measures but 5 $\frac{1}{8}$ in. in height and 2 $\frac{1}{4}$ in. across the base. Intended retail price, \$7.50; Piroxloid Products Corporation, 200 Fifth Avenue, New York City.

What the Trade Is Talking About

Plans for Standardizing Receiving Apparatus

The American Engineering Standards Committee, 29 West Thirty-ninth Street, New York City, announces that organization of the work on standardization of radio receiving apparatus has taken definite form through the organization of five technical working committees. The scope of the work assigned to these sub-committees is as follows:

Committee on Transmitting and Receiving Sets and Installations: Circuit classification, method of installation, rating and performance tests of receivers and transmitters. Chairman: Arthur Van Dyck, Radio Corporation of America.

Committee on Component Parts and Wiring: Mechanical and electrical characteristics of component parts, inter-connecting wiring and method of attachment to component parts. Chairman: L. G. Pacent, Radio Club of America.

Committee on Vacuum Tubes: Mechanical and electrical characteristics. Chairman: C. B. Joliffe, Bureau of Standards.

Committee on Electro-Acoustic Devices: Devices for sound production or amplification which are in part mechanical, including microphones, telephone headsets, loud speakers and mechanical amplifiers. Chairman: Lloyd Espenschied, American Telephone and Telegraph Company.

Committee on Power Supply and Outside Plant: Protection of radio equipment from lightning and from power line interference radiation from power lines and inductive disturbances from electrical devices, and current supply for dry batteries, storage batteries and rectifying devices. Chairman: L. W. Chubb, Radio Apparatus Section, Associated Manufacturers of Electrical Supplies.

Each of the technical committees will undertake the standardization of nomenclature within its field.

The sectional committee contains official representatives of twenty national organizations, including all of the important organizations concerned with the subject. The chairman of the committee is Professor John H. Morecroft, Columbia University, and the secretary is Dr. Alfred N. Goldsmith, chief broadcast engineer of the Radio Corporation of America, and secretary of the Institute of Radio Engineers. The Institute of Radio Engineers and the American Institute of Electrical Engineers are taking the formal leadership in the sectional committee work.

The Association of Former Westinghouse Employees held its first meeting-luncheon of 1925 on February 11, at Stewart's Restaurant, Park Place, New York City. The association is composed of men who were formerly connected with the Westinghouse Electric Com-

pany. The address of the meeting was made by M. C. Rypinski, vice-president of C. Brandes, Inc., and a member of the executive committee of the association. Mr. Rypinski gave an outline of the history of radio within the Westinghouse Company, with which he was also connected.

World Radio Conference Planned for U. S.

The government has begun preparations for a world conference on radio and telegraphy to be held in Washington, D. C., as a sequel to the London conference of 1912. The original date for the meeting was set for 1917 but the war forced a postponement. It is expected that representatives from many world governments will attend.

The strides made in radio and wireless communication since the 1912 convention will be taken up along the lines demanded by modern conditions, with the idea of adjusting them to international requirements.

New Broadcasting Stations

Four new broadcasting stations, of 500 watts or more, have recently been licensed by the Government. They are: KFRU, Etherical Studios, Bristow, Okla., 500 watts, 296.9 meters; WEAR, Goodyear Tire and Rubber Company, Cleveland, O., 1,000 watts, 389.4 meters;

WMBF, Fleetwood Hotel, Miami Beach, Fla., 500 watts, 384.4 meters; WSAG, Gospel Tabernacle, St. Petersburg, Fla., 500 watts, 266 meters.

Eight smaller stations, whose licensing is of interest to the radio trade are as follows: KDLR, Radio Electric Company, Devil's Lake, N. Dak., 5 watts, 231 meters; KFUU, Colburn Radio Laboratories, San Leandro, Cal., 100 watts, 224 meters; WBES, Bliss Electrical School, Takoma Park, Md., 100 watts, 222 meters; WBRE, Baltimore Radio Exchange, Wilkes-Barre, Pa., 10 watts, 231 meters.

Also, WGBN, Hub Radio Shop, La Salle, Ill., 10 watts, 256 meters; WHBA, Shaffer Music House, Oil City, Pa., 20 watts, 250 meters; WHBB, Hebal's Store, Stevens Point, Wis., 50 watts, 240 meters, and WSRF, Harden Sales and Service Company, Broadlands, Ill., 10 watts, 233 meters.

Kansas City to Have Radio and Electrical Exhibit

The Kansas City Electric Club will sponsor a radio and electrical show in Convention Hall, Kansas City, Mo., the first week in March. The directors of the club have appointed Sam Furst manager of the exhibit. He will be assisted by C. F. Farley, Leo Fitzpatrick and Joseph Porter, Jr., members of the Kansas City Electric Club. The club president, Mr. Jacques, and G. W. Weston, secretary, will also assist the committee.

"Over the Top"



Major Anatol Gollos, inventor of the "Gollos" circuit and vice-president of the Gollos Radio Corporation, Champaign, Ill., went "over the top" for Uncle Sam during the war and has continued his successful undertakings. He planned and installed the electrical equipment in the Chicago and Northwestern Railroad Station at Chicago, was electrical engineer of the Union Station at Chicago, had charge of all electrical activities at the Edgewood, Ill., arsenal and is the inventor of the Gollos Automatic Train Control.

Stewart-Warner Markets Radio Receiver

The Stewart-Warner Speedometer Corporation, Chicago, Ill., has placed on the market the Stewart-Warner "Aeromaster," a radio receiver embodying the tuned radio frequency circuit. The set consists of two stages of low loss tuned radio frequency amplification, detector, and two stages of distortionless audio amplification.

The new sets will be distributed by the sixty-three Stewart-Warner Service Stations in the United States and Canada. A feature of the receivers is the fact that air core transformers are used, which, it is claimed, prevent losses permitted by the usual tube forms. The cabinet is finished in dark walnut.

The Progress of Radio Development During 1924

BY JUDGE S. B. DAVIS
Solicitor U. S. Department of Commerce

In radio development during the past year two factors are outstanding—the use of the short waves and wire interconnection of stations. Both are of

great importance. The short wave has found its place in commercial and amateur transoceanic communication and in transmission for rebroadcasting both at home and to places across the seas. In domestic use it is a rival of wire inter-connection, both being a means to the same end, the furnishing of simultaneous programs to several stations. I consider inter-connection, in whichever mode effected, almost essential to the future of broadcasting, if we are to look at radio as a means of service to all our people all the time.

It is transforming broadcasting from a local to a national service, and this not by way of detriment to the local stations, which are the backbone of the system, but as an advantage to them. Inter-connection, with its corollary of national service, is only just beginning. It will go much further. Its development, together with some general rise in the power level of stations for the overcoming of static and interference, giving us really useful reception, will I believe be the principal improvements in the immediate future.

The "Radio Service Bulletin," February edition, published by the Radio Division of the Bureau of Navigation, Department of Commerce, contains a complete list of the broadcasting stations of the United States, giving all new stations, changes in call letters, location of stations, companies operating them, wavelengths, frequency (kilocycles), and power, up to January 31. This publication may be purchased from the Superintendent of Documents, Government Printing Office, Washington, D. C., price five cents per copy, subscription price twenty-five cents per year.

The New York Edison Company held a radio exhibit at its showrooms, Fifteenth Street and Irving Place, New York City, February 16-25. Local dealers and jobbers, as well as manufacturers, were represented in the thirty displays. It is estimated more than 12,000 people attended.

The Hazeltine Corporation at the annual meeting of stockholders held in Dover, Delaware, elected the following as directors for the present year: R. T. Pierson, R. E. McConnell, Paul Armitage, W. H. Taylor, Jr., I. M. Day, Fred Helman, and Thomas Leggett of New York City; Professor L. A. Hazeltine, Hoboken, N. J., Harvey S. Mudd and W. L. Honnold of Los Angeles, California. At its first meeting the new board of directors elected the following officers: R. T. Pierson, president and treasurer; R. E. McConnell, vice-president, Paul Armitage, secretary, and Jack Binns, assistant treasurer.

The Denver Radio Jobbers' Trade Association was organized at Denver, Colorado, February 17. It is the purpose of the organization to meet the fast-growing needs of the industry and at the same time curtail unfair and unscrupulous practices. The officers are: G. P. Hopkins, president; S. W. Bartlett, first vice-president; B. G. Vreeland, second vice-president; J. H. Blinn, secretary and treasurer.

Radio Stocks Keep Average Level Despite Several Sharp Drops

Outlook for Securities Based Upon Market's Estimate of Individual Sets' Success—Patent Litigation Reflected in Prices

RADIO stocks are commanding a large amount of public interest on the New York Curb Market, but on many stocks there has been a marked trend toward lower levels of prices. A comparison of thirty-three stocks listed last month in *Radio Retailing*, however, shows an average price of 34.7 per share, while this month the average for thirty-one shares is 34.9. While this average implies a slight gain, it must be remembered that these averages include many of the high-priced stocks which are much more stable than some of those offered on the Curb.

The biggest drop of all was shown by General Electric, which last month sold for as high as 308 and has dropped this month to 251 a share. Dubilier has also dropped some 37 points and Freed-Eisemann is now 7½ points lower than last month. Ware dropped 11½ points, Thermodyne, 7; Sleeper, 2, and Hazeltine, 5. On the other hand both Radio Corporation and Liberty Radio have advanced.

Frank Stanton & Company who make a specialty of radio stocks, consider that four outstanding radio stocks at the present time are, English Marconi, Canadian Marconi, Sleeper, and Liberty. Particular emphasis is laid on the Marconi stocks as great develop-

ment is expected during the coming year.

While Canadian Marconi should only be classed as a high-grade speculative stock it is generally considered that at the present price of 1¼ to 2 a share makes a very attractive prospect. The recent reorganization by which stockholders were allowed one share of the new stock to each two shares of old has now terminated and it is estimated that better than \$4,000,000 has poured into the company's treasury. The close connection between Canadian Marconi and the parent concern leads brokers to believe that this stock has a bright future, especially in view of the underdeveloped radio market in Canada.

News of Manufacturers' Shares

Apco Manufacturing Company's Class A preferred stock is also considered a "good buy." This stock was recently offered at \$25 a share and has since continued very strong. This is an 8 per cent cumulative participating stock. By this is meant that after 8 per cent has been paid on the Class A preferred and \$1 a share on the common stock, then the preferred participates equally with the common on any further dividends.

Of course the recent court decision which was interpreted as being in

Radio Stock Quotations

Stock	Div.	Authorized Cap. Stock	Current Market		1924	
			Bid	Asked	High	Low
American Tel. & Tel.	2½Q	900,000,000	134½	134½	134½	121½
Apco, A pfd.	2Q	1,250,000	25	25½		
Apco, com.		*65,000				
Boissonnault		*250,000	2½	2½		
DeForest		*250,000	31	32	28½	5
Dubilier, com.		*500,000	30	31	68	10½
Duplex Condenser		*62,500	10	11	12½	11
Freed-Eisemann		*300,000	22	23	33½	27½
Chas. Freshman		*225,000	22	23		
Garod Corporation		*100,000	10	12		
Gen'l Elect. com.	1Q	185,000,000	238	239	322	193½
Gen'l Elect., special	15c.Q	35,000,000	11	11½	11½	10½
Grimes Radio		*300,000	11	11½		
Hazeltine Corp.		*200,000	37½	38	48½	13
Inter Ocean		*100,000	6	6½	16½	8½
Jones Radio		*250,000	5½	6	10½	7
Liberty Radio		*150,000	8½	9	8	5½
Magnavox Mfg. Co.	5c.Q	750,000	3	5	4	1½
Marconi of America		10,000,000	15	20	15	6
Marconi of Canada		7,500,000	1	2	2	1
Marconi of Eng., com.	15%	18,000,000	9½	12	12	7
Marconi of Eng., pfd	10%	1,250,000	8	11	12	7
Marconi of Spain		1,750,000	1	2	2	1
Marconi Int. Marine	5Q	7,500,000	6	8	8	5
Music Master Corp.		*500,000	16	16½		
Radio Corp., A com.		*1,500,000	63½	63½	66½	25½
Radio Corp., A pfd.	87½c.Q	25,000,000	52	52½	50	45½
Rova Radio Corp.		*150,000	12	13	18	9½
Sleeper Radio		*110,000	15	16	17	15
Thermodyne Radio		*300,000	14½	15	19½	12
Thompson Radio		*140,000	14½	15	21	7
Ware Radio Corp.		*60,000	27½	28½	39½	13½
Western Elect., pfd.	1½Q	50,000,000	114½	116	117	111½
Westinghouse El. & M.	1Q	121,000,000	70½	71	71½	55½

* Shares—All others are in dollars.

favor of DeForest in its suit against the Radio Corporation served to create a great deal of activity in this stock. DeForest recently touched a new high of \$34 a share. Even after the profit-taking element had had their innings, the stock still stood up 3½ points for the week. Since that time it has remained rather close to 30, which is considered a little high for such a stock. It is generally considered in the market that DeForest is going to make money, despite the fact that brokers are of the opinion that the D-12 was not fully successful.

Freed-Eisemann was originally offered at \$30 a share and immediately afterward went up to over 33 only to drop back to the neighborhood of 23, all in the space of a few months. The reason is a rather difficult problem. This stock was touted as a tremendous money-maker and yet it has had a steady fall.

Freshman continues to be extremely active and if the present production can be kept up, the stock is well worth the present price of around 23 a share. Freshman has been particularly successful in defending itself in the courts. The expected activity after the recent dividend declaration soon died down.

There are so many tuned radio frequency sets on the market at present that it is generally feared that neutrodyne stocks are overvalued. Hazeltine, apparently, is unable to hold up its price and continues down around the low of the year. This despite the recent dividend of \$1.25 a share.

Thompson Radio has the brokers wary. Its recent gyrations have been left unexplained and a great amount of selling has developed in this stock.



Here's proof enough that anything is possible to the men of the radio industry. The chap here seen perambulating the Atlantic City boardwalk behind the baby carriage is Quinton Adams, eastern sales manager, Radio Corporation of America—more familiarly known as "Skeet." The number would seem to indicate that this is his 151st che-ild.

Dubilier has had wide fluctuations lately and brokers seem to be dubious that it will hold its present price in view of the capitalization of 500,000 shares.

Ware is considerably above the original price but it is still a long way from its record high for the year.

Some talk is now current that De Forest, Dubilier, Hazeltine and Freed-Eisemann are scheduled to graduate from the Curb to the "Big Board." These stocks, at least, show the greatest possibilities at present. Ware, too, has a chance, but it has a share capitalization of only 60,000 shares and this may possibly debar it from the market in that it only affords a relatively small floating supply of shares.

The Weston Electrical Instrument Company has secured the privilege of the "Big Board." The company has 100,000 shares of Class A stock and 100,000 shares of common stock. This stock was admitted to trading Jan. 28.

The stock offering of the Music Master Corporation was quickly oversubscribed and it is estimated by officials of the company that the sales for 1925 should aggregate close to \$15,000,000. Besides manufacturing Music Master horns, this corporation also acts as distributors for such lines as Radio Corporation, Thermodyne and Zenith. Based on orders now on file and indicated business during the coming year, the earnings should reach about \$6.60 a share on the stock. This would insure the early payment of dividends. The company is credited with an exceptionally strong directorate.

Just how these radio stocks will act when the usual "summer slump" comes along, remains to be seen. Brokers and buyers who are not radio-wise may wonder what has suddenly come over radio. Possibly the general condition of the market is due to a "premonition" of this very fact, and dealers throughout the New York area report that business has not been particularly good during the past few weeks. Taken all in all, the present outlook is not encouraging for radio stocks, especially from a speculative end. In the fall undoubtedly there will be some big advances, but many brokers feel that right now is a good time to let the market strictly alone.

Back to Headsets for Exhibition Demonstrations



Everyone loves to make things work for himself. For this reason the Perkins Electric Ltd., preferred headsets to a loud speaker in its radio booth at the National Exhibit in Toronto, Canada, and invited the visitors to tune-in for themselves. Attention was attracted to the exhibit by the giant reception board which reproduced all the details of a radio set in mammoth

proportions. The actual operating instrument was a normal sized set located near the railing.

Five headphones were conveniently placed and tempted the passerby to stop and try out for himself what was going on. The booth was operated jointly by the Perkins Electric, Ltd., Canadian Brandes, Ltd., and Canadian Westinghouse, Ltd.

Manufacturer Advocates Fewer Radio Shows

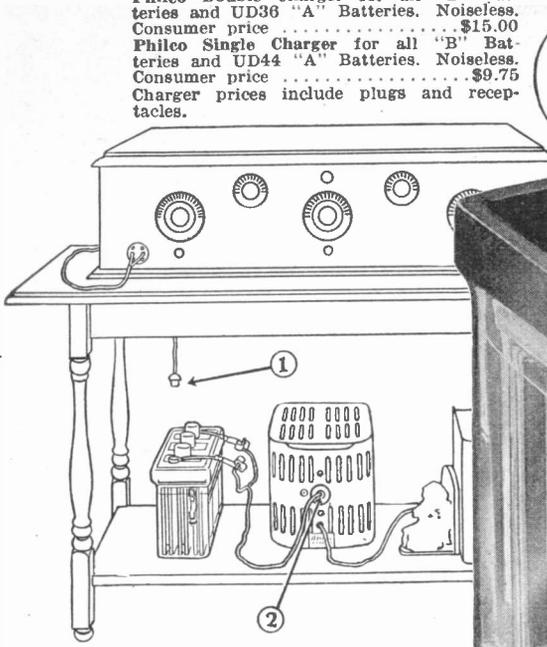
E. H. Jewett, president of the Jewett Radio and Phonograph Company, advances the opinion that a good deal of money may be saved the radio manufacturer and the public as well, "if radio shows and expositions are kept within bounds."

"There is no denying the importance of radio shows," Mr. Jewett declares, "but there is a tendency toward duplication which should be checked. Duplicate shows in eastern cities, shows in smaller cities where the populace has access to a nearby metropolis, all sorts of unnecessary shows adds to costs.

"Radio may well take counsel from the automobile industry where expositions have been reduced to an exact science. Every thought should be given to true economy, so that the public may obtain the finest quality at the lowest price."

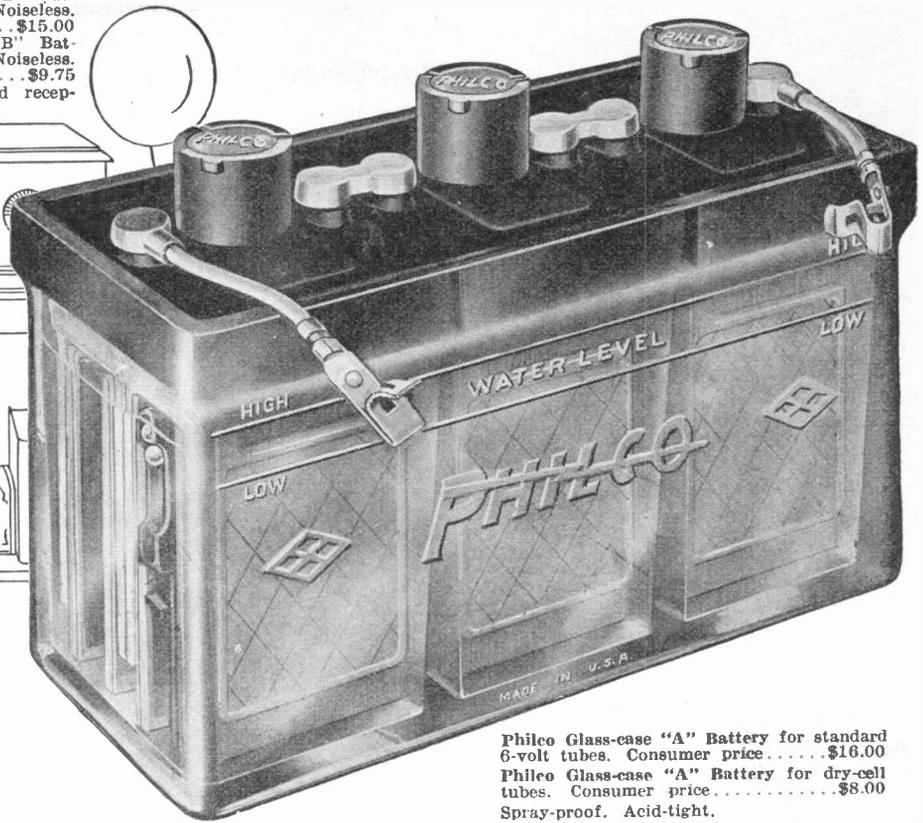
(Continued on Page 294)

Philco Double Charger for all "B" Batteries and UD36 "A" Batteries. Noiseless. Consumer price\$15.00
 Philco Single Charger for all "B" Batteries and UD44 "A" Batteries. Noiseless. Consumer price\$9.75
 Charger prices include plugs and receptacles.



Philco "A" Battery on Charge

To connect battery to receiving set just pull out plug (2) from the built-in receptacle of the Philco Noiseless Charger and push into receptacle (1). Simple as A B C.



Philco Glass-case "A" Battery for standard 6-volt tubes. Consumer price.....\$16.00
 Philco Glass-case "A" Battery for dry-cell tubes. Consumer price.....\$8.00
 Spray-proof. Acid-tight.

Easy to use—Easy to handle Easy to Sell



Philco "B" Battery

Storage "B" Batteries are just as essential for clear and distant reception as storage "A" batteries. Philco "B" Batteries stay clean and dry. To charge without disconnecting a single wire, use a Philco Charger and "B" Charging Panel (\$2.75.)

"B" Battery in de luxe mahogany-finish case with cover (48 volts). Consumer price\$20.00

"B" Battery in handsome mahogany-finish case without cover (48 volts). Consumer price\$16.50



Philco Mahogany-finish Case "A" Batteries

Two types—RAR and RW—for 6-volt tubes. Both in beautiful Adam-brown mahogany-finish cases harmonizing with your radio cabinet. Consumer price—\$14.50 up

Philco Charge Tester—permanently mounted in filler cap; avoids fussing with hydrometer—\$1 extra.

Strong, uniform, hum-free current—as every radio dealer knows—is an absolute essential for clear long-distance radio reception. That's why STORAGE batteries are so vastly superior to any other source of radio power.

Revolutionary changes made by Philco in the design and charging of radio storage batteries have made them easy to use, easy to handle, and easy to sell.

Philco Radio Batteries are Dynamic—shipped to you CHARGED but absolutely DRY. Their life doesn't start till you sell the batteries. You handle them just as easily as tubes or any package goods.

They are assembled in attractive, acid-tight, spill-proof, pressed-glass cases—or

in wood cases finished in beautiful Adam-brown mahogany.

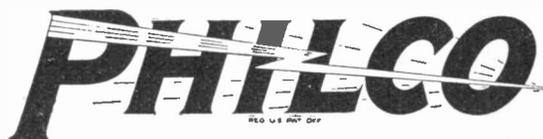
They have exclusive Charge Indicators that tell at a glance how the battery is charged or discharged.

And with the Philco NOISELESS Charger—with its built-in receptacle and sockets—you can recharge right in the living room without changing a single wire.

Philco national advertising has created—and is rapidly increasing—a strong consumer demand for Philco Batteries in all parts of the United States.

Order now from your Jobber or Wholesaler (standard discounts) or fill out the coupon below and mail to us.

PHILADELPHIA STORAGE BATTERY COMPANY, Philadelphia



DRYDYNAMIC RADIO BATTERIES

Jobbers and Dealers—Philco has brought radio batteries out of the cellar and put them in the living room. Our new Radio Manual tells how. Fill out coupon below and we will mail you a copy.

Name

Street City.....

State Jobber Dealer

News of the Trade

(Continued from Page 292)

General James G. Harbord, president of the Radio Corporation of America, sailed with Mrs. Harbord early in February for South America, on a combined business and pleasure trip. During his tour of the Southern continent, General Harbord will make a study of radio conditions. General and Mrs. Harbord plan to return April 20, after visiting Rio de Janeiro, Buenos Aires, Santiago, Valparaiso and other cities.

The Zenith Radio Corporation of Chicago, Ill., announces the appointment of Silas E. Pearsall, New York City, as Eastern jobbers. The Pearsall company has been identified with the Victor Talking Machine Company, serving over 300 Victor dealers.

The Fort Wayne Radio Trades Association was recently formed by dealers, jobbers and manufacturers of Fort Wayne, Ind. The officers elected were: H. C. Wall, of the Independent Supply Company, president; D. J. Duesler, of the Duesler Music Store, vice-president; R. H. Chadwick, of the Indiana Radio Company, secretary. Clarence Cornish, of the Wayne Radio Company, is chairman of the membership committee.

W. W. Miller, of Wellsboro, Pa., has been elected president of the Federal Telephone Manufacturing Corporation, of Buffalo, N. Y., succeeding the late Burt Gage Hubbell. Mr. Miller was one of the founders of the Frontier Telephone Company and vice-president of the Consolidated Telephone Company. He is also associated with the First National Bank of Wellsboro, has been president of the Birkett Mills at Penn

Yan, N. Y., and the Larowe Buckwheat Flour Corporation, Coshocton, N. Y. He is a member of the Buffalo Club of Buffalo and the Union League Club of New York.

The Queen City Electric Company has been incorporated; capital stock, 100 shares, no par value. L. A. Vosmer, Mrs. Blanche Vosmer, H. W. Vosmer. Seat of business, Denver, Colorado.

The Adler Manufacturing Company, New York City, announces the appointment of Ralph A. Meade as advertising and sales promotion manager. The Adler Company manufactures the Adler-Royal line of phonographs, radio-phonograph combinations, neotrodyne radio sets and radio loud speakers. Mr. Meade was formerly with the Sonora Phonograph Company, and took up his new duties on February 1.

The Jewett Radio and Phonograph Company, Detroit, Mich., plans to open a high-power broadcasting station June 1, according to an announcement just made by Edward A. Jewett, president of the company. While the wavelength and call letters have not yet been assigned, a 5,000-watt broadcasting equipment is being installed by the Western Electric Company of New York City, on a site at Pontiac, Mich.

The Milwaukee Journal has joined with Marquette University, located in Milwaukee, in erecting the first 500-watt radio broadcasting station in Wisconsin. The call letters are WHAD, and the wavelength 275 meters. The studios are located in the Science Building of the University.

The Royal Eastern Electrical Supply Company, New York City, in conjunction with the Eagle Radio Company, is

broadcasting a program every Tuesday evening at 7:30 through station WEAJ.

The American Electric Company Crosley distributors, at St. Joseph, Mo., recently held a sales convention. Radio and electrical problems were discussed by well-known men in the radio field. Mr. Echols, sales manager of this concern, talked on merchandising.

The Radio Corporation of America has announced a new downward revision of prices on other merchandise, effective immediately. The items affected, and their new prices are as follows: Radiola III-A complete with 4 WD 11 Radiotrons and UZ-1325 Radiola Loudspeaker, \$83; Radiola Regenoflex, without Radiotrons or Loudspeaker, \$90; Radiola Regenoflex, complete with 4 WD 11 Radiotrons and UZ-1325 Radiola Loudspeaker, \$120; Radiola X complete with 4 WD-11 Radiotrons \$150; Radiola Super-Heterodyne complete with 6 UV-199 Radiotrons and UZ-1325 Radiola Loudspeaker \$256; Radiola Loudspeaker UZ-1325 \$18.

The Priess Radio Corporation, 693 Broadway, New York City, announces the appointment of F. Clifford Estey to the position of sales manager. Mr. Estey has been in radio since 1911 when he had charge of the broadcasting station operated by the Salem News, of Salem, Mass.

Max Lowenthal, president of the Globe Commercial Company, was elected an honorary member of the Radio Pioneers, at their last meeting held in the clubrooms, 1380 Bush Street, San Francisco, Cal. Mr. Lowenthal was presented with a jeweled pin of the organization, and, in turn, gave the club a number of radio relics and publications.

WOC Has Novel Broadcasting Studio



With a ceiling representing a forest, inhabited by stuffed owls and eagles and other birds in lifelike poses, the broadcasting studio of WOC, the Palmer School of Chiropractic, Davenport, Iowa, should imbue its artists with the "back to nature" spirit

and make it easy for them to act naturally before the microphone. Dr. Palmer, head of the school, is a collector of birds, animals and curios and has succeeded in fitting out an attractive studio with some of the specimens he has secured.

Corrected Radio Set Specifications

In listing the "Complete Radio Set Specifications" in the February issue of *Radio Retailing*, the following corrections should be made in the models of the Federal Telephone Manufacturing Company, Buffalo, N. Y.:

Type 135 lists at \$106, instead of \$98.20; type 142 at \$230, instead of \$120, and type 143 at \$330, instead of \$230. Also, omitted were types 144, 159 and 161. These will be included when the list is repeated in the course of a few months, in revised and up-to-date form. It will contain several manufacturers whose specifications were received too late for the first listing.

Also, on the second page of the February listing, the manufacturer's name and address were omitted from the three "Exlntone" models. These receivers are made by the Exlntone Corporation of Boonton, N. J.

In the models of the Premier Radio Corporation, Defiance, Ohio, these changes should be made: Premier receivers have four stages of radio and three of audio frequency amplification; they operate on either aerial or loop and take 90 volts on the detector tube as well as on the amplifiers.

LONG before the days of radio, even when automobiles were only a far-off dream, Exide Batteries were doing important work in the daily life of the nation. As uses for storage batteries were developed, new types of Exide Batteries were designed to fill the jobs. It was an Exide that spun the first automobile electric self-starter. Today Exides start millions of cars.

Then Came RADIO

And with it a line of Exide Batteries designed and built especially for radio, from thirty-seven years' experience in storage battery manufacture.

For years millions of people have seen vigorous Exide advertising. This year Exide advertisements in great national magazines and radio publi-

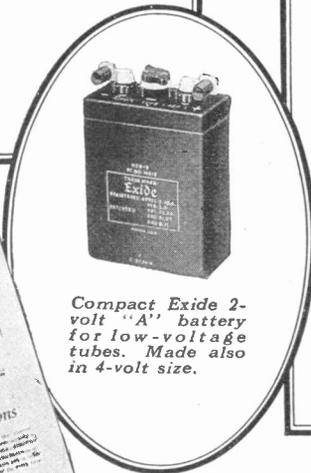
cations are featuring the dependable, good-looking Exide "A" and "B" radio batteries.

Is it any wonder that even the inexperienced radio fan knows and believes in the Exide? Is it any wonder that Exide Radio Batteries are the best buy on the battery market? Is it any wonder that radio merchants everywhere are featuring the complete line of the fast-selling Exide Batteries?

THE ELECTRIC STORAGE BATTERY COMPANY
PHILADELPHIA
Exide Batteries of Canada, Limited
153 Dufferin Street, Toronto



The new rugged, good looking Exide 6-volt "A" battery with one-piece case.



Compact Exide 2-volt "A" battery for low-voltage tubes. Made also in 4-volt size.



Exide 24-volt "B" battery in glass jars. 6000 milliamperere hour capacity. Made also in 48-volt size.



This is one of the full-page advertisements in color, that are appearing in the Saturday Evening Post.



Exide rectifier for economical recharging of "B" battery from house current.

Exide

RADIO BATTERIES

FOR BETTER RADIO RECEPTION USE STORAGE BATTERIES

Watch your socket sales jump

—when you push the “3-feature” leader!

NA-ALD can increase your socket sales because it's the *only* socket with *all* the 3 features that radio owners want:

- (1) Lowest loss (proved by laboratory tests)
- (2) Lowest capacity (also proved by test)
- (3) Positive side-scraping contact that cleans the sides of tube terminals

These advantages are being broadcast by wide-spread advertising in The Saturday Evening Post, American Boy, all important radio magazines and radio sections of leading newspapers.

To help make the contact between Na-Ald advertising and your store, we offer the striking window display illustrated below.

It's 26 inches high by 32 inches long, attractively printed in 7 colors. As you see, it also advertises Na-Ald Dials which are just as popular and as much in demand as Na-Ald Sockets.

Write today and we will tell you how you may have the window display without charge. It will give a boost to your socket and dial sales.

ALDEN MANUFACTURING CO.
Dept. A-3 Springfield, Mass.

One of the advertisements featuring the laboratory test that proved Na-Ald's superiority over 13 best-known makes of sockets.

Explore the Air Farther - Clearer!

NA-ALD
Processed
DIALS

- 1-Scientific Design
- 2-Prevent Eystain
- 3-Comfortable Knobs
- 4-Handsome Appearance

Quick and Easy Tuning

Use them in the set you build. Be sure they're in the set you buy.

ALDEN MANUFACTURING COMPANY Springfield, Mass.

NA-ALD
Processed
SOCKETS

- 1-Contacts Self Cleaning
- 2-Positive Duo Contact
- 3-Low Loss - Low Capacity
- 4-Alden Processed Bakelite

It's the Contact that Counts

Use them in the set you build. Be sure they're in the set you buy.

ALDEN MANUFACTURING COMPANY Springfield, Mass.

Surprising!... the improvement this discovery can make in your radio set

Laboratory test, just completed, reveals unsuspected source of loss in many sets—and shows how to correct it

IN THE electrical laboratory of a leading engineering university, a test has just been made which will interest every radio owner.

Radio engineers have known that the tube socket can be a source of current leakage. This laboratory test was conducted for the purpose of determining just how serious that leakage might be. It revealed some striking facts.

What the test disclosed

Out of 13 of the best-known makes of sockets, 12 showed losses higher than a good low loss condenser. Of those 12, only one make—Na-Ald Sockets—showed a loss lower than a good low loss condenser.

Note on the table herewith that the 12 brands of sockets had a resistance at 1000 cycles per second of from 70 to 800 megohms. Na-Ald DeLuxe Sockets (large) showed 1000 megohms and Na-Ald Sockets (small) showed 970 megohms. In good low loss condensers the equivalent shunt resistance at 1000 cycles per second may be 880 megohms.

In non-technical language these figures mean simply this:

Tests in your set are of such character that they show that the material that they use is of a higher quality than the condenser material that they use. The set of its full efficiency is the same as if this material had been used to insulate the condenser itself.

Write for details of test and free booklet

A copy of the laboratory test, together with booklet "What to Build" (giving a number of selected circuits) will be mailed to you free upon request. Write us for it.

Na-Ald Sockets also made of genuine Bakelite, Alden Processed. The big, generous-sized knob enables you to tune in—without finger-cramps or eye-strain. The position of the numbers and the length, spacing and width of lines, was determined after months of study by engineers and optical experts. Super DeLuxe Dials, 75c, others, 35c, and 50c.

ALDEN MANUFACTURING COMPANY
... Willow Street Springfield, Mass.

NA-ALD
Alden Processed
Sockets and Dials

THIS table shows the relative resistance of the 13 brands of sockets shown by the laboratory test, as compared with a good low loss condenser. The average loss at 1000 cycles per second is shown in parentheses.

Socket	Resistance (Megohms)	Loss (Percent)
Na-Ald DeLuxe (large)	1000	0
Na-Ald DeLuxe (small)	970	3
Socket "A"	800	20
Socket "B"	600	40
Socket "C"	400	60
Socket "D"	300	70
Socket "E"	200	80
Socket "F"	150	85
Socket "G"	100	90
Socket "H"	70	95
Socket "I"	50	98
Socket "J"	30	99
Socket "K"	20	99.5
Socket "L"	10	99.9

*(Note: Loss is calculated as 100 - (Resistance / 1000) * 100)*

What the test disclosed

Out of 13 of the best-known makes of sockets, 12 showed losses higher than a good low loss condenser. Of those 12, only one make—Na-Ald Sockets—showed a loss lower than a good low loss condenser.

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Tests in your set are of such character that they show that the material that they use is of a higher quality than the condenser material that they use. The set of its full efficiency is the same as if this material had been used to insulate the condenser itself.

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... Willow Street Springfield, Mass.

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ALDEN MANUFACTURING COMPANY
... Willow Street Springfield, Mass.

Four reasons for the good profits merchants find in the new De Forest D-17

1. A brand new receiver with strong sales features.
 2. The greatest name in radio.
 3. Powerful advertising.
 4. A reasonable resale price and a good margin.
- This is the combination that already has produced rapid sales and a nice profit for radio merchants handling De Forest's new receiver—the D-17.

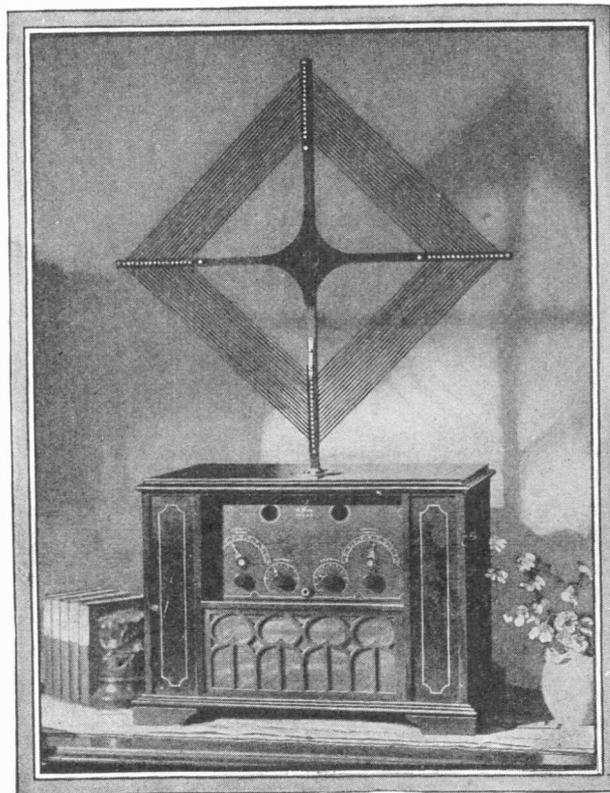
Complete and self-contained in one unit, the D-17 has its own loop and built-in De Forest loud speaker; it requires no ground wire; no outside wiring or aerial; the handsome mahogany or fabrikoid cabinet holds both the A and B batteries. The instrument can be moved easily from one room to another. Five minutes after your customer takes the D-17 home it is ready to operate.

In these features you have a strong sales argument, for the compactness and completeness of a radio set have become very important considerations to most householders.

Carefully planned—beautifully finished

The D-17 is a planned set—not assembled. Every important part is manufactured and carefully matched in the De Forest factory. The precision, orderliness and nice detail of the works are striking. There are five tubes, which include detector, three stages of radio frequency—one tuned—and two of audio frequency. The D-17 gets plenty of distance for DX fans. An indoor aerial can be used in place of the loop if desired.

The purity of tone of the D-17 is remarkable. It



The new De Forest D-17 Radiophone comes in two sizes—one with built-in loud speaker, tubes, loop and space in cabinet for both A and B batteries; the other, the D-17 A (a little smaller), without tubes or loud speaker, but with space for B battery. Retail prices from \$125 to \$195, depending upon type and style of cabinet finish.

stands out, even among sets noted for their clear tone, with that clarity and naturalness for which De Forest receivers are famous. The beauty of the receiver is as striking as its completeness and its efficiency. The handsome cabinet harmonizes well with any living-room.

The greatest name in radio

Back of the D-17 is the most famous name in radio—De Forest—the inventor of the first vacuum tube. Back of it too is a powerful advertising campaign. The full-page announcement of the new D-17 appeared in the Saturday Evening Post on February 28. In twenty-nine leading newspapers of big cities throughout the country, De Forest is using large space to acquaint the

public with its newest instrument. Tying this advertisement right up to the merchant's own store are the dealer helps we supply free—window material, booklets, mats and electrotypes for local advertising.

De Forest merchants are carefully chosen. They are selected on the basis of their standing and responsibility. If interested, write for further information.

List Prices, F. O. B. factory

De Forest D-17 Radiophone: Price includes loop, built-in loud speaker, five of the unequalled De Forest Tubes—complete except for batteries. In two-tone gray and black fabrikoid cabinet, \$185.00. In two-tone mahogany cabinet, \$195.00.

De Forest D-17 A Radiophone: A little smaller than the D-17, the D-17 A has self-contained loop. Price without tubes, batteries, or loud speaker, in fabrikoid cabinet, \$125.00.

De Forest Tubes, DV-2 and DV-3, now \$3.00 each.

De FOREST RADIO CO., Jersey City, N. J.

DE FOREST D-17 RADIOPHONE

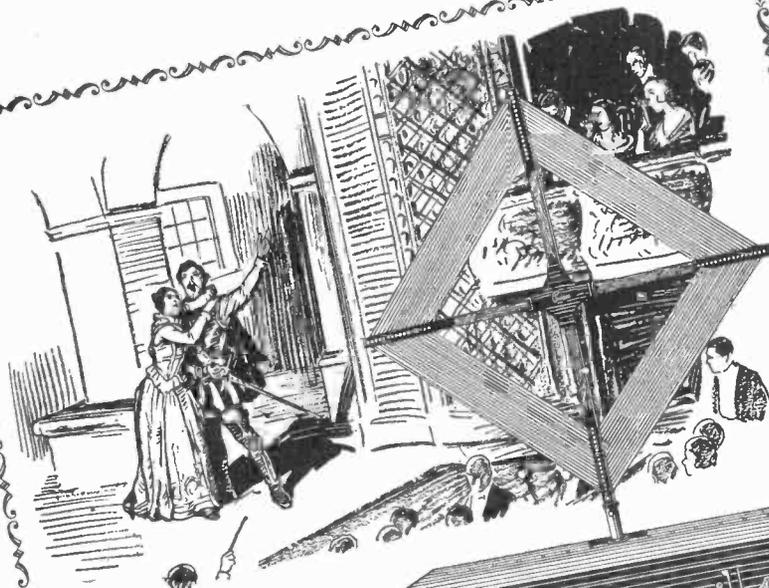
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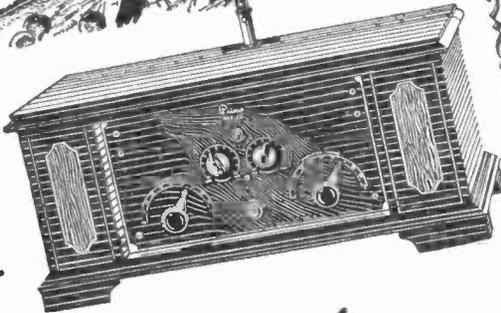
Priess

TRADE MARK
The Concert Grand of Radio

all the
RadioWorld
is
TALKING!
about it!



Down front
in the
ORCHESTRA
with a



Priess

TRADE MARK
The Concert Grand of Radio
A Five-tube-Reflex Circuit—Loop Set

THE difference between the Priess and the ordinary radio is the difference between an orchestra seat and a gallery seat.

Down front in the orchestra you have the clear voice of the singer or the resonant tone of the instrument. Up in the gallery you have the same sound surrounded with overtones and the sounds of an audience.

The tube detector in the ordinary radio brings you the sound, with a "fog" of radio sounds.

In the Priess the exclusive Teloflex detector brings you the sound with absolute fidelity—without distortion or tube noises.

\$145 as illustrated.

TELOFLEX FOR TONE
Brings you the voices of the great artists in their original purity and beauty.

REFLEX SYSTEM FOR VOLUME
Gives you seven-tube volume and distance with five tubes.

LOOP FOR STATIC FREEDOM
Eliminates outdoor interference from static and enables you to move the set about at will.

Enclosed in a rich two-tone mahogany cabinet with etched brass Malloy panel front. As beautiful as it is efficient in operation.

6215 in rich walnut cabinet CONSOLE with concealed loop.

Reproduction
of one of the
Priess series of
Newspaper
Advertisements

Priess Sets are sold under a plan giving both the Distributor and the Dealer territorial protection and absolute assurance of relief from Cut Price and other unfair competition.

Write for Details **PRIESS RADIO CORP.**
697 Broadway—New York City

There's Profit in Parts— if you stock the right parts!



There's plenty of profit in selling well-known parts. They are in active and constant demand.

There's profit in stocking them also because they bring in customers who buy other merchandise. Parts sell through the whole year—they prop up sales in the dull seasons.

Dubilier parts are found in over ninety per cent of all radio sets. *They are vital.* The public knows about them through their performance and through our national advertising. Fans insist on Dubilier parts. Stock 'em—and watch 'em sell!

For address of nearest distributor, write to
39-43 West 4th St., New York.

Dubilier

CONDENSER AND RADIO CORPORATION

Music Master Success



Music Master
Resonant Wood Insures
Natural Tone Quality

Model VI, 14" wood bell \$30

Model VII, 21" wood bell \$35

Connect Music Master in place of headphones. No batteries. No adjustments.

Prices of all models slightly higher in Canada

—Its True Significance



Model VIII, Mahogany Cabinet \$35
with "full-floating" wood bell



Model V, Metal Cabinet \$18
mahogany finish, wood bell

THE advent of Music Master sounded the death knell of the mere "loud speaker." For it transformed the radio receiving set into a musical instrument—a triumph of re-creative art.

Two years ago Music Master's full voiced volume and characteristic tone qualities heralded the New Era of Radio Art. It made possible the re-creation of supreme Music, Song and Speech, in the wonderful stellar programme now an established feature of American nation-wide broadcasting.

Music Master does more than reproduce—it interprets, it re-creates—it transforms mere radio receiving into artistic enjoyment. Music Master has been inadequately imitated, but never equaled. Music Master remains the supreme musical instrument of radio—and there IS no substitute.

MUSIC MASTER—the Ultimate of Artistic Radio Re-Creation

Music Master's precision instrument is the acme of scientific perfection. Music Master's tone chamber of heavy cast aluminum is a marvelous mold of sound without distortion. Music Master's amplifying bell of resonant wood gives to every sound its full, vibrant qualities and natural and lifelike characteristics.

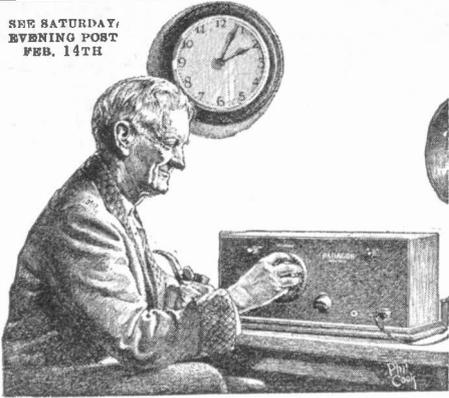
Music Master's manufacturers hold that every purchase of their product carries with it an implicit pledge of unreserved and unconditional protection. Back of the dealer's full and unfailing service stands the Music Master Corporation to guarantee its products direct, to anyone, anywhere, at any time.

Music Master Corporation

Makers and Distributors of High-Grade Radio Apparatus
Tenth and Cherry Streets

Chicago Philadelphia Pittsburgh
Canadian Factory: Kitchener, Ontario

SEE SATURDAY
EVENING POST
FEB. 14TH



NIGHTS OF FORGOTTEN CLOCKS

IS that Havana?.....Why, there's Oakland!.....Chicago again. Atlanta—I know that fellow's voice!

Paragon has no respect for bedtime hours. Its invisible "feelers" reach ever out for pulsing messages from far horizons. Its *one simple tuning dial* chooses and separates them quickly. Its fascination beckons young and old.

Paragon Receivers have made radio history. This newest Paragon, priced within the means of all, is adding more pages to the record. If your regular dealer is not showing the new Paragon Four, write us for address of nearby store that sells it.

"STATION PLEASE"

is a folder describing the new Paragon Receiver line. Send a postcard for it today.



THE NEW PARAGON FOUR \$65
Four tubes. New Paradyne Circuit—non-radiating. Single dial control. Clear tone. Loudspeaker volume over almost unlimited range. Mahogany case, 21 in. long.

NEW PARAGON THREE \$48.50
Another Paragon surprise. Three-tube set that brings in distant stations clear and strong on loudspeaker. Single dial control. Mahogany case, 17 in. long.

NEW PARAGON TWO \$27.50
A two-tube wonder. Excellent loudspeaker tone and volume from stations within reasonable range. Almost unlimited phone range. Mahogany, 11 in. long.

N.B. West of Rocky Mountains prices 10% additional

ADAMS MORGAN COMPANY, Inc.
3 Alvin Ave., Upper Montclair, N. J.

AN ELECT LIST OF Radio Distributors

DISTINGUISHED FOR SERVICE

IN radio, as in other businesses, *service* is the thing that really counts. We take genuine pleasure in printing the following list of Paragon Distributors who know the inner meaning of the word Service. We recommend them all not only for prompt satisfying service on Paragon Receivers but for service on high-class radio-merchandise in general. They may be depended upon to supply the dealer's needs conscientiously and reliably.

ADAMS MORGAN COMPANY, Inc.

14 Alvin Ave., Upper Montclair, N. J.

Originators Since 1915 of Record-holding Radio Receivers

- | | | |
|---|--|---|
| <p>CALIFORNIA
Edco Distributing Co.
Los Angeles
Edco Distributing Co.
419 Nineteenth St., Oakland</p> <p>COLORADO
Rocky Mountain Radio Corp.
1512 Broadway, Denver</p> <p>CONNECTICUT
New England Radio Corp.
438 Asylum St., Hartford</p> <p>DISTRICT OF COLUMBIA
Wm. P. Boyer & Co.,
812 13th St., Washington</p> <p>FLORIDA
Elec. Equip. Co. of Florida
42 N. W. Fourth St., Miami
Knight and Wall Company
Tampa</p> <p>GEORGIA
Fulton Electric Company
65 North Pryor St., Atlanta</p> <p>ILLINOIS
Chicago Radio Apparatus Co.
415 So. Dearborn St., Chicago</p> <p>IOWA
Iowa Radio Corporation
916 Locust St., Des Moines</p> <p>KENTUCKY
Belknap Hardware & Mfg. Co.
111 E. Main St., Louisville</p> <p>LOUISIANA
Electron Engineering Co.
115 Whitney Central Bldg.
New Orleans
W. D. Seymour Company
614 So. Peters St.,
New Orleans</p> <p>MARYLAND
Baltimore Hub Wheel &
Mfg. Co.
222 No. Gay St., Baltimore</p> | <p>MASSACHUSETTS
James H. Jones, Inc.
94 Massachusetts Ave.,
Boston
John V. Wilson
76 Brookline Ave., Boston
Tarbell-Watters Company
441 Chestnut St., Springfield</p> <p>MICHIGAN
Phonograph Co. of Detroit
1540 Woodward Ave., Detroit</p> <p>MINNESOTA
Sterling Electric Company
33 So. 6th St., Minneapolis</p> <p>MISSOURI
Western Radio Company
Walnut at 16th St.,
Kansas City</p> <p>NEBRASKA
The Korsmeyer Company
1329 "N" Street, Lincoln
Federal Radio Corporation
316 South 10th St., Omaha</p> <p>NEW JERSEY
E. M. Wilson and Son
11 Lafayette St., Newark</p> <p>NEW MEXICO
Radio Supply Company
415 W. Central Ave.,
Albuquerque</p> <p>NEW YORK
Buffalo Talking Machine Co.
778 Washington St., Buffalo
Great Lakes Motor Parts Co.
1049 Main St., Buffalo
R. H. McMann, Inc.
122 Chambers St., N. Y. C.
Progressive Musical Inst. Co.
319 Sixth Ave., N. Y. C.
Rudolph Schmidt & Co., Inc.
51 East Main St., Rochester</p> | <p>NORTH CAROLINA
Brown-Rogers Company
510 Main St., Winston-Salem</p> <p>OHIO
M. & M. Company
500 Prospect Ave., Cleveland
Erner & Hopkins Company
146 No. 3rd St., Columbus
P. & A. Elect'l Sup. Co., Inc.
102 Main St., Mansfield
Portsmouth Auto Sup. Co.
930 Gallia St., Portsmouth
Toledo Radio Company
143 North 10th St., Toledo</p> <p>OREGON
Edco Distributing Co.
Portland</p> <p>PENNSYLVANIA
Music Master Corporation
10th & Cherry Sts.,
Philadelphia
Winchester Simmons
Hdwe. Co.
1050 N. Delaware Ave.,
Philadelphia
OMC Supply Company
138 Ninth St., Pittsburgh</p> <p>RHODE ISLAND
Providence Hdwe. & Sup. Co.
76 Mathewson St., Providence</p> <p>TEXAS
Tel Electric Company
602 Preston Ave., Houston
Waco Electric Supply Co.
616 Austin St., Waco</p> <p>VIRGINIA
Reliance Electric Company
526 Harrington Ave.,
Norfolk
Hoffman & Goodman
601 W. Broad St., Richmond</p> <p>WISCONSIN
Radio Specialty Company
115 W. Water St., Milwaukee</p> |
|---|--|---|

PARAGON

RADIO RECEIVERS



NEUTRODYNE—for Selectivity



Name your station—
NEUTRODYNE
will get it for you if it's on the air

WITH a Neutrodyne radio receiver all the air is like a great telephone switchboard. You decide *what* you want to hear, turn the dials to predetermined numbers, and in rolls the station—provided the waves from that station are reaching your neighborhood.

Just as definitely as the telephone operator "plugs in" at a certain place on the switchboard to get either a local or a long-distance number. Carrying the analogy further, you will always get the same station with the same dial-setting, even as the operator of the switchboard uses the same number for a repeat call. Neutrodyne—*for Selectivity!*

Quality Reception

The Neutrodyne excels in *Tonal Quality*. It brings you programs from miles away with perfect fidelity to the original. The liquid notes of the flute; the deep bass of the tuba; the mellow croon of the violoncello; the high "C" of the soprano—all are reproduced as faithfully as though you were present at the concert yourself, *wherever* the concert may be.

Nor does the Neutrodyne offend the delicately attuned ear of the aesthete. It creates no squeals and cat-calls to annoy you or your neighbors. Be assured of this—if all radio receivers were Neutrodyne, there would be no squealing! That is an exclusive feature of the Neutrodyne system of radio reception.

Neutrodyne for long range

Is it the thrill of *Distance* you enjoy? You may take it for truth that, if you can't get a station with Neutrodyne, nobody can with *anything*. Yes—Neutrodyne will bring in the distant stations. Neutrodyne uses either wet

If it hasn't this label,
it isn't a Neutrodyne.
It is there for your
protection.



or dry batteries, and either outdoor or indoor aerial.

In a word, the greatest feature of the Neutrodyne system is its absolute *Dependability*. You may plan your radio concert with perfect assurance. For Neutrodyne never disappoints. It never embarrasses. You don't have to alibi that "It never acted that way before." You may buy a Neutrodyne receiver with the same confidence that you would put in a fine piano. And, incidentally, with as little fear of its ever becoming obsolete!

Neutrodyne followed broadcasting

Neutrodyne was developed in 1922, *after* modern broadcasting was established. The three other major receiving systems were invented *previous* to broadcasting. They were made first for dot-and-dash code (radio telegraphy) and adapted later to broadcasting. Neutrodyne was specifically designed to receive the broadcasting of music and speeches. It did not have to be "adapted."

In order to protect the public from fraudulent Neutrodynes, the Hazeltine Corporation was formed, and Professor Hazeltine entrusted his great idea to just fourteen hand-picked, licensed manufacturers. These fourteen radio builders are grouped into one association, known as the Independent Radio Manufacturers, Incorporated. No other manufacturers may use the genuine Neutrodyne principle! Look for the Neutrodyne label on the set you buy.

Hazeltine Corporation
(Sole Owner of Neutrodyne Patents and Trade-marks). Independent Radio Manufacturers, Incorporated (Exclusive Licensee of Hazeltine Corporation).

NEUTRODYNE

Perfected Radio

Speaking of "Selectivity"—



SUCH advertising as that reproduced herewith (greatly reduced) is bound to focus public selection on Neutrodyne. This is the third advertisement in the gigantic advertising campaign now running to make "Neutrodyne" the best known and most respected name in all radio.

The tremendous financial resources of the fourteen Neutrodyne manufacturers, their unequalled combined experience, are behind this advertising to the limit.

See that you get the most out of this great effort by studying Neutrodyne yourself; by stocking genuine Neutrodyne sets, identified by the official label; by talking Neutrodyne when people come into your store. This advertising will either help you or it won't. You yourself must decide that!

HAZELTINE CORPORATION
(Sole Owner of Neutrodyne Patents and Trade-marks).
INDEPENDENT RADIO MANUFACTURERS, Incorporated (Exclusive Licensee of Hazeltine Corporation).

Comprising the following firms

American Radio & Research Corp.
F. A. D. Andrea, Inc.
Carloyd Electric & Radio Co.
Eagle Radio Company
Freed-Eisemann Radio Corporation
Garod Corporation
Gilfillan Radio Corporation
Howard Manufacturing Company, Inc.
King-Hinners Radio Co.
Wm. J. Murdock Co.
Stromberg-Carlson Telephone Mfg. Co.
R. E. Thompson Mfg. Company
Ware Radio Corporation
The WorkRite Mfg. Company

Parts that make profits— are parts that stop leaks!

New! RASLA MARCO 3tube KIT

THE immensely popular improved Rasla Reflex now comes in Kit form! This Kit contains the correct MAR-CO and Rasla parts — matched together — and sealed with the personal approval of J. Clyde Davidson, perfecter of the Rasla Reflex, \$40.00 worth of parts in a sealed Kit that lists for \$37.50!

Ask your MAR-CO jobber, or write direct, for details of this Kit and the entire MAR-CO line.

MARTIN-COPELAND
COMPANY

Providence, R. I.

Branch Offices in
NEW YORK CHICAGO
BOSTON SAN FRANCISCO

LEAKS—energy leaks—must be stopped—if the set builder is to get the results he should!

And radio fans today are beginning to realize that fully half the efficiency of any circuit depends on a careful selection of parts, —parts designed to *conserve* radio energy—to *stop leaks!*

MAR-CO radio instruments are built by a maker with 45 years experience in scientific, precision methods. MAR-CO parts cut down energy losses—and every fan who has used *one* MAR-CO part —looks to MAR-CO for the same leakproof precision in other instruments!

LEAKS — *expense* leaks — must be stopped— if the radio dealer is to get the profits he should!

And far-seeing dealers today are beginning to realize that the secret of a profitable parts business, is to *concentrate* on a few *complete lines* of well advertised, *quality* parts!

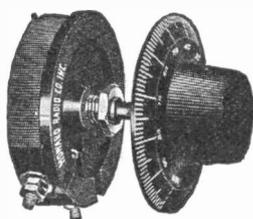
MAR-CO is the most complete line of precision parts in radio. MAR-CO parts are handsomely finished, attractively packed, and thoroughly advertised. Make MAR-CO the back-bone of your parts department —cut out needless duplication — needless expense leaks—and *count on* mounting *net* profits.

MAR-CO

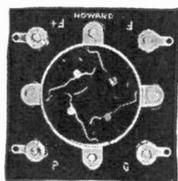
Parts of  Precision



THE satisfaction and profit that goes with selling Howard Guaranteed Parts is that same satisfaction and profit that builds your business.



HOWARD Standard Rheostat with Dial Control



HOWARD "Sure Contact" Socket



HOWARD "Hand Made" Fixed Condenser

It has been the aim of the Howard engineers to build the ultimate in radio parts, regardless of cost. Demonstrations, tests and comparisons will show you that they have achieved it.

Howard Guaranteed Parts include

- Rheostats,
- Potentiometers,
- Sockets,
- Phone Plugs,
- Fixed Condensers,
- Switch Levers,
- Binding Posts,
- Soldering Lugs, etc.

Write for descriptive circulars, catalogue sheets and other detailed information.

HOWARD RADIO COMPANY, INC.
469 East Ohio St., Chicago

The full color, Red Seal Window Display for March.

The Battery Season is here!

SPRING is the time to feature Red Seal Batteries! Red Seals for ignition on motor boats; Red Seals on tractors for plowing; Red Seals for stump-blasting; for spraying-machines; for the doorbells of new houses—and of course, *always* for radio.

The illustration shows the March mailing in the Red Seal Window Display Service. Use it in your window together with a display of Red Seals to speed up battery sales.



MAKERS OF MANHATTAN AND RED SEAL PRODUCTS

-a
Neutrodyne
 for \$ **100**
MAHOGANY CABINET
BUILT-IN SPEAKER

5 TUBES

COMPARTMENT FOR BATTERIES

A five tube *Neutrodyne*—
 With built in speaker!
 In a fine mahogany cabinet!
 Including compartment for "B" battery!

It is a standard instrument in every way meeting the high level set by Murdock in 1904 and consistently maintained ever since.

Not a kit.

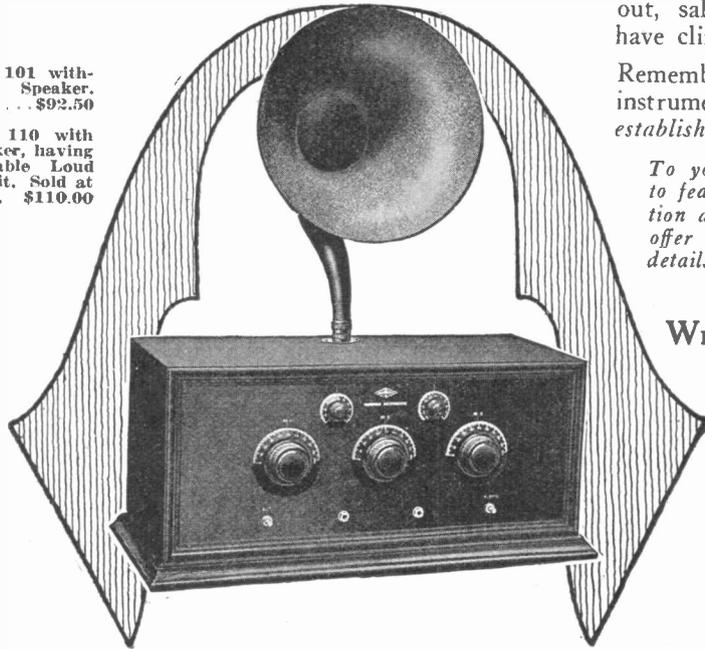
Eagerly seized upon by radio dealers right after the first announcements went out, sales of this popular instrument have climbed steadily ever since.

Remember that besides being a sound instrument, *it is backed by a soundly established organization.*

To you dealers looking for a leader to feature, one that will attract attention and purchasers to your store, we offer a real proposition! Write for details and for distributors' names.

Model No. 101 without Loud Speaker. Sold at \$92.50

Model No. 110 with Loud Speaker, having an adjustable Loud Speaker unit. Sold at \$110.00



Wm. J. Murdock Company
 Chelsea, Mass.



MURDOCK

Licensed by
 Independent Radio Manufacturers Int'l
NEUTRODYNE
 Pat. March 27 1923 and April 1, 1924
 Machine Pat. Nos. 1,430,060 and 1,468,778
 Other Patents Pending

Without
Tubes and
Batteries

\$75⁰⁰



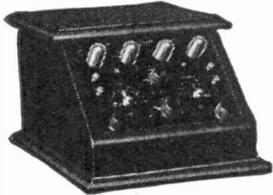
ECHOPHONE PORTABLE

*Its All-Year Utility
Assures All-Year Sales*



The Echophone "3"

An exceptionally powerful 3-tube set. Uses dry batteries. Two dial tuning. Range 1800 to 2000 miles. Without Tubes and Batteries. \$50.00.



The Echophone "4"

A combined radio and audio-frequency four tube receiver of unusual selectivity. Two tuning dials with special adjustment for volume. May be carefully calibrated for logging new stations. Non-radiating—clear tones, easy tuning. Without Tubes and Batteries. \$75.00.

Radio enthusiasts are buying the Echophone Portable *now* not only for summer vacation trips but for real radio enjoyment in the meantime.

It is compact and light in weight yet there is not the sacrifice in volume or tone quality usually experienced with a portable receiver. This is because the Echophone Portable uses a standard 60-ft. aerial instead of the usual small size lower-capacity antenna. For carrying purposes, the aerial winds on a reel fitted in the case. Convenient and ready to use wherever you are. The Echophone Portable furthermore uses the same receiving unit as the Echophone "3" or "4."

Weighs only 32 pounds and is no larger than an ordinary traveling bag. With the Echophone "3" unit retails at \$75.00; with Echophone "4"—\$98.00. The case alone including built-in loud speaker sells for \$30.00. Trade discounts and full details mailed upon request. Write today.

ECHOPHONE RADIO, INC.
1120 N. Ashland Ave.
Chicago, Ill.

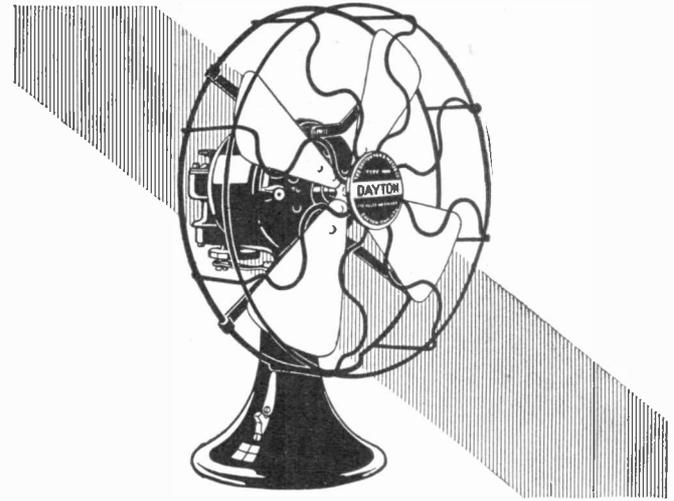
Echophone Radio Shop
Long Beach, Cal.
Echophone Sales Co.
156 2nd St., San Francisco, Calif.

ECHOPHONE

Storage Battery Results at Dry Cell Cost

Day Fan

RADIO • MOTORS • FANS
PRODUCTS



Dayton Fans will keep up your summer volume

NOW is the time to make your plans for Summer business. The big summer seller is fans. The big fan sellers are Dayton Fans.

Dayton Fans combine in a pleasing way the three essentials of fan construction: *durability, large volume of air delivery, and attractive appearance.*

Your customers know the quality of Day-Fan products. They do not have to be "sold" on Dayton fans—they are already convinced that dollar for dollar, there is no better "buy."

Get in on the big fan business this year.

"Trade Winds," a very unique, easy-to-read booklet, is full of fan merchandising ideas. Send for it.

The Dayton Fan & Motor Company
Dayton, Ohio

For 36 years manufacturers of high-grade electrical apparatus



DAYTON FAN & MOTOR CO.,
Dayton, Ohio.

Without obligating me in any way, please send me a copy of "Trade Winds".

Name

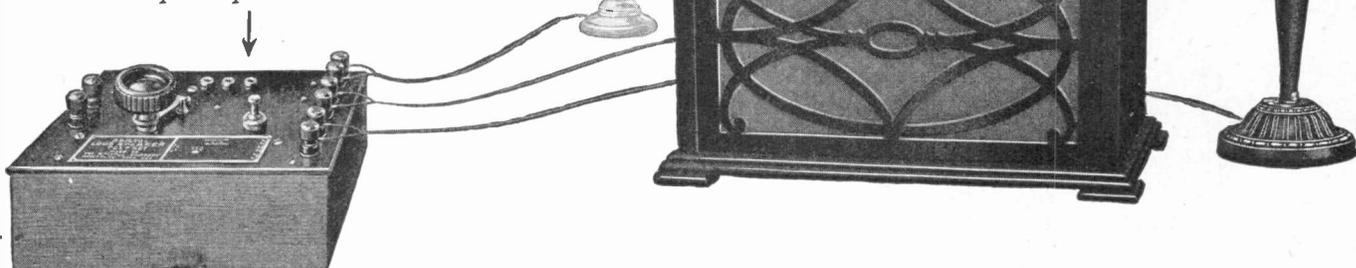
St. and No.

City..... State.....

End All Argument— Test Your Loud Speakers

Right Before Your Customer
Without Radio

Comparophon Does It



You can easily demonstrate every loud speaker in your store, with this Bristol Comparophon. No radio needed, yet you get a true comparative test. Simply connect it to any phonograph. A multiple switch on the Comparophon enables you to operate each speaker at will. End all argument. Let the customer be the judge. Whatever horn is selected will have the same comparative quality on his radio. You can buy the Comparophon outright for \$60.00, and you will find it the best radio fixture you ever put in your store. Write for Bulletin AL-3018.

Every Bristol Loud Speaker will Pass this Exacting Test

There are five Bristol Loud Speakers, priced from \$12.50 to \$30.00, and we like nothing better than to sell these through this remarkable test, right before your customer. We know what they will do, and when they are shown in true comparison there is usually a Bristol sold.

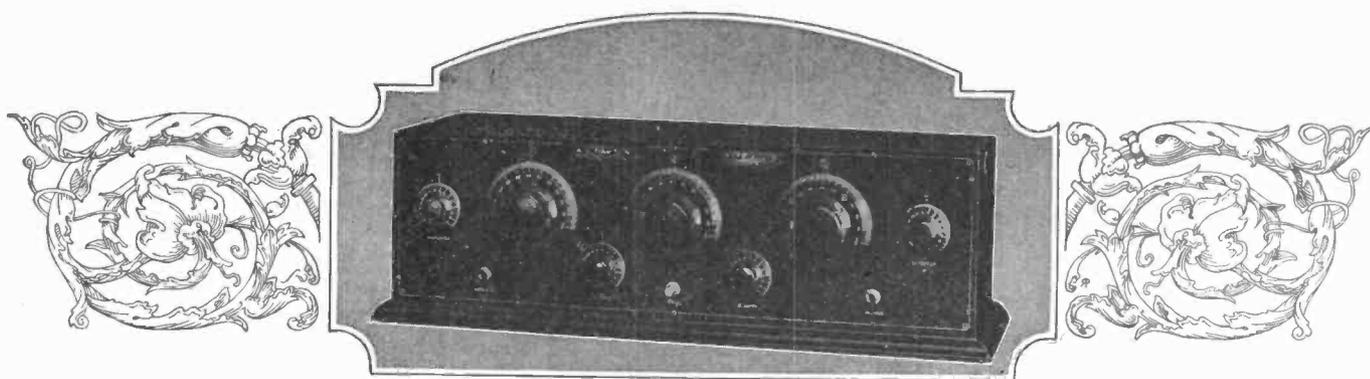
Two of the five are shown in the view above. The Model "C" Cabinet Loud Speaker is made of beautifully finished mahogany, 17 x 10 x 10¼ inches in size. It has a cast metal throat and a full-floating wooden horn with extra long expansion chamber. The tone is full and sweet, the reproduction of music and voice is remarkably true to the original. The retail price is \$30.00.

Model "S" is the senior of the Bristol family of horn speakers. The horn is of rubber, 14½ inches across the bell! The finish is velvet mat black, mottled with just a touch of bronze and gold. It has the same cast metal throat and tone mechanism as the Model "C" and is an excellent example of fine radio craftsmanship.

With these and three other intermediate models—and with representatives in 8 principal cities you can satisfy every customer who comes to your store. One line—one freight—one responsible house to deal with. Write for Bulletin AL-3022.

BRISTOL TRADE MARK AUDIOPHONE REG. U.S. PAT. OFFICE Loud Speaker

The Bristol Company Waterbury, Connecticut
FOR 36 YEARS Ask Any Technical Engineer MAKERS OF
 BRISTOL'S RECORDING INSTRUMENTS



**A RECEIVER THAT SATISFIES—
—THAT SELLS AND STAYS SOLD**

Only one thing can sell a Radio Receiver as the A-C DAYTON XL-5 sells—that's performance. And XL-5 performance keeps it sold, freeing the dealer from costly service and returns.

List price, less tubes and batteries
\$115.00
(\$120.00 Denver and west).

The XL-5 is a five-tube, tuned radio frequency set at an unusually attractive retail price, stamping it one of the leading radio values of the day. A liberal discount policy and an unreserved manufacturer's guarantee "talks business" to dealers who want to make and keep an honest profit on radio sales.

Knock-Down Kit complete,
List price
\$72.50
(\$76.50 Denver and west).

Write for literature and sales plan

THE A-C ELECTRICAL MFG. COMPANY
DAYTON OHIO
Makers of Electrical Devices for more than Twenty Years

PROVEN BY PERFORMANCE

A-C DAYTON



Parry Mount Says:

You Radio Dealers

Are you hooked up right—hooked up with a jobber who can give you what you want, when you want it?

Paramount Electrical Supply Co. has one of the largest and most complete radio stocks in the entire country. This means no back orders, no substitution when you order from Paramount.

R. C. A. — Fada — Freshman — Music Master — Erla — Thorola — Eveready — Frost — Remler — All American — Howard — Bremer-Tully — Carter — Dubilier — Balkite
and other nationally known and standard makes

Sell Direct From Catalog

Get a copy and keep it handy. You can sell many hundreds of dollars directly from it. All prices are list; we furnish you with a separate discount book. This catalog on your desk means money in your pocket. Mail the coupon for your free copy today.



Paramount Electrical Supply Company
160 West Lake St. CHICAGO

Paramount Electrical Supply Co.,
160-C W. Lake St., Chicago

Gentlemen: Please send me—free of charge—your complete Radio Catalog and put me on your mailing list for regular visits from Parry Mount, The Paramount Salesman—our monthly Bargain Bulletin.

Name

Address

City State

If Mozart could hear "The Magic Flute" on a FADA Neutrodyne

—his trained ear would approve the tonal fidelity to the original in his famous old opera. The peculiar charm of this woodwind instrument is caught in all its purity by the famous Fada Neutrodyne. With equal tonal truth, Fada reproduces the deep rolling bass of the pipe-organ.

The Fada Neutrodyne has the range of the 88-key pianoforte. McCormack's pure tenor, Bori's delicious soprano, create the illusion of standing beside the actual artists when you hear them on a Fada set. Bass and baritone voices are reproduced with equal fidelity. Nor does Fada create those raucous distortions that have kept many discriminating folks from investing in radio.

Fada selectivity is one of its chief charms. Turn the dials to predetermined numbers, and in rolls the very station you want to hear—provided the waves from that station are reaching your neighborhood. Fada also excels in distance and volume. In short, Fada is radio at its very, very best. There are six models to meet every taste and pocketbook. \$75 to \$270. Fada is adapted to either dry-cell or storage-battery tubes, and either indoor or outdoor aerial. Hear Fada. It will be a revelation in radio! Buy your Fada now and be ready to hear the world's famous artists whenever they sing or play for you over the radio.

FADA Radio

F. A. D. ANDREA, INC.
1581 JEROME AVENUE, NEW YORK

Better broadcasting demands better receiving

Now that programs are getting better and better, it is logical . . . imperative . . . that radio reception keep pace. Fada advertising is appealing to the great American public on the basis of better programs and better reception.

Fada Neutrodyne Receivers are better, and we are telling people so, through the columns of

the widely circulated *Saturday Evening Post* and through the great metropolitan newspapers. The far-reaching effect of this advertising is being felt by Fada dealers.

The Fada line includes six

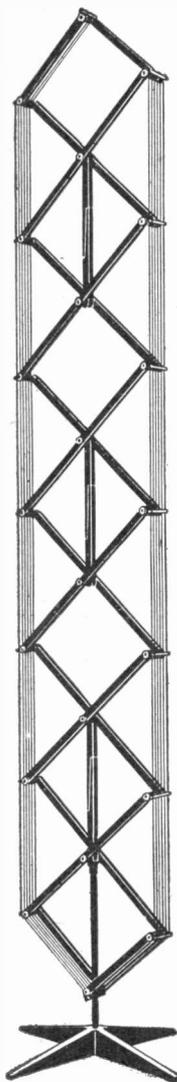
FADA Radio

models which meet every taste and pocketbook. The Fada phonograph panel unit caught the public's fancy immediately, because it is so adaptable and so dependable. Faithful Fada!

If you are not yet handling the Fada line and are of Fada calibre, get in touch with our nearest office at once.

F. A. D. ANDREA, INC., 1581 JEROME AVENUE, NEW YORK
326 West Madison Street, Chicago, Ill. 5 Third Street, San Francisco, Cal.

Greater Distance and Increased Strength from this New Loop



ON any receiver using an indoor loop the Volumax will show increased audibility ranging from 33 1/3% to 100% for a given station. It makes loud speaker reception possible on broadcasting heretofore got only with head phones.

"The height does the trick." The Volumax stands on the floor and almost reaches the average ceiling intercepting energy from many waves otherwise practically lost. It is 7 ft. 9 in. high. *Yet when not in use, it collapses into a box 7 1/2 x 3 1/2 x 20 in.*

The Volumax is a truly surprising advance in loop construction. Everyone who has tried it out has marveled at the greater strength of signals and the finer selectivity it makes possible. And it is wonderfully convenient. It swings in a radius of only 7 1/2 in.

We will gladly furnish you with all details on this remarkable loop, together with our attractive dealer arrangement. Use the coupon.

THE SCOTT AND FETZER CO.
Radio Division
Cleveland, Ohio

VOLUMAX LOOP

THE SCOTT & FETZER CO.,
Cleveland, Ohio.

Please send me complete information on the Volumax Loop as well as on your dealer arrangement.

Name

Business Address

City and State

—and now a good way to connect dry cells Rigid Battery Connectors

*Make perfect contacts
Hold cells rigidly in place*

Provide a strong, neat, simple mechanical means of securing a perfect contact and eliminate the danger and nuisance of a confusing tangle of loose wires resulting from the use of flexible wire connectors.



Series Connection

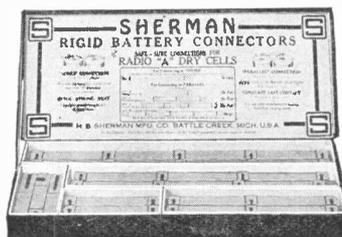
They snap on in a jiffy without removing nuts



Parallel Connection

(4 sizes for 2 to 5 cells)

Space cells slightly apart and hold them rigid



Self-Selling Assortment
\$5.00
DEALERS' PRICE

A handsome display box containing properly balanced quantities of all sizes. Enables dealers to secure initial stock at small outlay. Contains 102 pieces listing at \$9.00.

For replacement the five numbers are packed separately in cartons of fifty—prices on request.

TRULY NEEDED
IMMEDIATE SALES
GOOD PROFITS

SOLD BY JOBBERS

Made by



H. B. Sherman Mfg. Co.
BATTLE CREEK, MICHIGAN





Model WG-10
Ebony Finish

List Price \$12.50

Model WG-20 Shell Mahogany Finish \$15.00

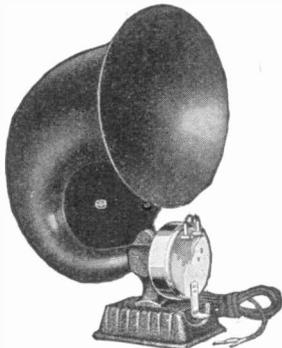
Model WG-40 Japanese Pearl \$17.50
Model WG-50 Mother of Pearl \$20.00

Majestic Reproducer

Home Concert Model

THAT wonder loud speaker—the G-G-H Reproducer—made history as a high class instrument at a popular price.

Now we offer the New Model WG. It is greatly improved in beauty and performance, has a larger and more powerful horn, a more efficient unit with the *exclusive* Constant Tension Diaphragm. The base is a new design and is finished in crystalline lacquer. Match it against any loud speaker at any price. Packed complete, with 5 feet of cord in single cartons, net weight 2½ lbs.



Model GA
Baby Grand

List Price \$7.50

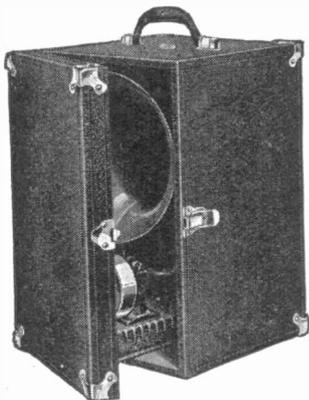
Baby Grand Model

This new compact and highly efficient loud speaker is destined to make Radio history.

Its equal, considering price and performance, has never been seen before. Du Pont Pyralin horn; new high-power Model WG unit; volume adjustment control; crystalline lacquered base; 5 feet of cord.

Just the thing for the auto tourist and camper—packed in the new convenient carrying case. Pyralin horn is practically unbreakable. Will withstand rough traveling and hard usage.

The dealer handling G-G-H Reproducers always gives his customers the utmost in value at the lowest price—yet each sale shows a fine profit. Because of these advantages G-G-H Reproducers are the fastest selling Loud Speakers on the market. See your jobber, or write for full details.

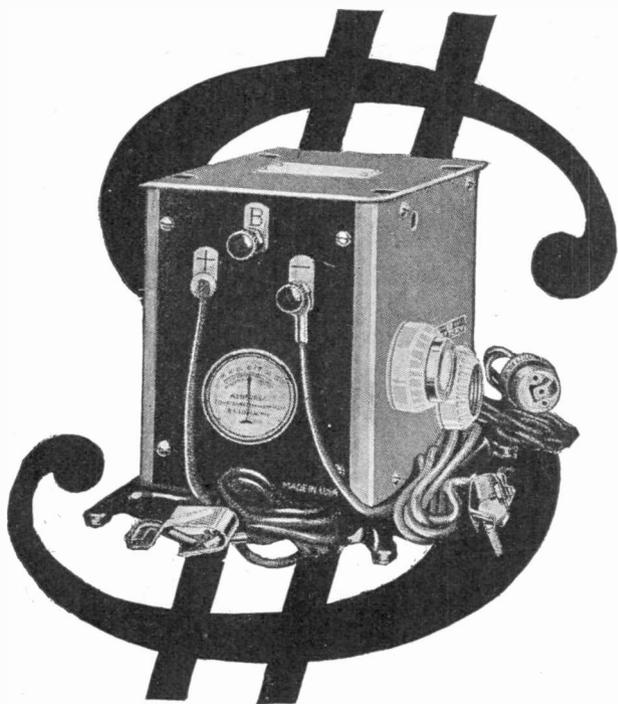


Model GB
Complete with Carrying Case
List Price \$15.00

GRIGSBY // GRUNOW // HINDS // CO

4540 ARMITAGE AVENUE, CHICAGO, ILL

Makes More Money For You



The Master Fore Battery Charger

Jobbers and Dealers make profit when the Merchandise they handle insures a rapid turnover, with sufficient selling margin. The Master Fore Battery Charger meets these requirements and more. It charges any 6-volt Radio or Automobile Battery, also Radio "B" Batteries up to 48 volts in series and up to 120 volts in multiple. In appearance it is a match for the most expensive Radio Set. Easy to operate, inexpensive and durable. There will be no idle stock on your shelves when you handle the Master Fore.

Send coupon today, we'll tell you how it's done

Manufactured by
Fore Electrical Mfg. Co.
5255 N. Market St.
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

They all need these
Sell 'em—it's profitable

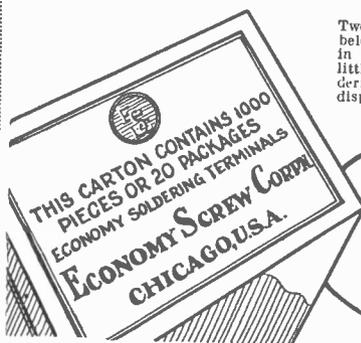
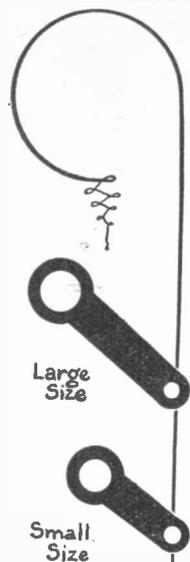
ECONOMY SOLDERING TERMINALS

Put a carton on the radio counter where customers will see them. They are just the thing—made of tinned brass, uniform and in two sizes. We produce these terminals in large quantities and package them attractively to help you sell. Priced right—real profit for you. Write for details.

Ask also about our Economy Screw Assortment. Each carton contains twenty individual packages of radio screws, nuts and soldering terminals. A fast, profitable seller. Jobbers, dealers, write for attractive selling plan.

Economy Screw Corporation
Manufacturers of Machine Screws, Nuts,
Washers and Soldering Terminals

5215-17-19 Ravenswood Ave., Chicago, Ill.



Twenty cartons like little one below, in circle, are packed in this large carton. Each little carton contains 50 soldering terminals. Easy to display and handle.



TRADE MARK

Radio Material

W666
15 in. Bell
"After Dinner Speaker"

Let the "After Dinner Speaker" speak for the rest of the line. Its tone demonstrates real *power amplification*. Has powerful permanent magnets, modulated by perfectly balanced controlling coil in conjunction with a compound lever system, itself amplifying some 2½ times the modulating impulse strength.

Added to this, a peculiarly sensitive Vernier Adjusting Control which enables user to vary the tonal quality to obtain reproduction with all natural clearness and strength.

For other examples of laboratory nicety in popular priced parts, write for H & H Catalogue 4W. Describes complete line — from *Aerial Insulator to Ground Clamp*.

RADIO DIVISION OF THE

HART & HEGEMAN MFG. CO.
HARTFORD, CONN.

YALE'S NEWEST FEATURE

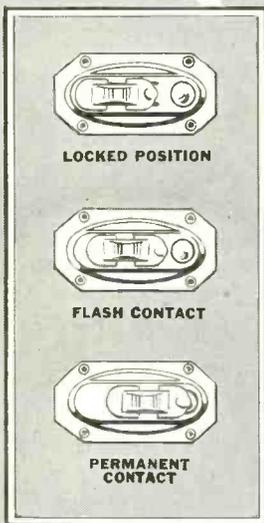
A CANDLE-LIGHT from any type of YALE Flashlight by just unscrewing the complete head assembly and standing on end as illustrated.

Your customers will immediately want one of these Two Purpose Utility Flashlights—of invaluable aid in sick room, nursery, camp, changing auto tires at night and for work in all dark places.

Increased profits to all dealers in handling the De Luxe line of YALE Flashlights embodying this new, unusual feature.

THE YALE SAFETY CONTACT SWITCH

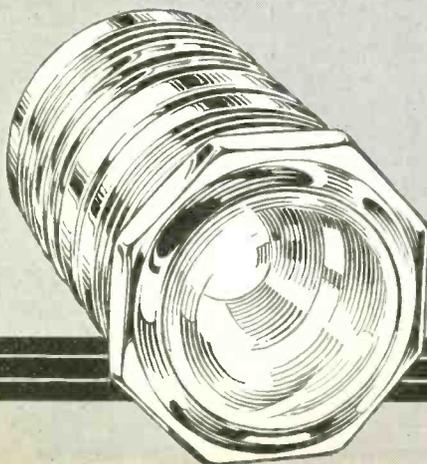
ABSOLUTELY PREVENTS ACCIDENTAL SWITCHING ON OF LIGHT—PROVIDES A FLASH CONTACT FOR SIGNALING, ETC.,—OR A PERMANENT CONTACT FOR A STEADY BEAM OF LIGHT.



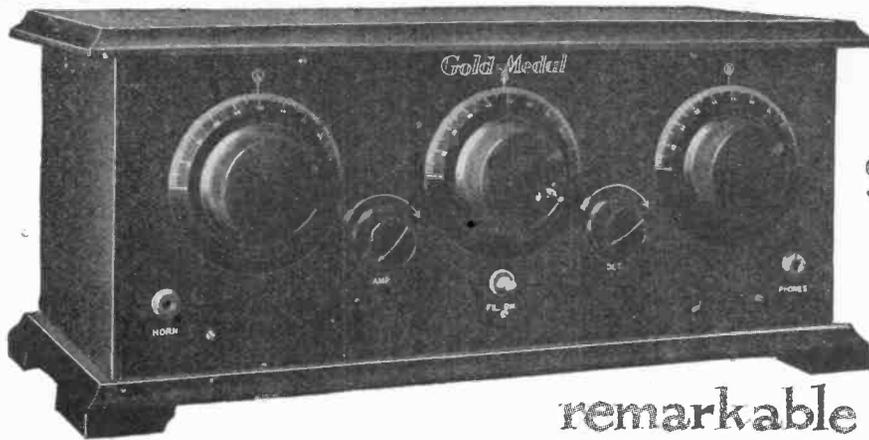
YALE ELECTRIC CORPORATION
CHICAGO BROOKLYN, N.Y. SAN FRANCISCO

YALE MONO-CELLS
Fit All Tubular Flashlights

"They are chock full of dark-dispelling energy"



Exceptional performance



\$60

remarkable price!

Gold Medal five-sixty

The "Five-Sixty" is supersensitive and tunes out local broadcasting so that distant stations come in loud and clear. Once logged, these stations come in always at the same place on the dials.

The Gold Medal Receiver is guaranteed to perform

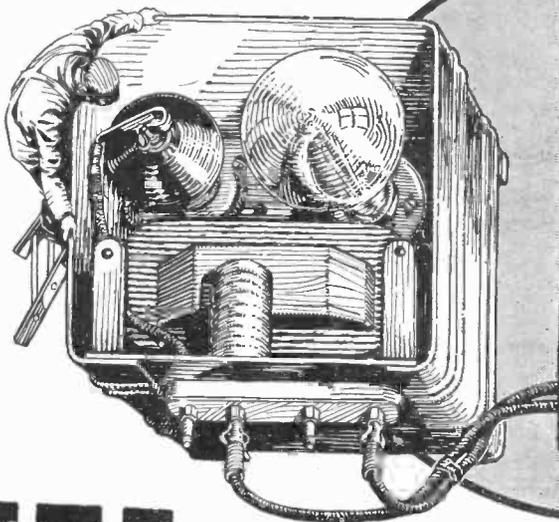
This is an attractive and responsible proposition. Dealers send for samples of this remarkable receiver.

CONSCO ELECTRIC CO., INC., 147 West 23rd Street, NEW YORK CITY

perfectly for one year, providing the manufacturer's seal is unbroken.

This price, remarkably low for such an instrument as the Gold Medal "Five-Sixty," has more than justified itself in the sales it has produced.

WORTH LOOKING INTO Charges all batteries



THOUSANDS of dealers are going to find it profitable to look into our proposition on the New Rectigon.

How many automobile and radio set owners are there in your town? They are all potential purchasers of the new Westinghouse Rectigon, because it is the battery charger that charges all batteries: 1, 2 and 3 cell Radio "A" Storage Batteries, 3 and 6 cell Automobile Storage Batteries, and radio "B" storage batteries up to 48 cells in series, or their equivalent in alkaline batteries. The new Rectigon is self-contained and complete in itself. The special terminal board with snap terminals for quick changing of connections to charge different numbers of cells is a feature that has a strong appeal to the Radio fan.

Sunday newspapers throughout the country will tell Rectigon's story to the world.

See your Westinghouse or Jobber salesman now! The New Rectigon is sure to be a big seller because it is the Battery Charger the Radio fans have been waiting for.

Act at once!

Westinghouse Electric & Manufacturing Company
George Easton Works South Bend, Ind.
Sales Offices in All Principal Cities of
the United States and Foreign Countries

Westinghouse



New!

A much needed Console Table

Radio is fast becoming a part of the modern American home.

The Radio Table is therefore fast becoming a part of living room or parlor furniture—it must add and not detract from the other furnishings of the room.

To meet the demand for a real piece of furniture in a radio table we are placing on the market this handsome new Console Table, made especially for a radio set and its accessories.

It is genuine Honduras mahogany. The top and legs are solid mahogany. The front and end panels are figured striped mahogany. Richly finished in dark lustrous

brown and hand rubbed to bring out the greatest beauty in the mahogany, its appearance is in keeping with the finest furniture in any home.

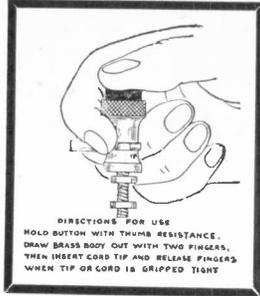
The front door, which has an Antique Silver Pendant Pull, drops to a horizontal position, forming a convenient place to write and giving access to a compartment for headphones, programs, extra parts, etc. The side compartments are open behind, making it easy to get to the batteries and charger.

The Console Table is useful and beautiful. It has enormous sales possibilities. The price is right and our dealer policy is right. Write us for quotations and discounts.

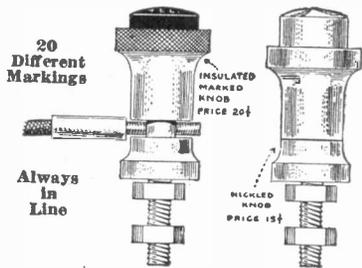
John O. Jesse Mfg. Co.
Bryan, Ohio

Morse Eureka
TRADE MARK

Spring Grip Binding Posts



DIRECTIONS FOR USE
HOLD BUTTON WITH THUMB RESISTANCE,
DRAW BRASS BODY OUT WITH TWO FINGERS,
THEN INSERT CORD TIP AND RELEASE FINGERS
WHEN TIP OR CORD IS GRIPPED TIGHT



20 Different Markings

INSULATED MARKED KNOB PRICE 20¢

Always in Line

NICKLED KNOB PRICE 15¢

The King of All Binding Posts

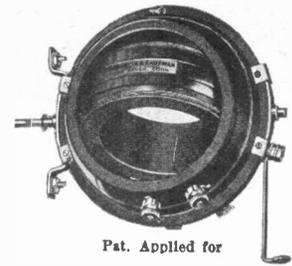
Most Positive Contact Markings always in line
Easiest to Connect

Manufactured by

Frank W. Morse Co., Boston, Mass.

L + K Variable Clarifying SELECTOR

Greatly Improves
Any Standard Hook-Up



Pat. Applied for

Whether yours is a reflex, R. F., one of the "dynes," a regenerator, or any other hook-up this Variable Clarifying Selector will greatly improve it.

Just replace variocoupler, fixed coupler, tapped coil, or aerial variometer with an L + K Clarifying Selector and a .0005 variable condenser.

This improvement clears up muffled signals to full brilliancy—gives minute selectivity—permits complete control of antenna coupling over the entire B. C. wave band—cuts down antenna losses and strengthens reception—and does away with tapped coils and high loss aerial tuners. \$7.00 list. Jobbers and dealers, write for representation.

Set Builders: Write us for our Proposition

LANGBEIN + KAUFMAN L+K
High Grade "Low Loss" Tuning Devices

A Guide to
TECHNICAL
ACCURACY

The Langbein-Kaufman Radio Co.
Dept. M., 511 Chapel Street, NEW HAVEN, CONN.

HARRY ALTER & CO.

OGDEN at CARROLL AVENUES . . . CHICAGO

Wholesale
Distributors
for

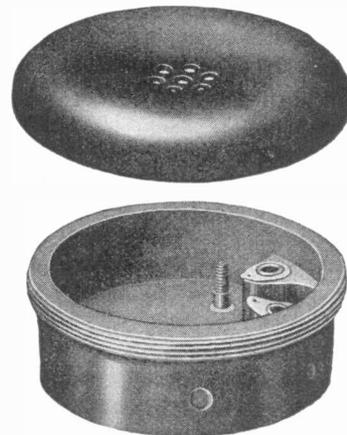
FREED-
EISEMANN
RADION
PREMIER
MOHAWK
HOWARD
BURGESS
DUBILIER
ERLA
BRANDES
FRESHMAN
CARTER
ACME
BENJAMIN
HOLD-HEET
APPLETON
SAVE
LIBERTY
SIMPLEX
WADSWORTH
MASTER
MOTOR

And over
100 others

The dealer who makes Harry Alter & Company his wholesaler has at his command complete stocks of the products of America's best known radio and electrical manufacturers. And he enjoys the additional advantage of immediate delivery from these stocks—90% of the orders we receive are shipped the same day.

These are only two of the reasons why dealers in every state in the United States and in 22 foreign countries are buying from Harry Alter & Company to their satisfaction and profit.

Molded Bakelite for Radio

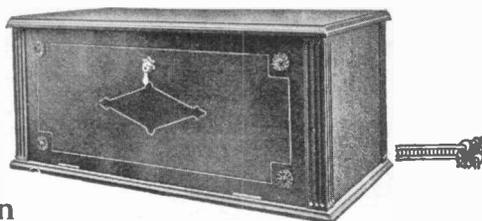


Bakelite and Condensite knobs, dials, socket bases, rheostat bases, condenser end plates, and other parts, produced by our large and experienced Molding Organization.

American Insulator Corp.
52 Vanderbilt Ave., New York City

Gluckson

Beautiful to the Eye
Sweet and Mellow to the Ear



Setting a new standard in radio reception

The Gluckson is undisputedly one of the high achievements in radio. As a result of its unique construction, absolute stabilization is gained. Its two stages of inherently balanced radio frequency amplification, detector and two stages of power audio amplification, achieve trueness of reproduction, range and selectivity that are unsurpassed. Highest class parts used throughout.

Write for specifications and full details.

MODEL E F 5
In Distinctive
Solid Mahogany
Cabinet
List \$98

GLUCK RADIO MANUFACTURING COMPANY, 115-117 West 23rd St., New York City
DISTRIBUTORS: Sanford M. Booke, 221-225 Fulton St., New York City. Burney Radio Corp., 17 West 60th St., New York City.

**With Every
Loud Speaker Sale**

Sell a PREMIER 20-foot Extension Cord.

It's tightly braided for maximum wear. Comes complete with connecting plug.

Individually packed in self-selling container. One dozen boxes in a display carton.

An attractive 14x17-in. Counter Card is yours with each order of one dozen.

**List
\$1.75**

From Your Jobber—or write
Crescent Braid Co.
Inc.

Providence, R. I.

*Makers of Battery Cables,
Telephone Cords, Spaghetti Tubing*



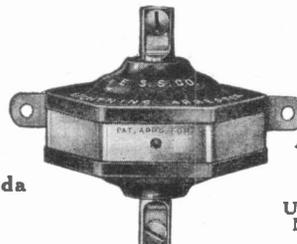
KEYSTONE

Now is the time
to stock

Lightning Arresters

\$1.50
each

In Canada
\$2.00



Approved
by The
National
Board of
Underwriters
No. E-1835

Big sales for the Nationally advertised Keystone Radio Arrester are just ahead. Place your order now for your stock of this famous Arrester—made of genuine Bakelite and brass parts. You can sell nearly every customer a KEYSTONE RADIO LIGHTNING ARRESTER. Try it today.

Order from your Jobber or write for complete information.

Electric Service Supplies Co.
17th and Cambria Sts., Philadelphia, Pa.

**LOW LOSS
ARRESTERS**

Telephone Cords

High grade Cords for all makes of
Headsets and Loud Speakers.

We solicit your 1925 Business

Write for Prices.

Gavitt Manufacturing Co., Inc.
West Brookfield, Mass.

De JUR JR
COMMERCIAL
RHEOSTATS
Genuine Bakelite

The DeJur is the only rheostat that does not have to be taken apart in order to mount. There is nothing to get loose in back of the panel. Positive connections throughout assure permanent contact. Compare and you will see the difference between DeJur and other rheostats. The DeJur, Jr., is made especially for manufacturers requiring an efficient part at the right price. *Manufacturers—Write for Prices and Samples.*

DeJur Products Co.
Lafayette and Broome Sts.
New York

UNITED STATES POST OFFICE
Kansas City, Missouri

February 11, 1925.

Mr. Business Man:

The Post Office Department at Washington desires to improve the parcel post system in every detail, with a view of eliminating every complaint, and to this end is conducting an extensive educational campaign on the proper labeling and insuring of parcel post packages.

Experience has shown that many of the losses, delays, wrong deliveries, and complaints in general, can be traced back to improper labels and poor indorsements on insured and C.O.D. packages.

We desire your help to standardize all labels used on mail shipments. There is submitted herewith for your guidance three sample labels, marked "A", "B", and "C", which cover all phases of parcel post. Specimen "A" is for labeling ordinary parcel post. Specimen "B" is for labeling insured packages. Specimen "C" is for labeling shipments sent C.O.D.

It is not the intention of the Department to eliminate individuality, or to specify the exact size of labels, with the exception of the imprint of the regulation C.O.D. and insurance stamps and provision for the insurance number of each parcel, which must be an exact reproduction of the regulation insurance stamp.

Parcels bearing the indorsement, "Insured", on the outside wrapper or cover, that are not actually insured by the Government, are not mailable.

The paper used should be white, or of very light color, and it is suggested that it be typed in red, or any other conspicuous color or colors. The return directions may include a pledge guaranteeing return postage, or a request to be notified, whichever is desired. The number of days such parcels may be held is optional with the sender but, by law, must not exceed thirty days. At your discretion, you may take advantage of the privilege of sealing parcels containing merchandise, which shall be accepted for mailing at the fourth-class rate of postage when bearing printed labels worded to conform with the attached specimen. Uniformity in construction is desired, in order to reduce mishandling of parcels to the minimum; therefore, samples of proposed labels should be submitted to this office for approval.

I will be pleased to review all proof sheets submitted, and your co-operation will be very much appreciated.

Sincerely yours,
Wm. F. Marton
Postmaster.

Proofs—if desired.

Phenix Box & Label Co.
817-19 Broadway
Kansas City Missouri

Specimen "A"

FROM: JOHN DOE CO., 817 Broadway, KANSAS CITY, MO.

CONTENTS—MERCHANDISE—FOURTH CLASS MAIL

RETURN POSTAGE GUARANTEED

For "A"

BLUE INK—STANDARD SIZE 2 1/4 x 5 1/4

1000 — \$4.30 3M at \$3.60

6M at \$2.90 12M at \$2.46

24M at \$1.92 100M at \$1.35

Specimen "B"

FROM: JOHN DOE COMPANY, 817-19 Broadway, KANSAS CITY, MISSOURI

CONTENTS—MERCHANDISE—FOURTH CLASS MAIL

RETURN POSTAGE GUARANTEED

To "B"

RED INK—STANDARD SIZE 3 x 5 1/2

1000 — \$4.90 3M at \$4.20

6M at \$3.90 12M at \$3.40

24M at \$3.25 100M at \$2.90

INSURED

NO. _____

Specimen "C"

FROM: JOHN DOE COMPANY, 817-19 Broadway, KANSAS CITY, MISSOURI

CONTENTS—MERCHANDISE—FOURTH CLASS MAIL

RETURN POSTAGE GUARANTEED

To "C"

RED INK—STANDARD SIZE 3 x 5 1/2

1000 — \$4.90 3M at \$4.20

6M at \$3.90 12M at \$3.40

24M at \$3.25 100M at \$2.90

DUPLICATE SENDER \$ _____

M. O. FEE \$ _____

TOTAL \$ _____

Extraordinary one tube reception—

\$ 10
LIST

In power, clearness and selectivity the Babydyne is extraordinary. 1500 mile reception is not unusual. It is not a trick circuit—just a scientifically balanced hookup using highly efficient parts and incorporating some new radio developments. We warrant it for good clear reception under ordinary conditions. Tested and approved by Radio Age Institute.

An unusual opportunity for quick profits. Sold on a cash basis—10% profit to the dealer! Special proposition to jobbers and distributors.

KENMAR RADIO CORPORATION
Danvers, Mass.

Pacific Coast Distributor: Charles T. Preusser, 537 Market St., San Francisco
Export Manager: Charles Bragin, 1416 Broadway, New York City



**INTERNATIONAL
BABYDYNE
RADIO RECEIVER**
TRADE MARK

THE WINDHAM WIRE FORMER

Forms loops for No. 4, 6, 8 and 10 screws, makes easy radius right angle bends, has flat jaws and wire cutters. A complete tool for those who build their own.

Price \$1.25

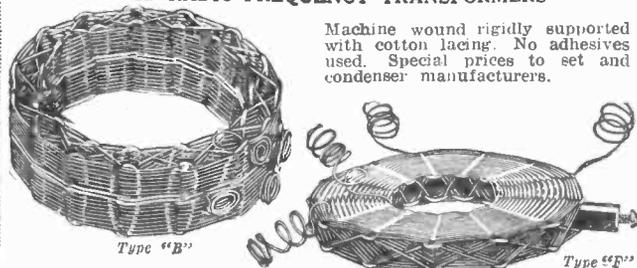
(Patents pending)

THE GOYER COMPANY
Willimantic, Conn.



SELF-CONTAINED Lo-LOSS COILS

TUNED RADIO FREQUENCY TRANSFORMERS



Machine wound rigidly supported with cotton lacing. No adhesives used. Special prices to set and condenser manufacturers.

Preferred by many because of small space required. Made for condensers of all capacities. Packed in attractive boxes, with mountings and readable diagram and instructions. Liberal discounts to Dealers and Jobbers.
Feri Radio Mfg. Co., 1167 Bedford Ave., Brooklyn, N.Y.



MORE PROFIT for YOU on CLEARTRON *Guaranteed Tubes*

CLEARTRON Tubes—backed by a rigid, lasting guarantee—backed to help you and help us in creating satisfied customers and swelling the sales turnover—soon to be backed by local newspaper advertising, national in scope, that will bring customers to your store.

Consider the CLEARTRON high spots—

1. Sensitive to weak signals.
2. Distortionless to tone.
3. Economical—long life.
4. Rigid construction.
5. Oscillator, detector, radio or audio amplifier.
6. Consistent quality—uniform tubes.
7. Rigidly guaranteed.

Cleartron Tubes come in three regulation sizes: C-T 201A, C-T 199 SMALL with regular 199 base and C-T 199 STANDARD. The latter is a so-called "peanut tube" made with a standard sized base. No adapters necessary. All retail at \$3 apiece.

DEALERS, order through your distributor or jobber. We have national distribution. Or write us for information. We shall gladly co-operate.

Cleartron Vacuum Tube Company
24 West 44th Street, New York City



Type C-T-
201-A

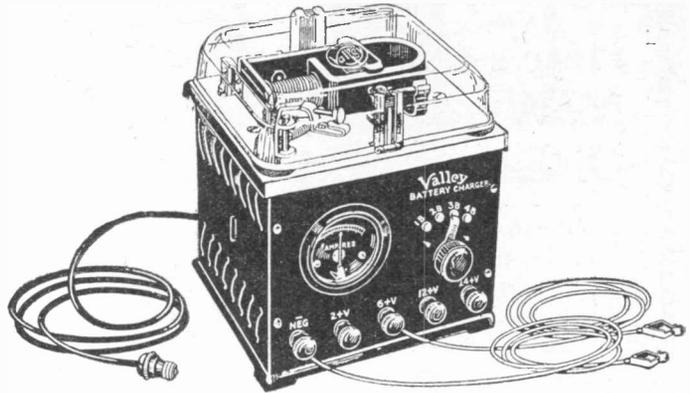


Type C-T-
199 Small

CLEARTRON

GUARANTEED RADIO TUBES

THE ONE CHARGER FOR ALL RADIO STORAGE BATTERIES



*Ten Selling Points
in*

Valley Battery Chargers

You'll find ten real selling points in the Valley Battery Charger — ten talking points that give you something vital to say to a prospective purchaser of a Charger:

Here they are:

1. No bulbs
2. No liquids
3. Quiet in operation
4. Cannot harm the battery
5. Efficient. Takes about a dime's worth of current for a full charge.
6. **Correct 6-ampere** charging rate enables the user of a Valley Charger to recharge his battery overnight.
7. Ammeter mounted flush with panel shows if battery is receiving charge and if charging rate is correct.
8. Listed as standard by Underwriter's Laboratories.
9. Has only two wearing parts, the contacts, which can be replaced easily and cheaply. Average life of these contacts is about two years.
10. Built in handsome black case with grained and engraved Bakelite panel and clear glass top which shows simple, patented working parts. Harmonizes with the finest radio receiving sets.

If you are handling the Valley Charger now, learn these features and tell your customers about them. See that your salesmen know this story of the Valley's Ten Points of Superiority.

If you are not handling the Valley Chargers, you are missing sales, that's all. But that's enough for the progressive retailer of radio merchandise. Order from your jobber.

VALLEY ELECTRIC COMPANY

3157 S. Kingshighway - - - - - St. Louis, Mo.
New York Philadelphia Chicago Indianapolis
Minneapolis Cleveland Kansas City San Francisco

Here's a
**NEW
ONE!**

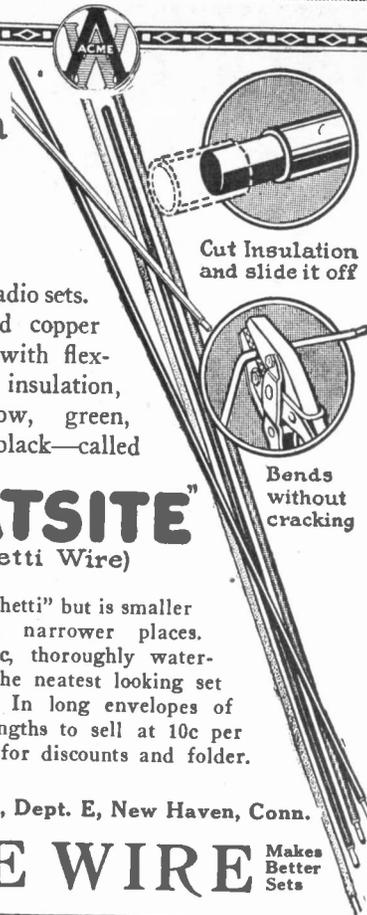
—for wiring radio sets.
No. 14 tinned copper
wire covered with flex-
ible, varnished insulation,
in red, yellow, green,
brown and black—called

"CELATSITE"
(Spaghetti Wire)

Looks like "spaghetti" but is smaller
and goes into narrower places.
Highly dielectric, thoroughly water-
proof. Makes the neatest looking set
you ever saw. In long envelopes of
forty 30-inch lengths to sell at 10c per
length. Write for discounts and folder.

Acme Wire Co., Dept. E, New Haven, Conn.

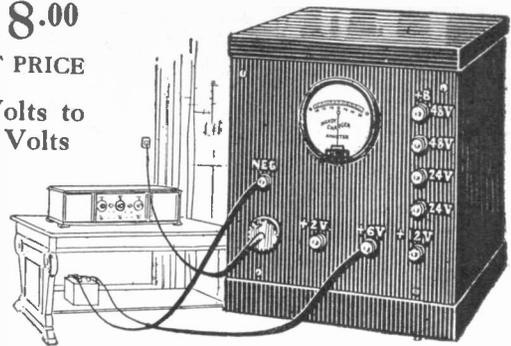
ACME WIRE Makes
Better
Sets



\$18.00

LIST PRICE

2 Volts to
48 Volts



**HANDY
CHARGER**

It Charges Any Type or Size of Battery
for Radio or Automobile

Here is the battery charger that has been highly success-
ful and one that has found a very responsive market.
Show it to your customers and they will at once appre-
ciate its value—they'll soon see the satisfaction obtainable
in having a beautiful, fully enclosed battery charger
always handy, ready to use, and very economical.

Operates from 110 volt A.C. lamp socket. No bother to
use. No bulbs—sloppy liquids or sticking contacts. Here
is a really complete charger at a low price. Has
WESTON ammeter.

INTERSTATE ELECTRIC Co.

4339 Duncan Ave., St. Louis, Mo.

Sell it
with every
set—

Sell this special antenna
with every set!

Feeble signals from distant stations will be brought in
stronger.

The set you install will be improved just that much.

Giving the greatest possible capacity and conducting sur-
face, with less resistance, it actually increases range and
volume.

There's nearly half a mile of single copper strands in every
100 feet. It makes an excellent indoor antenna too!

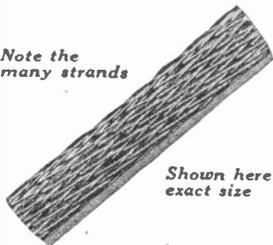
Made in copper, tinned copper, enameled copper. Put up
in coils of 100 and 150 feet.

Ask your jobber for literature and sales-pulling prices!

RACCO
RADIO ANTENNA

ROSS WIRE COMPANY
9 Charles Street, PROVIDENCE, R. I.

Note the
many strands



Shown here
exact size

YAXLEY
APPROVED RADIO PRODUCTS

Are Selling
for Dealers
Everywhere

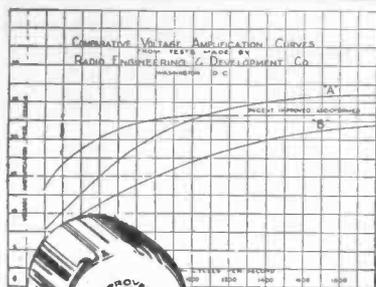
There's
a
Reason

Convenient
packages, on-
time deliveries,
National Adver-
tising backed by
original and correct
design and superior
construction.

That explains the pop-
ularity of Yaxley Ap-
proved Radio Products
with dealers and consumers
everywhere.

*Ask your jobber for your price
lists and full information or
address*

Yaxley Manufacturing Co.
Dept. F, 217 N. Desplains St., Chicago



Another
Pacent
money-
maker
for you!



Examine this chart

Uniform—high—undistorted amplification over the *entire* band of sound frequencies—and no single high peaks! That's why the Pacent Improved Audioformer gives your customers the maximum satisfaction and keeps them sold on your service.

Get in touch with your jobber—or write direct for complete catalog and dealer's discounts.

PACENT ELECTRIC COMPANY, Inc.
91 Seventh Avenue, New York City

Washington Chicago **Pacent** Birmingham Buffalo
San Francisco Boston Jacksonville Detroit
Philadelphia St. Louis **RADIO ESSENTIALS** Minneapolis
Canadian Licensees: R. H. White Radio Co., Hamilton, Ont.

DONT IMPROVISE - PACENTIZE

RADIO TABLE



\$6.50
Dealer's Price

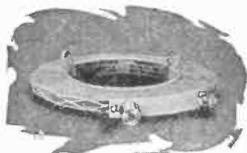
THE PYCO RADIO TABLE is designed especially to hold a receiving set with batteries on the tray below. Shipped knocked down and packed in individual cartons.

Write for catalogue and prices for other
Radio Tables and Cabinets.

THE PARKER-YOUNG COMPANY
131 State Street, BOSTON, MASS.



Knockout Reflex Coil No. 8
Price \$4.00 a Set



Tuned Transformer Coil No. 14
Price \$2.00

Sickles Diamond Weave Coils

Patented Aug. 21, 1923

For Craig, Roberts and Hoyt Circuits

Sickles Coils were chosen by Albert G. Craig in designing his remarkable new Reflex Receiver using the new Sodian detector, and are specified by him, for this circuit in the February issue of *Popular Radio*.

For the very popular Roberts Circuit the Sickles Coil Set No. 18 (\$8.00) is standard equipment. Unit No. 1 has primary and secondary coils. Unit No. 2 has primary secondary, Neutralizing coil and tickler. Broad variation in coupling adjustments is provided for. Tickler is provided with 180-degree dial control.

Coils for the Hoyt Circuit at \$10.00 a set, for the Knockout Reflex Circuit at \$4.00 a pair, the Tuned Radio Frequency Coil at \$2.00 and the Acme Reflex Circuit at \$4.50 a set are among the standard Sickles Coils. We manufacture special coils also for manufacturers' requirements.

Send for descriptive catalog.

THE F. W. SICKLES CO.,
341 Worthington St., Springfield, Mass.

The New FRESHMAN MASTERPIECE

Complete Knockdown Set



\$39⁵⁰

To build
the Five
Tube Tuned
Radio
Frequency
Receiver

This wonder knockdown set contains every single part necessary to construct the FRESHMAN MASTERPIECE including every bracket, screw, nut and bushing that is required as well as an ample supply of spaghetti and bus bar. It certainly is

The Kit the Whole World's Been Waiting For

A 24-page book of instructions packed with every kit. Seven full page illustrations and many smaller ones explain every operation step by step.

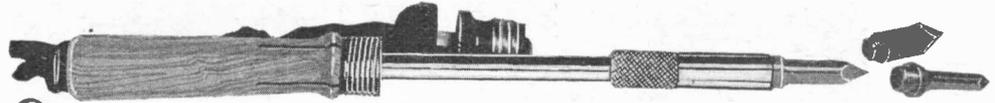
No radio stock is complete without this new Knockdown Set.

Write for catalog today.

Chas. Freshman Co. Inc.
Radio Receivers and Parts
FRESHMAN BUILDING
240-248 WEST 40TH ST.-NEW YORK, N.Y.

3 Hot Points to Consider—

Set complete, \$2.50 list. In display carton with stand, solder and paste. Mail a sample order. Also one point irons at \$1.75. Immediate delivery.



1. An unbreakable heating element guaranteed for one year.
2. Three interchangeable copper points.
3. Never-slip handle construction.

The Chapman Co., Terryville, Conn.

from 50,000 ohms to 10 Megohms DURHAM Grid Leaks can be sold with nearly every tube



Ask your customer how the tubes are to be used. For detectors you'll sell him Type 101 or 201A DURHAM Variable at 75c.; or the desired size of Metallized DURHAM Fixed Leak at 50c. The sizes under ¼ meg., 75c., are used in Resistance Amplifiers. Type 100 DURHAM Variable goes with tubes for audio stages. On every tube sale get the extra profit—from DURHAMS.



DURHAM Grid Leaks Standard in these sets

Remarkable results based on tests put DURHAM Grid Leaks into Eagle, Howard, Thompson and Zenith. Other contracts pending.

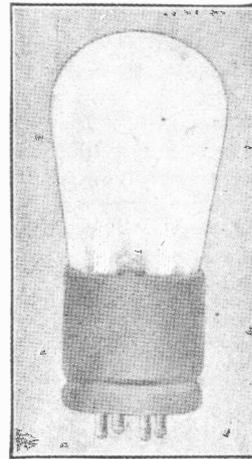
Write for sales plan.

DURHAM & CO., Inc.
1936 Market St., Philadelphia,

Canadian Distributors: De Forest Radio Corp., Ltd., Toronto

A better deal for you, and 100% satisfaction for your customers—

TYPE
F201-A



"FEDERAL"

GUARANTEED
LIST PRICE
\$3.00

The Federal Tube, through its vastly improved and guaranteed filament, achieves a clarity of tone unequalled in any other. Non-microphonic of very rigid construction, and notable for its extremely long life.

You will welcome this real tube. Well made by experienced engineers, and soundly backed. You can give your trade a real deal at last.

Generous discounts. Order through your jobber, or direct.

THE SERVICE LAMP CO.
112 Trinity Place, New York City

RADIO DEALER CATALOG FREE!

Our 1925 Catalog

is being used by thousands of Dealers everywhere as a positive guide to more profitable buying of the kind of radio that is in greatest demand today.

Our financial strength, responsibility and SAME DAY shipping service will help you to "grow with us."

As we are the largest exclusively wholesale radio organization in the East, our tremendous stocks are representative of the best and fastest selling lines as indicated by nationally known manufacturers.

Consult us first and save on your next order, or the stocking of your new store. Your name on our mailing list will keep you posted and prove a valuable asset. Write today.



Trilling & Montague
Exclusively Wholesale Radio
Merchandisers
49 No. 7th Street, Phila., Pa.
"Grow With Us"

SOCKETS—All Types

DIALS—All Sizes

TRANSFORMERS

VARIOMETERS

INSULATORS

BINDING POSTS

(Character and Plain)

PHONE ADAPTERS

SOCKET BRACKETS

PANEL BRACES

TERMINALS—

Any Finish

BATTERY CLIPS

KNOBS—All Sizes

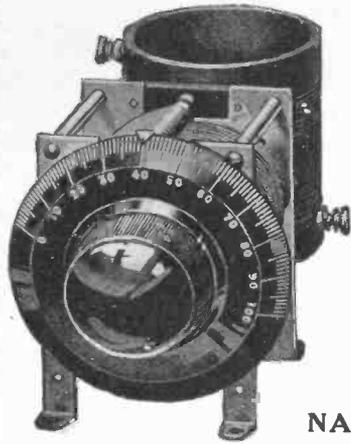
SWITCH ASSEMBLIES

and other Radio Parts

To Jobbers and Mfrs. Only
Send for Catalog and Prices

"RADIO DEPT."
WATERBURY BUTTON CO.
Manufacturers Since 1812
Waterbury, Conn.

Only reliable products can be continuously advertised



The NATIONAL Regenaformer

Exclusive Licensees
for Browning-Drake

One of the big, outstanding successes in radio. Its performance ensures enthusiastic customers who tell their friends. Results—quick sales with excellent profits. Your jobber can supply you or we will gladly tell you more about it.

NATIONAL COMPANY, Inc., Cambridge, Mass.

"The National Regenaformer,"

says THE CHRISTIAN SCIENCE MONITOR

"is a new type of tuned radio frequency transformer which showed such remarkable amplification per stage and such sharp tuning that it demanded the attention of experts in various parts of the world. Monitor readers all over the United States made up this set and most astonishing results have been reported."

Specify-AJAX-for Values

St. Louis

- AJAX—Plural Socket Plugs.
- AJAX—Universal Heater Plugs
- AJAX—Heater Cord Sets

AJAX—Radio Parts and Accessories
Greatest values offered on Multi Plugs and Connectors—Rheostats—Binding Posts—Radiolite Panels and Dials—

AJAX—Porcelain Insulators
Nationally Advertised

Guaranteed and Approved Merchandise
Priced Right and Protection To Distributors
Samples and Complete Price Sheets on Request

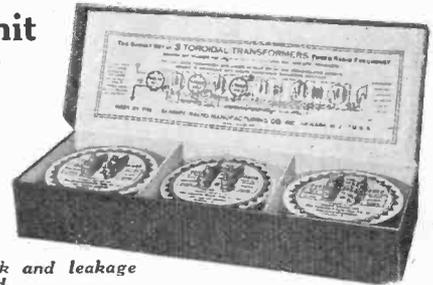
AJAX—Electric Specialty Co.
1926 Chestnut St., St. Louis

The Summit

TUNED RADIO FREQUENCY

Toroidal Transformer

- Low Losses
- Low Distributed Capacity
- Correct Ratio
- Self Neutralized
- Self Balanced



Eliminates feed-back and leakage

—Has no stray field

Step by step the causes of radio losses, noise and the other disturbing factors are being eliminated.

The Toroidal Transformer is the latest step in radio progress, and the only radio transformer with closed magnetic circuit and pre-calculated capacity. Write for a sample set of 3 mated Toroidal Transformers, and enjoy the clearest finest reception ever. Attractive Discounts

Sold in mated sets of 3, packed in a handsome display box with complete instructions for building the Summit 5 tube Receiver. List \$10.00.

The Summit Radio Manufacturing Co., Inc.
Dept. 16, 481 Broad Street, Newark, N. J.

The new tube with the popular price—

You can sell it at half the usual price, and make a very attractive profit.

A standard tube—a tested and guaranteed tube—at a price that will "bring the world to your door." A strong feature article for attracting attention to your store!

TRIPLE TONE

"Tubes That Are Alive"
Sizes: 201A, 200A, 12, 199

Each tube tested separately on a laboratory radio tube testing machine.

Buying from the manufacturer, you are assured of satisfaction and service—besides the tremendous reduction in price. Write for discounts.

Radio Tube Mfg. Co.
154 Nassau Street, New York City
Dept. E



LIST

\$2

Tested and Guaranteed

EACH

SHINN AMPLITONE BRAIDED AERIAL WIRE

For Outdoor or Indoor Use

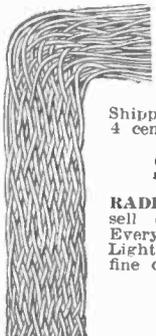
Brings in much greater distance and full radio signals; enabling the receiving set to reproduce the rich volume of voice or music.

Shipped in packages of 50, 75 and 100 feet. Price 4 cents per foot. 33 1/3% discount to dealers.

Shinn-Flat Lightning Rods

RADIO DEALERS: When your radio sales slow down sell our Lightning Protection—good money in it. Every building owner a prospect. Sell Shinn-Flat Lightning Rods in Summer and Radio in Winter—a fine combination. Write for information.

W. C. SHINN MFG. COMPANY
152 Whiting St., Chicago, Ill.



ELEKTRON

RADIO TUBES

(Tipless)



200, 201A, 199

Fully Guaranteed

Bakelite Bases

LIST \$3.00

A REAL TUBE MADE by an organization with years of experience, and capable of giving you the best possible combination, quality and service.

Territory now open to Jobbers and Dealers. Our unusually large discounts mean more profit to you.

RADIO TUBES, INC.

186 Market Street, Lynn, Mass.

Radio Tube Specialists

How can
you get
your product
before the
radio
jobber—?

Telephone
Tulcar 2515

RADIO SALES DISTRIBUTING CO.
REPRESENTING MANUFACTURERS
245 L. W. HELLMAN BLDG.
Los Angeles

Radio Supplies
Accessories

CHAS. H. GARDNER, President

HARDWARE PAINTS
BUILDERS' SUPPLIES

HALL'S HARDWARE
WINCHESTER SQUARE

811-813 STATE STREET

McGraw Hill & Co.,
New York City

Gentlemen:

We have received the copy of the Radio
Trade directory and appreciate this very much.

This book we find very satisfactory and
it contains much valuable information. We intend
using it freely during the coming year as it
will enable us to locate the names of many manu-
facturers which it is impossible to locate oth-
erwise.

Yours very truly,
RADIO EQUIPMENT

Dec. 24, 1924

The Radio Trade Directory
10th Ave., at 36th St
New York City

Gentlemen:

We acknowledge receipt of
and thank you very much for same

We know this will be of great
ordering.

Very truly
Yours,
HALL'S

ADD: M

DISTRIBUTORS
MANUFACTURERS

ROSSITER-MANNING
Reliable Radio Merchandise

PHONE ARBONORE 4748
1830 WILSON AVENUE
CHICAGO, ILL. Jan. 5, 1925

LABORATORY
RADIO ENGINEER

Mr. J. S. Cartelou,
Tenth Avenue at 36th St.,
New York.

Dear Mr. Cartelou:-

We are in receipt of the November issue
of the Radio Trade Directory and we
no hesitancy in pronouncing the work
indispensable to jobbers and others
interested in the selling end of the
game.

We sincerely thank you for sending us
a copy.

We have occasion to very frequently
refer to it and do not see how we could
very well get along without the work.

Yours very truly,
ROSSITER-MANNING CORPORATION

WOODHOUSE ELECTRIC CO.
INCORPORATED
ELECTRICAL APPARATUS AND SUPPLIES

NORFOLK, VA.

Dec. 24, 1924

The Radio Trade Directory,
New York City, N. Y.,
10th Ave. at 36th St.

Gentlemen:-

inst. and please to our favor of
Radio Trade Directory which you have
forward to us.

We are very much pleased with the
and your quite sure that the firm will aid us
in the future.

Yours very truly,
WOODHOUSE

C. J. LITSCHER ELECTRIC COMPANY
ELECTRICAL SUPPLIES

GRAND RAPIDS, MICH.
December 17, 1924

McGraw Hill Co.,
New York City, N. Y.

Gentlemen:

We are in receipt of your recent issue of the
Radio trade directory, and we wish to thank you very
much for this book which we know is going to prove very
valuable to us.

We wish to compliment you on the very fine way
in which this book is put up and the information which
it contains, which certainly is invaluable to the radio
buyer.

Thanking you again, we are

Sincerely yours,
C. J. Litscher
Radio Dept.

Let the jobber

ROSSITER-MANNING CORPORATION

WASHINGTON

ALBERTS ALL CORDS
ELECTRICAL

Radio
1724

SOLE IMPORTERS OF ALL SING
HARMON AND RADIO INSTALLATION

Manufacturers of "BUGGY" Radio Apparatus

Northwest Radio Service Co.

1320 SIXTH AVENUE
PHONE EL-01-4878
SEATTLE WASHINGTON

December 27, 1924.

HARRY A. CARROLL
PRESIDENT & TREASURER

LOUIS O. CARROLL
VICE-PRESIDENT

Carroll Electric Co., Inc.

JOBBER OF
ELECTRICAL SUPPLIES
AND MACHINERY

ESTABLISHED
1900

WASHINGTON, D.C.

38 B CALVERT ST.
BALTIMORE, MD. 12/24/24

NORFOLK, VA.

McGraw Hill Co.,
471 Tenth Avenue,
New York City.

Gentlemen:-

FREDERICK L. FROSTEN, President

J. C. DOWNING, Treasurer

Frosten Electric Company

ELECTRICAL SUPPLIES

1310 WYANDOTTIC ST.
KANSAS CITY, MO.

December 22,
1924

W. W. TRUE, President

ESTABLISHED 1884

INCORPORATED 1881

TRUE & BLANCHARD COMPANY, INC.

WHOLESALE AND RETAIL

HARDWARE

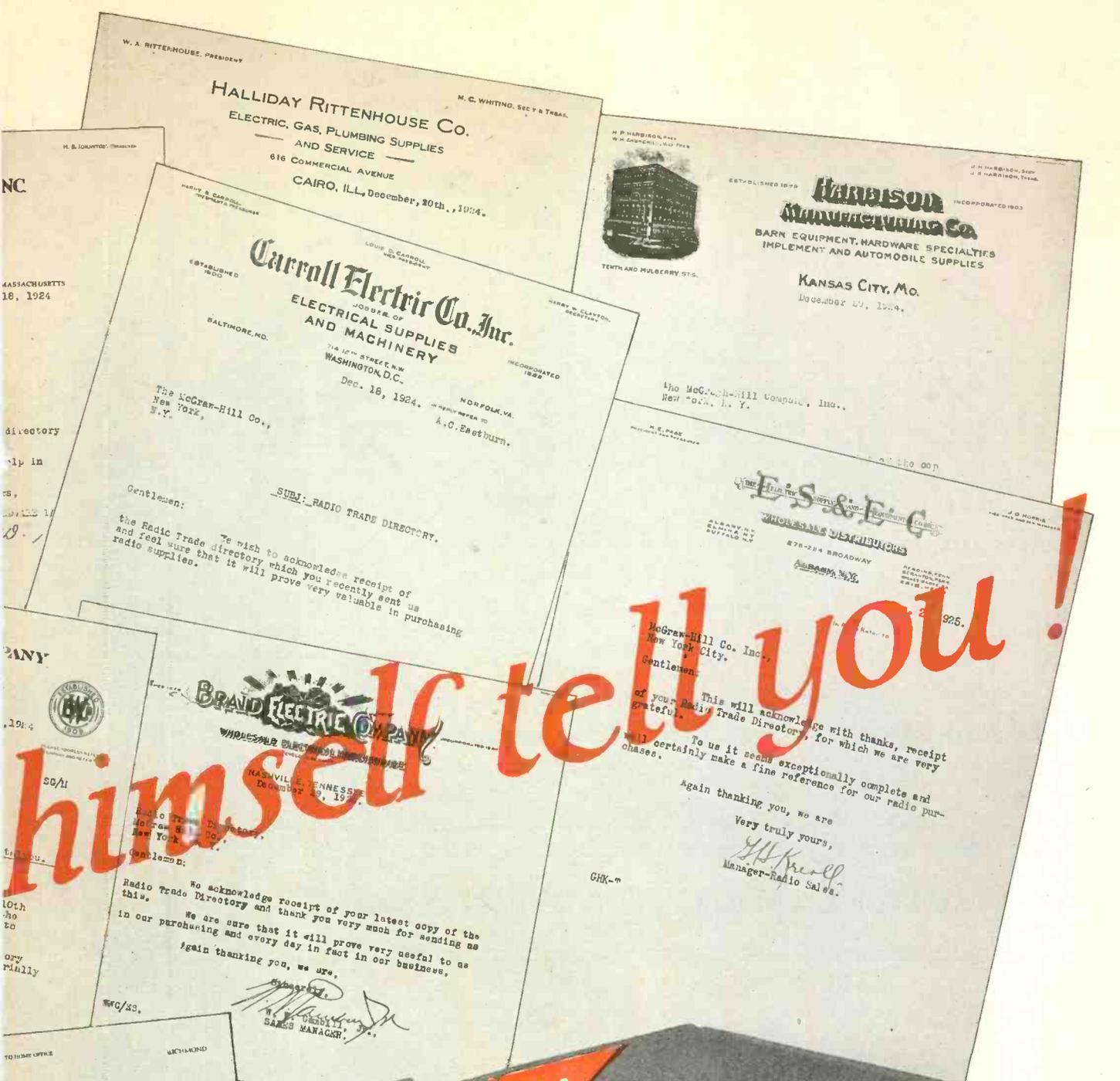
RADIO SPORTING GOODS

AUTO ACCESSORIES

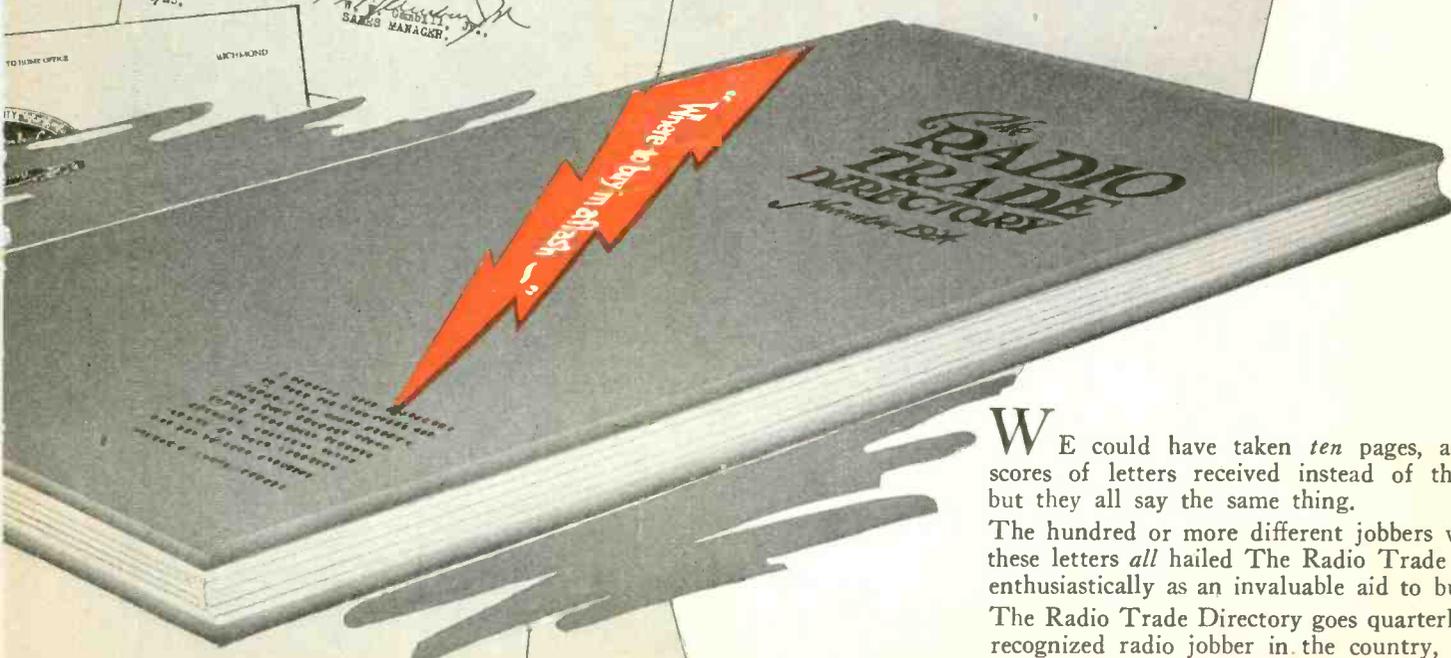
NEWPORT, VERMONT

CHAS. B. TAYLOR, Treasurer

Our Radio
in wishing for
Lic.



They themselves tell you!



WE could have taken *ten* pages, and shown scores of letters received instead of these few—but they all say the same thing. The hundred or more different jobbers who wrote these letters *all* hailed The Radio Trade Directory enthusiastically as an invaluable aid to buying. The Radio Trade Directory goes quarterly to every recognized radio jobber in the country, and to all radio dealers and manufacturers. It is a permanent classified directory of sets, parts and accessories.

THE RADIO TRADE DIRECTORY
A McGraw-Hill Publication
 Tenth Avenue at 36th St., New York City, N. Y.

December 22, 1924.

McGraw-Hill Company, Inc.
 New York, N. Y.

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.....\$6.65 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

POSITION WANTED

WANTED—Position as radio manager by up-to-date radio man. Can build (if necessary) and service sets. Experienced electrician and appliance salesman. PW-3, Radio Retailing, Old Colony Bldg., Chicago, Ill.

BUSINESS OPPORTUNITIES

Business For Sale
 If you are seeking a going radio business, you can find what you want through an advertisement in these "Searchlight" columns addressed to the Nation's radio retailers.

SALESMEN WANTED

Salesman Wanted

If you are a wide awake salesman who has kept step with the manifold changes and improvements effected in radio during the past two years, there's a good job awaiting you somewhere in this ever expanding field. You can find this opportunity through a "Searchlight" advertisement in Radio Retailing.

SALESMEN AVAILABLE

Salesman Available

A live-wire radio salesman is seeking a bigger opportunity to demonstrate his ability. This man is now associated with one of the 40,000 dealers served by Radio Retailing and will be watching these columns for information of opportunities offered. If you wish to locate this man, your advertisement here will get his attention.

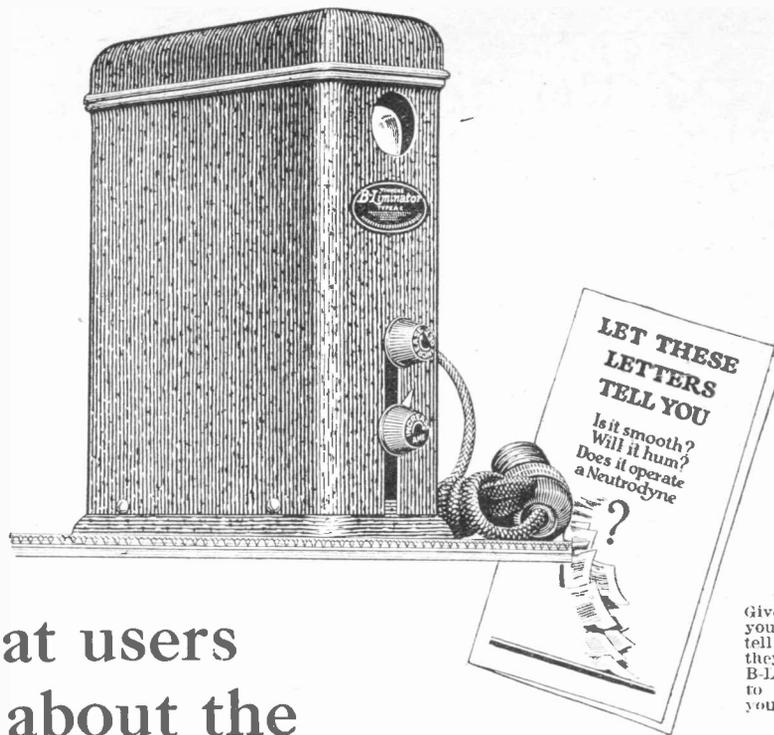
Your Overstock is a Dead Investment—Move it at a Profit!!!
Use the Radio Dealers' Overstock Exchange in Radio Retailing

What have you to turn into cash NOW? Get it into the "Exchange" of the next issue of RADIO RETAILING. The cost will be small.

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			Yaxley Manufacturing Co.....320

List Price \$35
With Type R
Special Rectifying Tube



Give copies of this folder to your customers. In it users tell of the wonderful success they are having with B-Limiter. We'll be glad to send as many copies as you desire.

Here is what users say about the B-Limiter

which takes the place of B batteries, operates on alternating house current, 110 volts, 60 cycles

In addition to these letters, editorial articles are appearing in newspapers telling of rigid tests which the B-Limiter has successfully passed. Everybody is real enthusiastic about the B-Limiter.

And now the price has been made \$35 *with special tube*

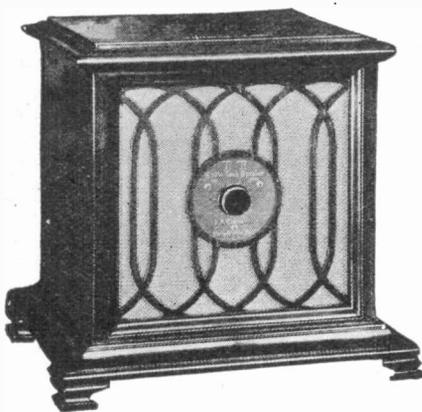
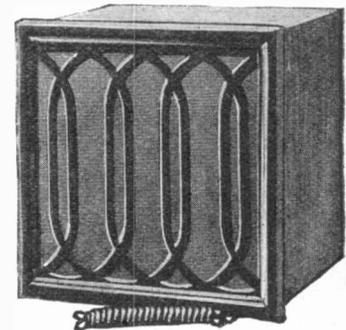
This tube was developed just for B-Limiter use. We tested forty tubes of many types and makes before deciding upon this one, which has remarkably long life.

With every B-Limiter now goes a tube which has been thoroughly tested. Dealers do not have to tell their customers to use this or that make of tube. In other words, the B-Limiter is complete when you sell it and there is no danger of it coming back because your customers used an inferior tube. *The B-Limiter stays sold.*

Even before we developed this tube, the B-Limiter was the outstanding radio development of the year. Thousands are now in successful operation. Users are interesting their friends with stories about remarkable reception with B-Limiters.

Our Saturday Evening Post advertising is telling the story of the B-Limiter to millions of people. Newspaper advertising in principal radio centers is tying up. We have folders and window stand and a complete dealer plan of co-operation. We will be glad to hear from responsible dealers and jobbers.

Timmons Talker.
Non-adjustable Type N.
List \$18.



Timmons Talker.
Adjustable Type A. List \$35.

TIMMONS RADIO PRODUCTS CORPORATION

GERMANTOWN,



PHILADELPHIA

TIMMONS Radio Products

Fewer and Better —

The time is not far away now when radio will become standardized—just as improvements standardized the phonograph and the automobile.

There will be fewer and better hook-ups and fewer and better radio parts. The radio retailer will carry a smaller stock of a faster turnover—a stock composed of “big sellers,” all well-advertised, well-known products of real merit. In this way overhead will be reduced to a minimum, “dead” stock will be unknown, and profits as steady and good as the reliable turnover.

Today the Benjamin Cle-Ra-Tone Socket has already become a standard part of leading receiving sets and kits. The many revolutionary improvements it embodies have placed it at the head of its class and it has received a wide acceptance and a glad welcome everywhere. Well known radio authorities and radio engineers recommend the Cle-Ra-Tone for the improvement of all popular

hook-ups and especially the portable sets—because it *floats* the tube out of reach of floor vibrations which disturb the filament and prevent quiet reception. There are no rubber parts in the Cle-Ra-Tone to deteriorate—Bakelite is used wherever possible to insure sturdiness and long life. Contact points to tube terminals are perfect and permanent. Equipped with lugs for soldering.

Cle-Ra-Tone Sockets are vital to the success of your customers' radio sets—they will improve reception and save the delicate filament from premature breakage. Perfectly adjusted springs at the base of the socket take up jars and shocks just like balloon tires on your automobile.

Rid yourself of all “dead” merchandise—its carrying cost is eating into the profits of your leading sellers. Cle-Ra-Tone Sockets will please you with their big turnover and good profits.

Spreading the Story of Cle-Ra-Tones

Bold, persistent advertising in Popular Radio, Radio News, Radio, Radio Engineering, Citizens Radio Call Book, is telling the story of Cle-Ra-Tone Sockets to Radio users every month. Hook-ups designed by leading radio engineers, recommending the use of Cle-Ra-Tone Sockets, are constantly increasing prestige and acceptance. When you offer the Cle-Ra-Tone your good judgment is backed by the highest authority.



BENJAMIN

Benjamin Electric & Mfg. Co.

120-128 S. Sangamon St., Chicago

247 W. 17th Street
New York

448 Bryant Street
San Francisco

An Over-Night Battery Charger



APCO "A" Charger,
of 7½ ampere capacity. Self-
polarizing.

List \$18.50
Dealer, \$12.50



APCO "B" Charger,
for 24 or 48 volt "B" storage
batteries, or 90 volts in multiple.

List \$10.00
Dealer, \$6.75

—for Radio Storage Batteries

APCO chargers are small,
compact and extremely
attractive in appearance.

They consume very little
current.

Are practically noiseless in
operation.

Have taper charge for safety.

Are simple and easy to
operate.

Pay dealers a worth-while
margin.

Order from your Jobber

APCO MFG. CO.
PROVIDENCE, R. I.

APCO BRANCHES
APCO MFG. CO., Electrical and Export Office,
154 Nassau St., New York
APCO MFG. CO., 1438 S. Michigan Ave., Chicago
APCO MFG. CO., 2005 E. 15th St., Kansas City, Mo.
Canadian Factory, APCO Canadian Co., Ltd.,
3150 Jeanne Mance St., Montreal
Southwestern Office: M. L. Martin,
2008 ½ Commerce St., Dallas, Texas

APCO

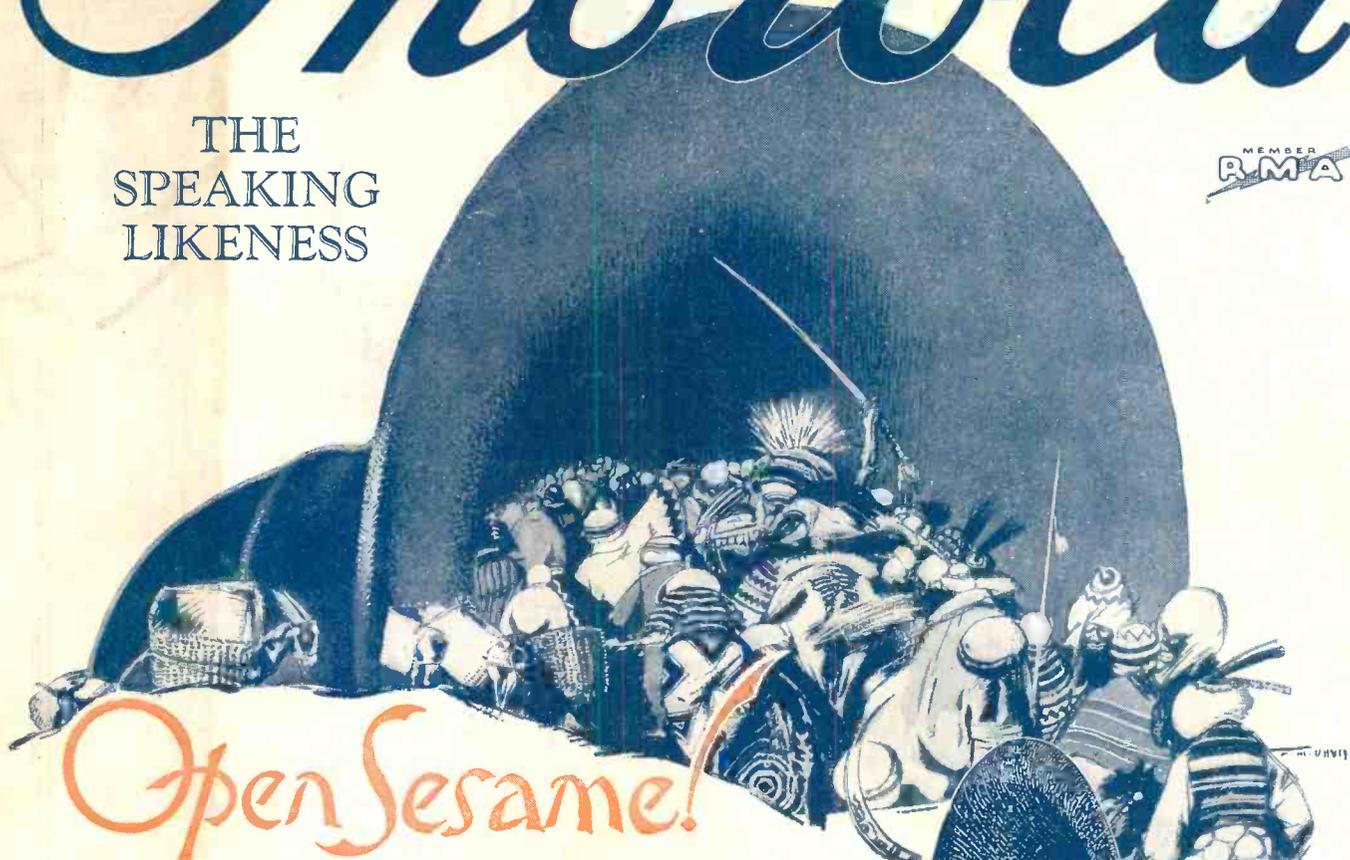
BATTERY CHARGERS

for "A" and "B" Batteries

Thorola

THE
SPEAKING
LIKENESS

MEMBER
RMA



Open Sesame!

Magic words opened the way to a mystic, fabulous treasure cave.

Dials now magically open upon all the wealth of music and speech hidden in air.

Every note, every word, every overtone, in all its original clearness, is sifted out with beautiful Thorola Loud Speaker. Radio is known for its music now, exquisite beyond anything heretofore. With Thorola Loud Speaker radio goes into finest music rooms to stay.

With this loud speaker, new artis-

tic possibilities are revealed in even the costliest radio receiver.

The difference is decisive, not only in tonal purity, but in volume. Thorola so far excels in amplifying efficiency that super-abundant volume remains when tuning for maximum clearness, even at extreme long distances.

Are you aware of all the specific, exclusive Thorola superiorities described below? Only Thorola construction permits surpassing Thorola music. Hearing is believing—and it makes sales.



No external battery needed. Simply plug in, same as head phones.

THE THOROLA REPRODUCER
A toy piano cannot have the tone volume and purity of a concert grand. Compare the very size of Thorola Reproducer—*much larger*, permitting fine construction unduplicated in smaller reproducers.

CONTROLLED MICA DIAPHRAGM
Easily establishes Thorola as THE musical instrument among loud speakers, another accomplishment made possible by Thorola veteran loud speaker experience and technical facilities.

EXCLUSIVE THOROLA SEPARIX
Only Thorola Loud Speaker has the Separix, indispensable for faithful preservation of the delicate

note shadings and overtones, without which there cannot be true music, voice, tone—unblurred.

THE HORN OF THORITE
An exclusive laboratory compound, developed expressly to remove natural limitations. The value of Thorite superior acoustic accuracy cannot be overestimated.

THE THOROLA SYNCHRONIZER
The loud speaker, like every other circuit factor, must be in perfect balance for maximum results. Only Thorola can be harmonized with the exclusive Thorola Synchronizer, individually adapting each Thorola to each receiver, another reason even finest and most costly receivers do better with Thorola.

THOROLA 4 \$25

THOROLA 6 \$15
Phonograph Attachment

THOROLA 9 \$40
Cabinet Loud Speaker

THOROPHONE . . \$45
Power-plus Speaker (Storage Battery)

The Thorola 10-day Refund Warranty is a guarantee to every user that Thorola will fulfill every claim.

REICHMANN COMPANY, 1725-39 W. 74th St., CHICAGO