A McGraw-Hill Publication

April 1925

Radio Retailing

The Business Magazine of the Radio Industry

22 Ways to Interest Women in Radio

A Review of Radio Selling Costs in Music Stores

Why You Should Sell on Time Payments—and How

Sell a Brandes with every set!

Most people measure the value of a set by the distant stations they can log. A headset gives them just about *thirty per cent* more stations.

Most people want to listen in without disturbing others — and without being disturbed.

They need headsets.

And — to the dealer — the sale of a Brandes headset means much more than a sale. It means a customer *better satisfied* with his set — whether that set be large or small.

The caps on Brandes Headsets are of hard rubber — not composition or imitation. They are comfortable, sanitary, and they afford most efficient seating for the diaphragm.

Brandes

The name to know in Radio

Radio Retailing, April, 1925. Vol. No. 1, No. 4. Published monthly, McGraw-Hill Co., Inc., Tenth Avenue and Thirty-sixth Street, New York, N. Y.
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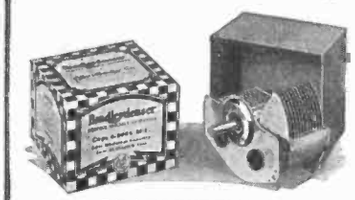
The Allen-Bradley Line of Perfect Radio Devices



BRADLEYDENSER

BRADLEYSTAT

BRADLEYLEAK

BRADLEYOHM

BRADLEYOMETER

BRADLEY-
NIER

BRADLEYSWITCH

Nationally-advertised radio units that sell fast at a good profit

PROGRESSIVE radio dealers are enthusiastic about the Allen-Bradley line. Every unit is of superior workmanship, and the performance is so exceptional that Allen-Bradley units are repeatedly specified as essential in new hook-ups if maximum efficiency is desired.

Allen-Bradley Radio Devices are easy to sell and they stay sold. They are backed by a strong guarantee that protects dealers and jobbers. The turnover is rapid and the profits good.

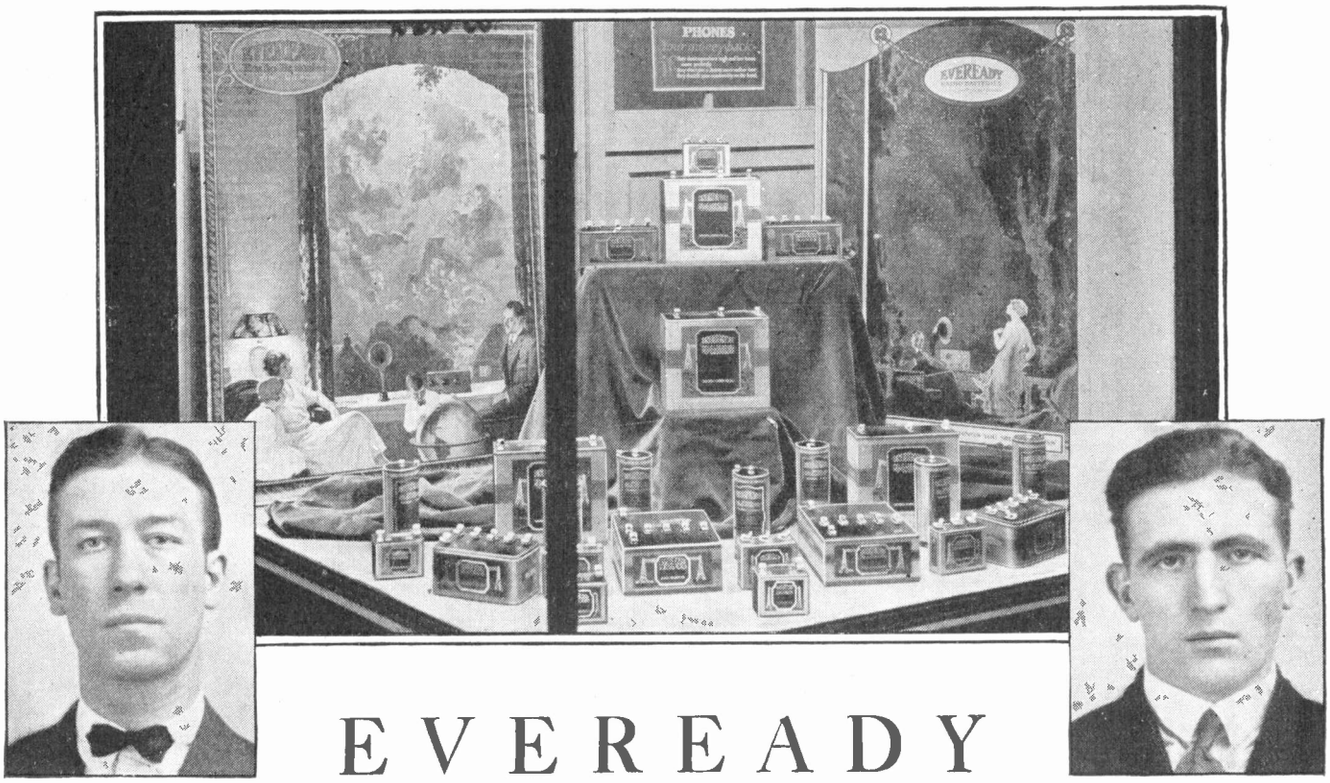
Investigate the Allen-Bradley line. A small stock will convince you of the high quality and attractiveness of the whole line. Ask your jobber, or write us for descriptive literature.

Allen-Bradley Co.

Electric Controlling Apparatus

489 Clinton Street Milwaukee, Wis.

Manufacturers of graphite disc rheostats for over twenty years



EVEREADY
Batteries pay the overhead

BY SUMMER the Chattanooga Radio Co., Chattanooga, Tenn., will have enough sets in use to pay its overhead from sales of Eveready Radio Batteries. So say Earl W. Winger and Norman A. Thomas, who are the company.

You'll find happy, contented, ever-busy firms such as this wherever Eveready Radio Batteries are sold. Sales are especially good where Eveready national advertising is capitalized by window displays—as is done by Messrs. Winger and Thomas, who say "our best silent salesman is our window display."

There's an Eveready Radio Battery for every radio use.

Order Eveready Radio Batteries and window display material from your jobber. *Manufactured and guaranteed by*

NATIONAL CARBON COMPANY, INC., New York—San Francisco
Atlanta Chicago Dallas Kansas City
Canadian National Carbon Co., Limited, Toronto, Ontario

EVEREADY
Radio Batteries
—they last longer

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

WEAF	New York	WJAR	Providence	WEAR	Cleveland
WEEI	Boston	WCAE	Pittsburgh	WWJ	Detroit
WFI	Philadelphia	WGR	Buffalo	WOC	Davenport
		WCCO	Minneapolis		

Sell Leaders to Make Money

In the long run—and that is all that really counts—most Radio profits are made from the sale of LEADERS.

When business is best, the Leaders sell faster than the rest. In midsummer the Leaders have sales almost to themselves.

You always net a clean profit from the sale of Leaders like the Jewett Superspeaker, the Jewett Vemco, the Jewett Micro-Dial, the Jewett Parkay and the Jewett Superspeaker Highboy.

Each is a Leader. Each is in active demand. Each is the first choice of your customer.

It pays US to BUILD Leaders. It will pay YOU to SELL them—just as it is paying more than 8,000 Jewett dealers elsewhere.

All by itself, the Jewett line can constitute for you a paying stock of High Quality Radio Equipment.

Write today for us to put you in touch with the right source of supply.

JEWETT RADIO & PHONOGRAPH COMPANY
5695 TELEGRAPH ROAD PONTIAC, MICHIGAN

THE JEWETT SUPERSPEAKER—The Leader of All Loud Speaking Equipment.

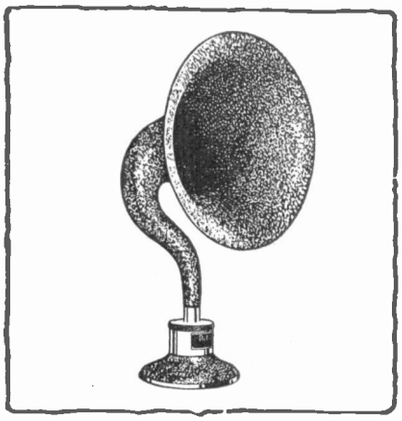
THE JEWETT VEMCO—Makes a Radio Loud Speaker out of any phonograph.

THE SUPERSPEAKER HIGHBOY—Houses Any Set and Equipment—Superspeaker built-in.

THE JEWETT PARKAY CABINET—With Parquetry Top—All Standard Panel Sizes.

THE JEWETT MICRO-DIAL—Makes Tuning 50 Times as Accurate.

"THERE IS NO SUBSTITUTE FOR THE BEST"



Why we call the ROLA *a "Re*Creator"*

IT is one thing to transmit sound as the telegraph wire carries the dots and dashes of the code. But it is another thing to *re*create* all the subtle expression of the symphony orchestra—the piping trebles and the resounding basses—each one as perfect, as full and round and clear as if you were sitting in the same room.

This is the Rola. Because its reproduction of sound is so faithful, because its range of reception is so great, we have called it a "Re*Creator."

But the Rola "Re*Creator" speaks for itself. No argument in its favor is so convincing as an actual demonstration. Drop in to your dealer's and ask to hear the Rola. Then you will know the difference between a "Re*Creator" and a loud speaker.

Price complete with 14-inch horn and cord, $36. Phonograph unit with adaptor, $22.50.

A product of the Rola Company, 4250 Hollis Street, Oakland, California. Marketed nationally through Baker-Smith Company, Call Building, San Francisco

Rola

RE ★ CREATOR

"All the News That's Fit to Print."

The New York Times.

THE WEATHER
Cloudy and warmer today; tomorrow cloudy and colder.
Temperature yesterday—Highest 55, lowest 33.
Full weather report, page 25.

TWO CENTS in Greater New York | THREE CENTS | FOUR CENTS

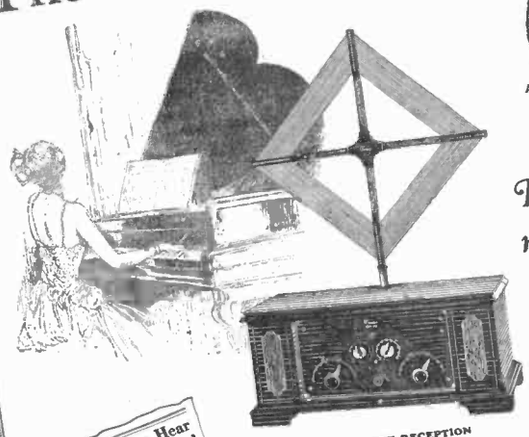
NEW YORK, THURSDAY, FEBRUARY 19, 1925.

VOL. LXXIV ...No. 24,458

DAVEGA
12 CONVENIENT SPORT SHOPS

Davega Introduces to New York

The "CONCERT GRAND" of RADIO



Priess
TRADE MARK
The Concert Grand of Radio
A Five-tube—Reflex Circuit—Loop Set

The New Era of Broadcasting brings a new era of reception in this true musical instrument

$145 (without accessories)
$3 Weekly and down payments

Works Without Aerial or Ground


Millions Hear M'Cormack and Bori on Radio

Other Attractions To Be Broadcast Semi-Weekly From Hooked-Up Stations

FOR THE RECEPTION OF GREAT ARTISTS
You must go a step beyond the ordinary receiver for that fine precision of sound reproduction which will give you absolutely perfect reception of voice or instrument without noise or distortion.

THE GREATEST ACHIEVEMENT IN RADIO REPRODUCTION
In the ordinary set the tube detector, where the sound originates, adds the tube noise to your music and magnifies it from tube to tube. You get the voice or sound surrounded by a "mist" or "fog" of tube and radio sound.

THE TELOFLEX DETECTOR
In the Priess is the exclusive Teloflex detector instead of a tube. It is fixed, non-adjustable, non-oscillating. It detects the sound and passes it on exactly as it originates—in all its purity and clarity of tone. You have never really heard radio until you hear the Priess.

THE REFLEX PRINCIPLE
The Teloflex is the invention of the great engineer who discovered the famous Reflex system of radio.

POWER AND DISTANCE
The reflex system applied in the Priess gives you Seven tube power with Five tube economy. It gives you the power that insures distance when you want it.

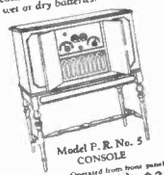
LOOP RECEPTION
The loop does away with the aerial and eliminates most of the static and outdoor interference that is so annoying in ordinary radio. It enables you to use the set Anywhere or to take it with you on your summer vacation to camp or hotel.

PERFECT LOGGING SYSTEM
So perfect is the mechanism of this "Concert Grand of Radio" that stations are logged and charted for you in Advance. Just set the dials and tune in.

HIGHLY SELECTIVE
The loop adds to the selectivity of the set. Of two stations on the same wave length, either one may be tuned out with the loop.

BEAUTY
It is enclosed in a rich two-toned mahogany cabinet with an etched brass Malloy panel in black and gold. The loop is of Bakelite construction and collapsible.

QUALITY
The Priess is to radio what the Concert Grand is to music—the final word of perfection in sound reproduction; it has the sonorous tone quality—the magnificent construction of the Concert Grand. Uses wet or dry batteries.


Model P. R. No. 5
CONSOLE
Contained loop. Operated from front panel and loud speaker. All batteries self-contained. Two-toned walnut cabinet. **$225**

The Victor Program Tonight offers you these Great Stars:
Giuseppe de Luca
Baritone
Toti Dal Monte
Soprano
Victor Concert Orchestra

DAVEGA
United Sport Shops
STORES ALL OVER NEW YORK

DOWNTOWN
10 Wall Street
Opposite New York Stock Exchange
15 Cortlandt Street
Convenient to Hudson Terminal
79 John Street
Near Nassau Street

831 Broadway
Near 13th Street
306 Fourth Avenue
At 23rd Street
MIDTOWN
102 West 32nd Street
Near 6th Avenue and Pennsylvania Station
531 Sixth Avenue
At 42nd Street and Pennsylvania Station
111 East 42nd Street
Commodore Hotel at Grand Central Station
1789 Broadway
Columbus Circle at 58th Street

UPTOWN
125 West 125th Street
Harlem Store
653 West 181st Street
Washington Heights Store
1011 Southern Boulevard
Bronx Store

Easy Terms of Payment on This or Any Leading Set at Any Davega Store
NEW STORE—97 Chambers Street

Buy this set today —and hear the great program tonight

No aerial—no ground—no trouble to set up

If you are interested in Quality Radio. Write for the Priess booklet of facts about Radio reception.
DAVEGA—831 Broadway, New York
Send me booklet and full details of Priess Radio

Name
Address

Reproduction of a full page newspaper advertisement in the New York Times by New York's great retail radio shops

No set in Radio history has made such an instant appeal!

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* unfair competition

PRIESS RADIO CORP. 697 Broadway, New York City

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-4 Springfield, Mass.

One of the advertisements featuring the laboratory test that proved Na-Ald's superiority over 13 best-known makes of sockets.

CASH BONUSES FOR REAL DEALERS

ON every CARDWELL CONDENSER which the dealer sells due to his own recommendation we will pay a CASH BONUS of 25 cents each!

This amounts to extra discounts (over the regular 35%) of:

9.0% on the **11** plate (list $4.25) **totaling 44.0%**
8.5% on the **15** plate (list $4.50) **totaling 43.5%**
8.0% on the **17** plate (list $4.75) **totaling 43.0%**
7.6% on the **21** plate (list $5.00) **totaling 42.6%**
6.4% on the **41** plate (list $6.00) **totaling 41.4%**

These conditions should make the effort to push Cardwell's well worth while to the live dealer. Let us tell you how to make at least $10.00 extra a month!

The bonus is payable monthly on the following terms:

(1) Effective after May 1st to all dealers, but will apply to all present Cardwell dealers immediately. (To qualify write at once for "Bonus Applications".)
(2) Payment is based on reply postcard signed by bona fide purchasers who state they bought condensers on specific recommendation of dealer and give dealer's name.
(3) Not paid where condenser is sold for less than list.
(4) Applies only to dealers who receive 35% (not jobbers).
(5) Applies only on condensers listed in other column.

Checks Will Be Mailed Promptly On the Tenth of Each Month!

No. 19764 Date.....192...

I wish to receive all new data on the use of Cardwell Condensers in the latest circuits. Place my name on your special mailing list and address mail to

Name .....

Street .....

City ..... State .....

I bought (...)..... plain / vernier from the following dealer.....

.....Price Paid $.....ea.

I am using it in a.....tube.....circuit

On the recommendation of.....

MAIL THIS CARD IMMEDIATELY, AS WE ARE ANXIOUS TO KNOW HOW OUR CONDENSERS ARE BEING USED IN VARIOUS CIRCUITS. THIS CARD PROTECTS YOU IF ON OUR RECORD.

This stamped reply card which is enclosed in every condenser box tells us if you are entitled to the bonus. Claims may also be filed independently.

WRITE TODAY FOR FULL DETAILS

(Please Give Name of Jobber)

ALLEN D. CARDWELL
MANUFACTURING CORPORATION
87 Prospect St., Brooklyn, N. Y.

CARDWELL

TRADE MARK

INDUCTANCES CONDENSERS TRANSFORMERS

Vol. I April, 1925 No. IV

Help Your Customers to Celebrate "Mothers' Day" Next Month

The sentimental appeal of "Mother's Day"—Sunday, May 10—may be tied up effectively with radio. It almost rivals Christmas as a day of gifts for Mother. What is more natural than a radio set with which to brighten her declining years? Spread the idea in your advertising, your window displays and your store interior, too, if possible. This photograph, suggested by the painting, Whistler's "Mother," is used through the courtesy of the Eureka Electric Company, Eureka, Cal. Remember this slogan for Mother's Day—"Has She a Radio?"

Radio Retailing

The Business Magazine of the Radio Industry

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Cable Address: "Machinist, N. Y."

Electrical World Journal of Electricity Ingeniería Internacional
Industrial Engineer Engineering and Mining Journal-Press
Engineering News-Record Coal Age American Machinist
Electrical Merchandising Power Electric Railway Journal
Bus Transportation Chemical & Metallurgical Engineering

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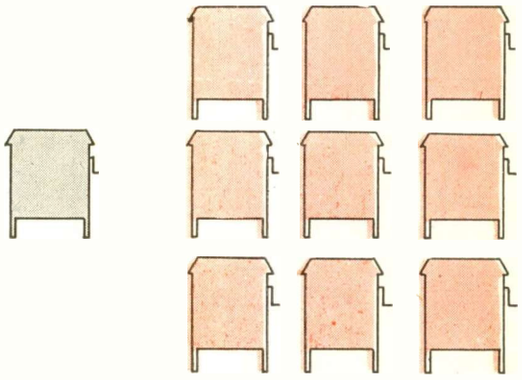
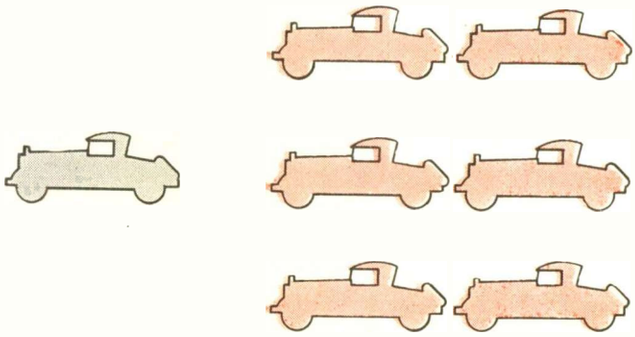
Annual subscription rate is $2 in United States and Canada.

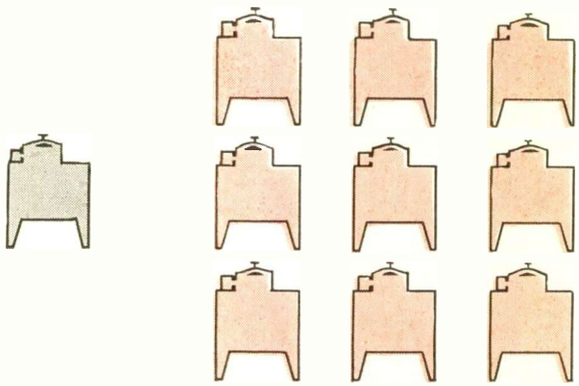
"Cash Customers" vs. Time-Payment Sales



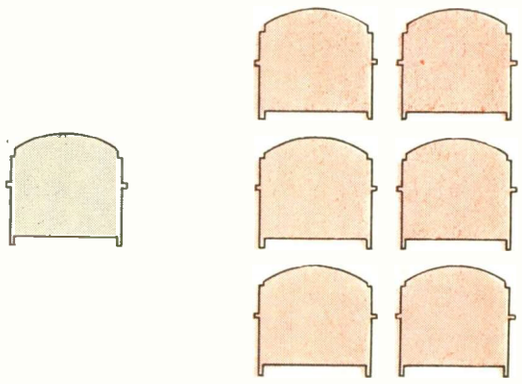
For Every One Phonograph Sold for Cash,
Nine Are Sold on Time Payments



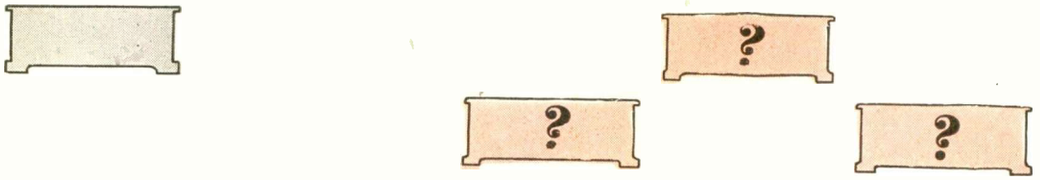
For Every One Automobile Sold for Cash,
Six Are Sold on Time Payments



For Every One Electric Washer Sold for Cash,
Nine Are Sold on Time Payments



For Every Dollar's Worth of Furniture Sold for Cash,
Six Times as Much Is Sold on Time



Evidently, Then, the Dealer Who Sells Radio for "Cash Only" Is Missing at Least Five Out of Six Possible Sales

Sales for cash probably reach less than one-fifth the possible buyers. In other words,—the market for time-payment sales of radio, is, at a conservative estimate, at least five times as many customers as are ready and willing to pay cash.

Radio Retailing

VOLUME 1 APRIL, 1925 NUMBER IV

Here Is the Story 126 Readers Asked "Radio Retailing" to Publish

Why You Should Sell Radio on Time Payments—and How

The Philosophy of "Easy Terms"—Why Radio Fits—How the Two Principal Plans Work—The Importance of Down Payments—Losses Are Nil

By EARL E. WHITEHORNE

THE American people like to buy things by easy payments. It has become the established custom throughout the country in purchasing expensive equipment for the home. And the wise radio dealer is the man who gets in step with this now-standard practice and lets his customers buy the way they want to—particularly so since it can be done with a good profit.

The budget idea is gradually taking hold in the American home. The old day when a wife went to her husband and teased five dollars out of him for spending money or to buy some particular thing she needed has happily passed, and in most households today they work on some sort of a budget scheme. So much is set aside each month for running the home and every woman tries to see how good a job she can do by sensible economy and how much she can squeeze out of the allowance for extras. She wants an electric sewing machine, she wants a vacuum cleaner, a clothes washer or something else. She hasn't a Chinaman's chance to buy it for cash, because it is going to cost fifty or a hundred dollars or more and no such amount can be spared in any month from the household allowance. And so the manufacturers of these devices have hit upon the expedient of selling her the stuff by permitting her to pay a small cash payment and the balance in monthly installments. They charge her a little extra for making all these additional collections, and she is glad to pay for the accommodation.

So everybody's happy. The manufacturer and his dealer make the

Time-Payment Contracts May Be Financed in Two Ways

(1) The dealer may assume the credit risk and sell what he pleases, or (2) he may tie to one line and not guarantee collection

For those who do not wish to finance their own time-payments, there are two alternative methods, the *non-guaranteed plan*, and the *contingent liability plan*. In either case, it is necessary first to secure the co-operation of an established credit company. The hesitation many credit companies previously felt about carrying radio paper is fast disappearing and, in most cases, you will find them willing to co-operate, providing, of course, your own credit and references are good.

Under the terms of the non-guaranteed plan, the credit company assumes all credit risks. The dealer secures a down payment of twenty-five per cent, which he retains. Then he forwards the customer's contract to the company and receives a check for ninety per cent of the balance, less a discount charge of four to seven per cent. When the payments are completed, the company gives the dealer the ten per cent held back. Under this plan, the dealer is limited to the products of one manufacturer.

Under the contingent liability plan, the dealer is not restricted in the number of lines he handles, but he must assume all credit risks. While the terms are much the same, if the customer is remiss in his payments, the dealer must make good on the date specified in the contract.

sale at full profit plus. The housekeeper gets what she wants. It has been made easier to sell as well as easier to buy.

And so it has grown into an accepted custom. Sewing machines, pianos, automobiles, furnaces, furniture, electric washing machines and vacuum cleaners, books, phonographs and a dozen other things are today habitually sold that way because everybody is buying that way—not because they lack the money to buy for cash, in the majority of cases, but because it is more convenient. People simply like it, and so they do it.

Now Comes Radio

Now comes radio into the picture. The American family is eager to buy this newest thing in household equipment. But it is a luxury—this fascinating form of entertainment. To most households it seems extravagant to pay one, two or three hundred dollars out of the bank account for a radio set. The family conscience cuts up over it. But if they can pay so much a month—that's different. And so the average man and woman of the other millions who will be buying radio through the coming years want to make the purchase on the easy payment plan.

Financial Help

That in a few words is the whole philosophy of installment selling. Here is a dealer. Here is a typical home. The dealer wants to sell a radio set to this household. They want to buy. Now what's the easiest way to close the deal? Why the easiest way to sell is the easiest way to buy. And there you are. "Alright!" says the dealer. "But I must pay the manufacturer in thirty days. If I let my customers pay me in small amounts over ten or twelve months I'll tie up all my capital and all my credit at the bank and ruin myself—even though I add enough to my selling price to pay me cost and a profit for the collecting of these deferred accounts. What then?"

Well that is also simple to answer. The experience of thousands of other dealers in other fields who have been selling pianos and books and phonographs to the same home that you now want to equip with radio, has proved that the sensible thing to do is to cash in these contracts immediately with a regular contract-financing company, get your money for the radio set immediately and then, when the account is all paid, receive a further and adequate profit for the routine work of collecting the monthly installments. This leaves your own capital free for the conduct of your business. Your credit line at your local bank is not involved and your borrowing capacity not impaired. You are building up your radio sales. You are entering into continuing relations with a constantly increasing number of customers to whom you will make other sales. You are turning over your capital faster than you can on regular thirty-day charge account business.

"Very well," says the dealer once more. "How do I start?" And that's easy again. There are fortunately a number of large and experienced commercial investment or contract purchase corporations who are ready not only to buy these deferred payment contracts of yours, but to show you exactly how to handle such accounts, and give you the benefit of their broad knowledge of what to do and what not to do. With one of these companies as your partner in the enterprise you are absolutely assured of success in time payment selling so long as you use the proven methods.

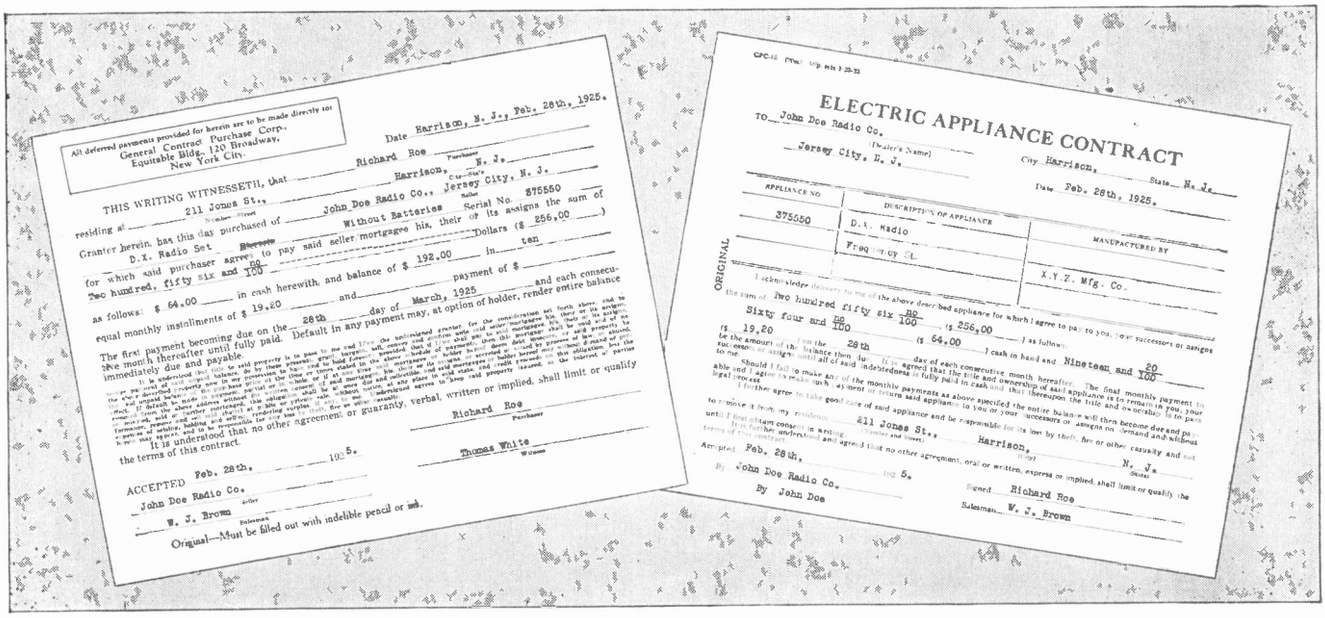
Must Prove Credit Good

Naturally, in the first place, you will have to show the credit company that you are in good financial health and have enough capital to swing your merchandising business. They will immediately set a limit on the volume of term paper you should take, just as the bank limits your borrowing—which is all fair enough. You will sign a contract with the credit company which will empower you to go ahead and write deferred payment contracts with your customers, and turn them in to the credit company for immediate discount. You will then be provided with the necessary forms and instructions and you are all set to carry on.

The Two Plans

Roughly there are these two general systems for handling these easy payment sales.

The Non-Guaranteed Plan—This system has been established in the



ELECTRIC APPLIANCE CONTRACT

This contract form is used under the non-guarantee plan, where the dealer sells one line exclusively, and the credit company takes all credit risk

automobile, house wiring, electrical appliance, radio and perhaps other fields in connection with the sale of the products of definite manufacturers. Under these terms the credit company accepts and discounts the dealer's easy-payment sale contracts and assumes all credit risks. The dealer secures a down payment when the sale is made of 25 per cent or more, which he retains. Then he forwards the customer's contract at once to the credit company and receives back by return mail a check for 90 per cent of the balance less a discount charge of from 4 to 7 per cent according to the time the contract is to run. The dealer then collects the deferred payments and deposits the money in a local bank to the credit company's account, reporting monthly to them. When the full amount is in the credit company forwards to the dealer the 10 per cent held back. Here's the way it figures out for the dealer:

Customer Pays

Cash selling price of radio set..	$100
Additional charge for easy-payment privilege	10
Total time selling price.....	$110

Dealer Receives

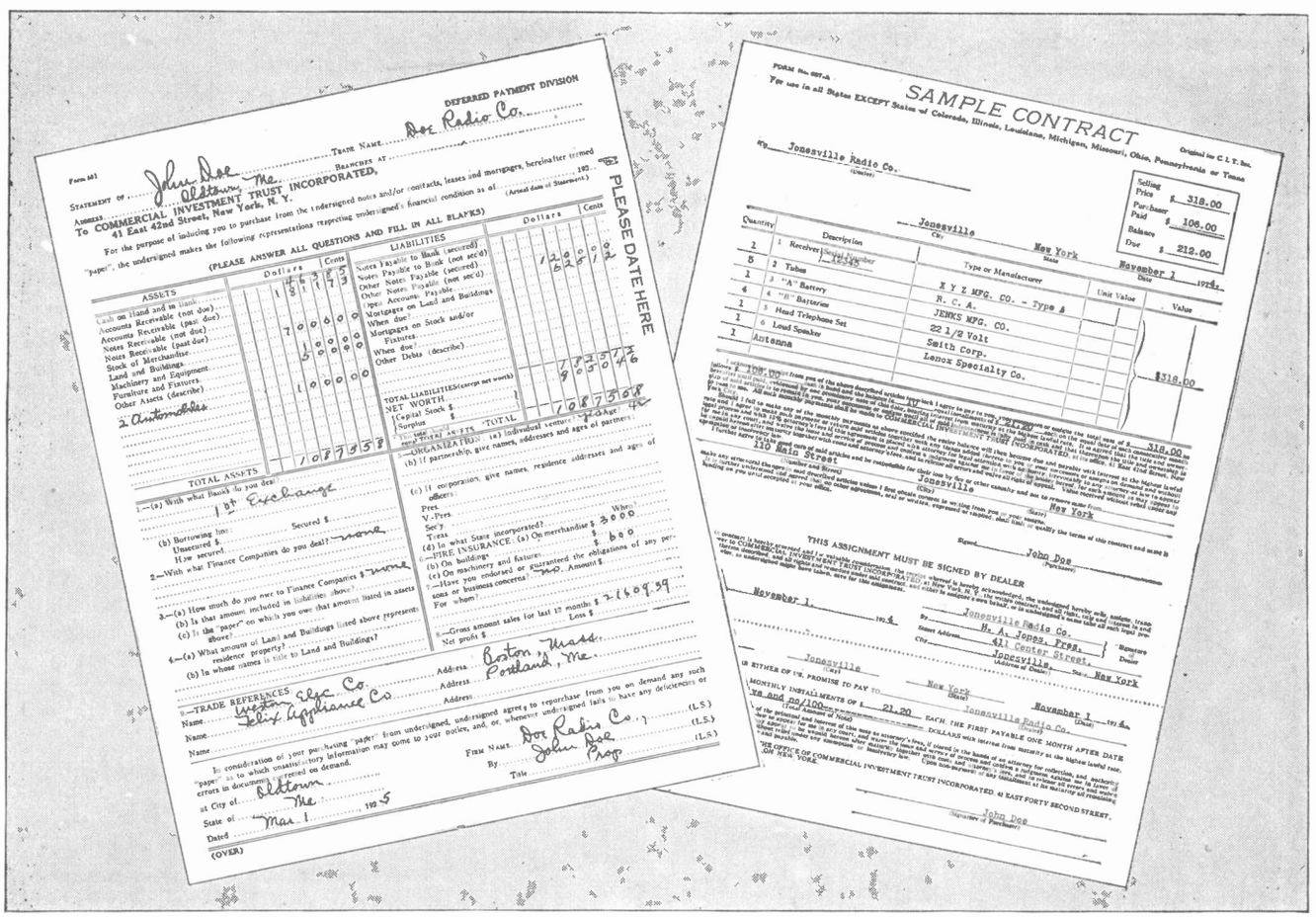
Purchaser pays in cash 25 per cent (or more) of the retail cash selling price and also the the carrying charge (in this case $10) 35	
And gives contract for $75	
Dealer sends contract to credit company and immediately receives 90 per cent $67.50	
Less discount charge of 7 per cent of the face of the contract..... 5.25	
Dealer therefore receives from credit company..	62.25
When dealer has collected and deposited to credit company's account the final payment credit company sends him check for the 10 per cent reserve	7.50
Dealer has therefore received on the sale of this radio set.	$104.75
Cash selling price.....	100.00
Additional profit to dealer on time payment plan...	$4.75

Contingent Liability Plan—This system will embrace any standard radio set, products of different manufacturers considered by the credit company as stable in the market. It has been applied to every variety of houshold equipment sold by easy payments. Under these terms the dealer is free to sell what line he wants, but accepts liability for collection. Some credit companies do the collecting under this plan, others call upon the dealer to collect and he must pay a fixed amount on a certain day each month, no matter whether he has received this amount from his customer or not. The dealer is responsible for the payments as due. The figures under this plan work out very much the same.

Under the non-guarantee plan, if the customer is delinquent the dealer loses the 10 per cent he would have received if the collection had been made in full; but this is all. But if the losses from his customers run too high he loses his discount service. Under the contingent liability the dealer has greater risks but he has the same guidance and co-operation from the credit company and is free from the restriction to one manufacturer's line.

As a matter of fact, however, the loss is almost nothing. Ninty-eight

(Continued on Page 379)



This contract form is used under the "contingent liability" plan where the dealer assumes full responsibility for collections and all credit risk, but is free to sell any standard line

22 Ways to Interest Women

Of All Retail Purchases Made in Retail Stores of Every Kind, Eighty-Five Per Cent Are Made by Women — Women Control the Purse-Strings of the American Home — So in Selling Radio to Your Community You Will Be Interested in These Insights Into the "Feminine Viewpoint"

Sets Must Not Howl

Perhaps the most important point in selling radio sets to women is to give the customer absolute assurance that the set in question cannot be made to whistle or howl. Nine out of ten women will not tolerate sets which produce unearthly sounds. The dealer who stresses this point is the dealer who will sell sets to the gentler sex.

Quality Above All

"I want quality on local stations. The set must not be too loud." The men folk may want to see how loud they can get the broadcasting, but the women nearly always prefer tonal quality even at a sacrifice of volume.

Concealed Wires

Most dealers, who have had experience in selling women radio sets, have found that sets with concealed battery wires are more desirable. Women do not want loose wires hanging around to collect dust and dirt. Sets in which both A and B batteries are self contained are found to be the best sellers. Even the aerial and lead in wires must be installed in the neatest possible manner. Some women object to the appearance of a loop aerial; others consider them decorative. A unique map-loop, with a Seventeenth Century map of American broadcasting stations, now on the market, makes a strong appeal to the decorative instinct.

Don't Talk Mechanical Details

Dealers who sell to women invariably find that mechanical details, the number of tubes, and facts concerning the aerial and ground, hold little feminine interest. The question invariably asked is "How simple is it?" and "Will it work and continue to work?" Women are close buyers and must make absolutely certain of these facts before the set is sold to them. Sometimes a "bargain" will make a sale.

Avoid "Power-House" Look

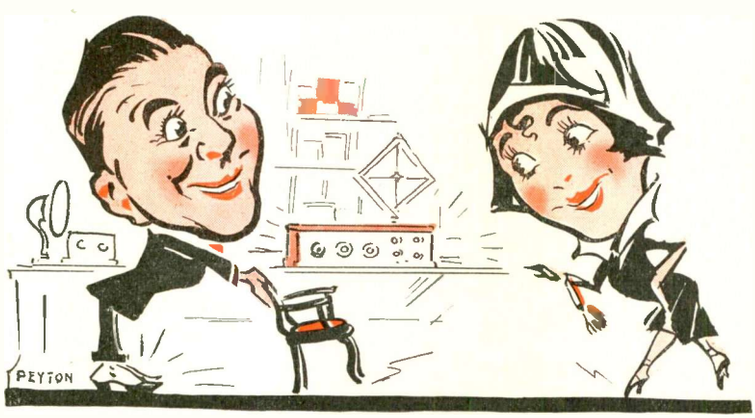
Interior decorations play an important part in the woman's thinking and the newer console type sets seem to be very popular, according to several dealers who are catering to the women. In some cases the cabinets have been especially refinished to match the interior decorations of the house. Dealers selling to wealthy customers find that the "power house look" is not a talking point. The radio set must be a piece of furniture in harmony with the rest of the household. Some dealers have taken particular pains in harmonizing radio receivers and as a consequence have built up an excellent business.

Worked Through the Husbands

Another small town dealer made it a point to get the names and addresses of most of the men customers who were in the habit of buying parts from him. Through tactful questioning he was able to find out which ones were married and it was not long before he had a lengthy list. Shortly after this the wives each received a neatly printed notice that the dealer would be able to supply them with "squealless and howlless" sets at a nominal sum. He played up the howling end considerably because he realized that many of the home made sets were prone to do this and that the women did not like it. In some cases he was offered home-made sets as trade-ins, but diplomatic policy of insisting that the husband keep the old set netted him many excellent "clean" sales. The husband, in some instances, rather than risk the displeasure of his wife, would consent to the purchase of a "tailor made" set, moving his own "junk" off to some other part of the home.

Dressing the Windows for Feminine Attention

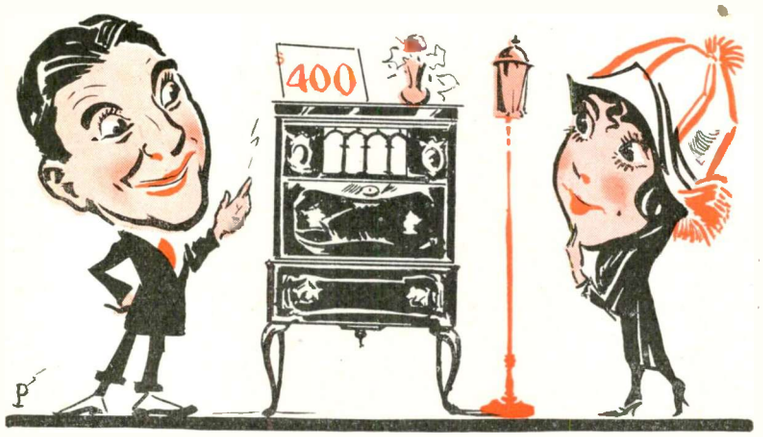
In a great many cases dealers have found that women will not come into the store. Displays of "intricate" parts in the window have been known to frighten off feminine



Have the Store Attractive and the Salesman Neat and Well-groomed

in Radio

buyers. Radio is too "mechanical" for them. Quite frequently a tastefully decorated window with just one good set, with an appropriate background will do a lot in attracting women. The mechanical and electrical workings must be kept in the background.



Women Are Always Interested in the Radio Set's Appearance as "Furniture"

A House-to-House Canvass

More than one successful sale has been made by dealers who have taken the trouble to canvass the homes in their neighborhood. This is particularly true of suburban sections. Dealers who have tried this find that the most interest is aroused between the hours of three and five. In the morning there is housework and ordering to be done but quite frequently a salesman will be permitted to demonstrate his set in the afternoon. The morning is no time to attempt to sell women anything.

Tell Her You'll Send It Out and Have It Working to Her Satisfaction

Time Payments

Several dealers have declared that time payments frequently assist considerably in selling to the women. In a few cases radio sets were installed as surprises to husbands as birthday or wedding gifts and time payments very often helped in making such sales.

Reaped His Harvest

Whenever the electrician in a small town had to make a repair to a door bell or an electric light fixture, he usually took the trouble to mention the fact that he was in the radio business also. In this way when the family became interested in radio, the electrician's name was the first one which came to mind of the lady of the house. His propaganda has more than repaid him for the trouble. In the various conversations he was able to glean some idea of what would please each woman the most and when the time came he was ready with exactly what she wanted.

Don't Talk "Distance"

Most dealers, who have dealt with women, have found that the range of the set has little or nothing to do with the sale. The big talking point has been the excellence of quality together with the beauty of the case in which the set is built. Women invariably prefer the set which looks more like a piece of furniture.

Club Demonstrations

During a political campaign another dealer was able to interest an officer of a woman's club in a radio set. Through her influence he was able to arrange a demonstration at a club meeting. So favorable was the impression made that he not only sold a set to the club but also to several of the members. Of course the seed was sown and one by one the other members gave him their orders for similar sets.

Demonstration Booths

In nearly every case radio stores in the business section of a city will do most of their business with men and what few women do come in usually are accompanied by an escort. As in buying an automobile, the man frequently has a lot to say about the choice. In order to make matters easy, one dealer in lower Manhattan has arranged two booths in the back part of his store where customers can be comfortable and at the same time hear any one of the half dozen sets carried by this dealer. He has frequently found that if the customers are left alone in the booth a quicker decision can be reached. Many times a woman will not express her opinion freely if the salesman is standing about.

Stresses the Price

Department stores, of course, do more business with women than with the men and for this reason alone the managers draw many interesting conclusions. In one large store of this kind the manager of the retail radio department stated that the only secret in selling to women was to keep the price low. He said that women did not know and did not care what was inside of the set just so long as it worked right. In this particular department one of every set in stock was arranged for instant demonstration with the prices

clearly marked. Large easels also gave the necessary list of accessories with prices. This manager had also found that time payments were an assistance to sales.

"Reproducer" versus "Loud-Speaker"

Several dealers stated that women were greatly in favor of the newer types of cabinet loud speakers, rather than the usual horn arrangement. One dealer had even gone so far as to completely eliminate the word "loud speaker" from the vocabularies of himself and staff. He had found that "reproducer" had a more refined sound and did not tend to scare off the prospect in the way that "loud speaker" would.

Must Service Sets

The maintenance of a service and installing department is an absolute essential in the store dealing with women. If the man buys a set he will take it home and "hook it up" himself but women are not going up on the roof to put up an aerial and go through all the other gymnastics necessary to the installation of a radio receiver. Sometimes a charge can be specified for this service, but the set sold with a free installation clause is the best bet from the feminine angle.

Exchanging Sets —Beware!

One of the biggest items in the overhead of a department store is the "exchanged-goods" evil as it exists today in most cities. Exactly the same thing is true of the radio department and special provision has to be made to take care of the trouble. A woman will change her mind, many times, after the set has been sent home and installed and department store radio managers have found it necessary to make rather rigid rules regarding such practices. In a few cases, exchanges would not be tolerated, but in most of the stores a time limit of a week or a few days was set.

A Neat Attractive Store Helps

Clean collars, dusted equipment and a shining transparent window help to attract a woman into your store. This is the most important feature of all. A woman will positively not go near a dirty and unkept store. See that the windows are washed, that the floor is reasonably clean, that the sets are dusted off frequently and that your salesman keeps his coat on and at least has a semblance of neatness. Do not permit smoking by the salesman on duty and above all see that he is courteous.

Prompt "Closing" at the Home

Sometimes a woman cannot make up her mind and will wish to consult her husband. If the husband happens to be a commuter, he will naturally think that he can do better in the city. Forestall any such a move by calling up the home of the prospect that very night and make an appointment for that evening if possible at which time you can set forth the advantages of buying a radio set from the local dealer the chief of which is the service which can be rendered quickly, if necessary. Many a sale has been lost by dealers who have neglected such an opportunity. If you can get the family together the chances are that a sale can be made.

Home Demonstrations

Radio sets cannot be readily demonstrated in the home unless some expense is incurred because it is generally necessary to erect an aerial, connect up a ground and wire in the batteries. These facts alone might tend to discourage a prospective buyer and for this reason the best kind of demonstrator is one of the newer self contained sets where a loop aerial is used and both sets of batteries are inside the cabinet. In some cases, if it is necessary to give a demonstration of the actual set desired, it may be necessary to make a small charge to cover the cost of the work. Be sure to make such arrangements ahead of time, especially with the women.

Applied Psychology

The manager of one of the largest radio stores in New York has found that feminine psychology plays no small part in the sale of a radio set. He has spent considerable time and money in perfecting a series of rooms in a balcony at the back of the store. The atmosphere of this place is entirely different and a woman can come in bringing a friend, and be seated comfortably while the various arrangements are made. This manager claims that the ordinary demonstration booth is entirely out of the question and he believes in creating a home atmosphere as an aid to sales. Probably more sets are sold to women in this store than in any other purely radio store in New York City.

Watch the Programs

Appeals either by newspaper advertising or by mail will frequently bring results. The dealer should make it a point to watch the morning programs of the broadcasting stations and cite the many interesting talks and events to which the mistress of the house may listen during the morning. Brides are generally interested in cookery and recipes while other woman may prefer lectures or musical features. Many women do not know about these morning programs simply because they seldom see a morning newspaper and the evening papers do not, as a rule, carry these programs. A propaganda campaign by mail, bringing out these facts might be of material assistance in selling sets directly to the house-wives. In one case a dealer sold a set to a stout lady simply because she wanted to get in on the early morning setting-up exercises broadcast by WOR. This feature might bring in a few sales if it were played up diplomatically.

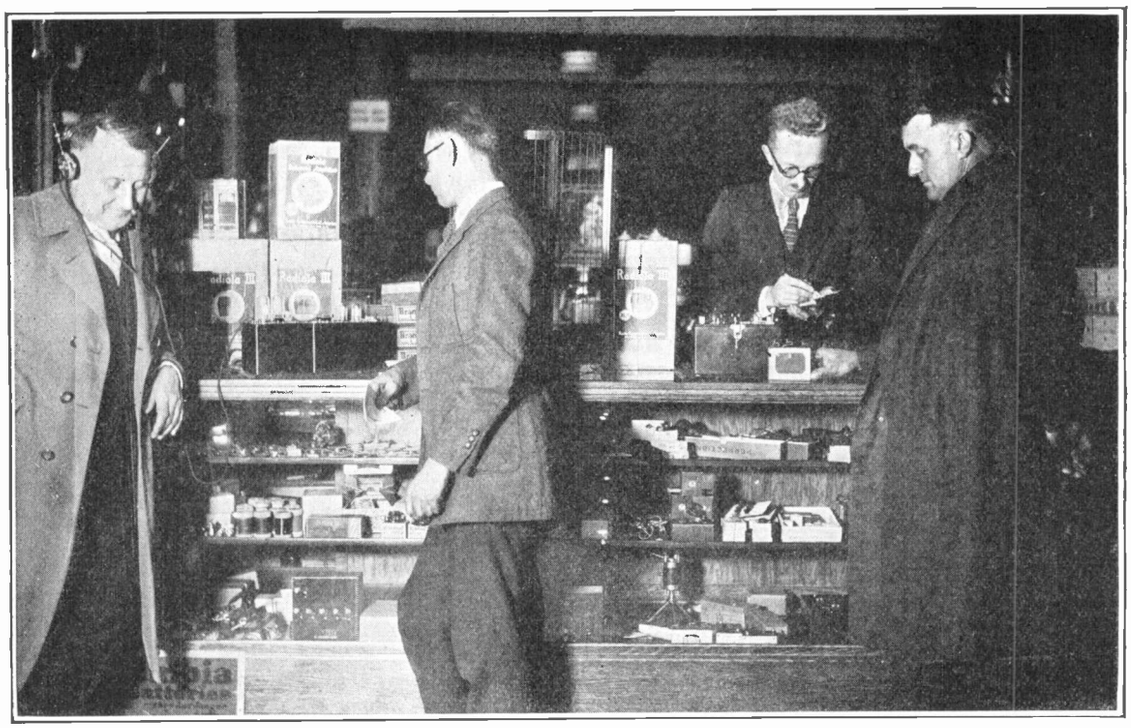
San Antonio Dealers Seek Causes of Interference

Twenty of the radio dealers of San Antonio, Tex., have formed an association for closer understanding and co-operation in bringing about improvements in the industry.

A committee was formed to call on the local utility company and ask its assistance in eliminating interference. This committee reports that the company graciously offered to do all it can in co-operating with the radio dealers in running down trouble, but explained that it had found from its experience that much of the interference came from sources beyond the lighting company's control or with which it had no connection. This conclusion, it explained was obtained from more than five hundred such calls.

The Radio Trades Association of San Antonio is the official name given the association which includes both the jobbers and dealers. The following officers were elected:

G. C. Blanchard, president; E. L. Ginsburg, vice-president; B. F. Davis, secretary; and Victor H. Cortines, treasurer.



"Demonstrate— Then Sell While the Interest Is Hot"

Dealer in Town of 3,000 Finds Advantage in Knowing Prospects and What Price Set They Can Afford. How Van Voris of Cobleskill, N. Y. Uses Mails to Stimulate Radio Interest

A Letter from One of "Radio Retailing's" Readers

Editor, *Radio Retailing:*

WE ARE located in a small town of less than 3,000 folks, with competition from three other distinct sources (and various indistinct ones) and yet we have been enjoying a good radio season.

To get to the meat of the matter directly, we employ a regular radio man—a young man experienced in all the arts of radio. We deem this vitally important, for the average "retail layman" is not fitted to care for the intricacies of radio, as it is today.

So, with the expert on the job at all times and a good, fair stock of up-to-date sets for him to work with, all we need do is to sell them. Simple, isn't it—thus far?

We feel that the small town has its assets. We admit a limit as to number of prospects, but we think you will agree that those whom we do have, we can approach along personal lines, *for we know them.*

In other words, the ice is half broken before we begin our local selling onslaught, for the local retailer needs no introduction into the homes of his prospects.

Our "approach" in selling radio is invariably on the angle of entertainment.

"Don't Hurry Them Into a Snap Decision"

We do not assume that every prospect, whether they come to us or we go to them, is ready to buy a set. We don't want them to hurry into a snap decision, which may frequently result in a return of the set.

So we ask for the privilege of entertaining them, in their own home, for an evening, with a set of the type which we think suitable to their taste and pocket-book.

This evening of free entertainment is always undertaken by our radio man, who delivers the set in the afternoon and then calling in the early evening hours, spends the whole evening at the prospect's home, making clear the operation and functioning of the set.

It is not difficult to secure permission for such an evening of free radio entertainment in the home and we have yet to experience an occasion when the set did not remain for further demonstration by the home folks, themselves.

Thus, right at the outset, they receive expert demonstration and learn much about the set and see it and hear it perform right in their homes, so the element of skepticism is removed once and for all.

When the family evince an interest throughout this first evening, our Mr. Rew tells them that he is author-

Personal Contact

with prospective customers is what sells radio sets in small towns, declares A. H. Van Voris, of Cobleskill, N. Y., which boasts of 3,000 population.

Newspaper and direct-mail advertising, service, attractive radio windows and locating radio prominently in the store interior, together with a sales policy of "strike while the iron is hot," are some of the other factors that help Van Voris sell radio.

ized to leave this set in their home for two or three days more (a week if the prospect warrants it) and they generally take up the offer, as he makes it perfectly plain that there are no strings to the offer and that they assume absolutely no obligation by so doing.

The First Few Days Are the Easiest

Again, let me tell you that we have had many more sets remain in the homes, as purchases, than we have had come back to us at the end of this demonstration period.

Strike while the iron is hot.

This is tremendously important—it is relatively easy to arouse an interest for radio in the home, once the folks have had a set right there before them. The first few days is the best time of all for making and clinching a sale, for that is when interest and enthusiasm are "100 per cent overtime."

Don't miss this opportunity, for if you once let this ardor cool down, you may slip up on closing the sale. This "novelty stage" is when they fall hard.

Our radio letters keep them coming, too. We send letters out at intervals to all prospects, just to focus their attention on the subject of radio (inclosed is a copy of our last prospect letter).

Advertising and Display

We take regular weekly space in two local and one adjoining town newspapers and these advertisements tell the folks in our locality what we have for them and what we are doing in up-to-date radio. We have secured many excellent electros from manufacturers—illustrations help a lot with local copy.

Service—We give it gladly. We have a work-shop in connection with the radio department and in this we look after all service jobs and any others that come to us.

Window Displays—Radio sets and parts are featured and we have much good display material secured from manufacturers.

Store Display—Ever since the beginning of last fall's season, we have given over the front show cases, inside and on top, to radio displays, so that it is the first thing to greet the eye, when one enters the store. This prominence is worth while.

Circulars, Booklets—We get them printed when possible and the rest we rubber-stamp. We figure their value to lie in the fact that they keep folks thinking about what you told them in the store, after they reach home. In other words, they are good reminders and so merit our use both over the counter and in outgoing local mail (statements, etc.).

Withal, I believe our success in radio has resulted from having an experienced radio man with us, from a definite though inexpensive publicity program, and from the personal contact that any small town retailer can attain with his local prospects.

I. VAN VORIS & SONS,
A. H. Van Voris.

Mrs. William Brown,
Cobleskill, N. Y.

Dear Madam: Some time ago you expressed an interest in owning a radio set and we hope you have not lost this interest.

On our part, although we have been enjoying a fine radio business this winter, we do not want to overlook any of our friends who really ought to be listed as real radio enthusiasts.

Most of our customers, who like you, were merely prospects for some time before selecting their radios, have later informed us that if they had only known what they were missing, they wouldn't have held off at all.

This is a pretty good indication of the wonders of radio, we think.

So then—*why delay?*

We know we can meet your pocket book half way.

We have radio sets from $2.50 to $250—crystal sets, neutrodynes, superheterodynes, tuned-radio-frequency sets, and so on. So you needn't shy off on account of price; we have taken care of that for you in advance.

Our radio man Rew understands his business from the drop of the hat and when you buy of us, service goes with every sale.

And now we come to the best part of this whole story—our free entertainment proposition, which places any set you select right in your own home for entertaining the home folks over a week end—and all without a cent of cost or a bit of obligation on your part.

Above all—ask us about it now.

Yours for Radio,
I. VAN VORIS & SONS.

Distance from Broadcasting Helps Set Sales

For a radio store to be located a long distance away from a broadcasting station is a help instead of a hindrance in selling sets, according to I. H. Hall, of Milledgeville, which is in Georgia. Milledgeville is a metropolis of 5,000 people and the nearest station, at Atlanta, is 100 miles away.

This, Hall declares, works out profitably for him, because it forces prospective purchasers to buy a set good enough to reach out at least that far to get a program, which effectively eliminates the sale of cheap sets. The receivers sold last year ranged in price from $35 to $300, the average sale being $150.

Dealing in sets only, Hall's sales, during the hottest part of a Georgia summer, average $1,000 a month. This may not sound much, but taking the size of the town and local conditions into consideration, it resolves itself into an excellent small town business.

Hall's outstanding sales policy is to secure a prospect's permission to install a set for a free home demonstration. Most of his sales are to those who have built a small set or bought a cheap one and desire something more ornate. The comparison with Hall's installation usually results in the sale of the new set.

Why Every Set Owner Needs a Battery Charger

In selling battery chargers, says C. D. Pettingell, sales manager of the Apco Manufacturing Company, it is necessary to impress upon the customer the necessity of frequent charging of both "A" and "B" batteries.

Fully charged batteries result in:

1. **Better reception.**
2. **Longer tube life.**
3. **Longer battery life.**
4. **Steady flow of current.**
5. **Elimination of noise.**
6. **Economy in battery upkeep and operation.**

These Radio Prospects Are in Every Town

What better prospects can you think of than the Boy Scout troops? Canvass the scoutmasters, not to sell sets to the individual scouts, but to the troop as a whole. Many troops have put on schemes to raise money for a radio set. Schemes that were interesting as well as instructive for the boys—entertainments, contests and similar plans have been successfully used. Set building contests between teams of troops will push parts sales.

Firehouses and police stations are excellent possible markets. Have you made a canvass of your own town to try and sell them? Suppose they have a set already? Sell 'em a better one.

Right—There are 35,000 beauty parlors in the United States. Their customers must sometimes sit for hours while getting a permanent wave or some other such necessary attribute to feminine pulchritude. Why not while away the tedious minutes listening to a radio concert?

Left—The radio restaurant is by no means new, but there are still thousands of dining places, of all classes, that are yet unsold on radio. From Broadway to Main Street you will find restaurants supplying entertainment via radio.

Right—"Next!" on the radio prospect list is the barber shop. Next time you drop in for a shave talk to the boss about it. And if he refuses, tell him not to try and sell you any more massages and shampoos when all you want is a shave. But tell him, also, that in many shops a radio set has already replaced last year's magazines as a means of passing away the time between now and "Next!"

Dealer Keeps a Card Index of Radio Reception Conditions

Good or Bad Quality of Reception in Any Part of City May Be Told at a Glance

A CARD record of the relative "receptivity" in sections of great cities like New York and Chicago, together with such general information as the heights of buildings, the number of steel structures nearby, whether there are trees in the street, whether the houses are detached or attached, and the distance from the nearest broadcasting station, is one of the means used by Haynes-Griffin Radio Service, New York and Chicago, to help the head of its service department in recommending different types of sets to prospective customers. The use of similar cards will be found to be worth the effort by any store in any section of the country and the starting and maintaining of this record can be accomplished with little difficulty.

Another use Haynes-Griffin makes of this expert information is its incorporation in a series of newspaper ads, as illustrated, saying just what make and type of set best meets reception conditions in a given area.

When a new building containing steel or whose position is likely to cause interference, is erected, information is at once sent to J. K. Cronin, service-department manager, and he enters it on his cards. Thus when a customer talks of his house Mr. Cronin is able with the aid of his cards to discuss just what forms of local interference there are likely to be and to make his recommendations for overcoming it.

This system of keeping data was developed gradually and has never taken a great deal of time to keep up-to-date. Frequently these cards have been the means of closing a sale when it appeared other arguments had failed.

The information is gathered by the outside salesmen or service men who turn it in every night. When it is necessary a new card is made out by the salesman and put in place.

A tip for other radio retailers is contained in the efforts Mr. Cronin makes to keep abreast of these important developments. He has made a comprehensive study of locations in and around New York and his knowledge of conditions covers a territory of over fifty miles in the three directions from New York. Often the mere statement of a street number enables him to visualize the house where a set is to go.

Technical Men Advise but Do Not Sell

The use that the Haynes-Griffin Company makes of this information is indicated by the fact that although they have two technical experts in their New York store, these men always refer requests for recommendation of a set installation directly to Mr. Cronin.

These technical experts discuss and try to solve problems of operation of sets now in use. They are not allowed to sell even a screw, but that the service draws people to the store is shown by the three hundred persons whose questions are answered daily. Naturally when these experts recommend a change in sets, with the corresponding purchase of a part, the sale is made at once.

Also, when a service man is sent out on a call, he must file a report of the conditions he has found at the home he has visited. He must give the details of reception, what stations are heard well and what stations come in poorly. By comparing these service reports and checking them up with each other, an excellent first-hand analysis is obtained as to receiving conditions in all sections visited and which sets give the best reception in a definite locality.

Following this idea through, and putting the information to a practical use, the Haynes-Griffin Company has incorporated it into a series of newspaper advertisements. Dividing New York City into sections, they have definite knowledge of reception conditions in each territory and take advantage of it by telling what particular type of receiver is best suited to overcome the difficulties encountered there.

Not only is a specific make of set recommended in the advertisements, but it is also stated what circuit would best meet the requirements and the type of aerial to be used.

Are You Selling to the Farmers?

Every County Has Hundreds of Prospects for Sets Costing $100 to $175, Government Survey Shows—Demonstrations Will Make Spring Sales

By J. C. GILBERT
Marketing Specialist, U. S. Department of Agriculture

THE farmer who buys a radio set buys it because he wants results; he buys it because he has been told that his radio set will enable him, in the privacy of his own home, to hear the market and weather reports, news of the day, and entertainment, which are being broadcast by many stations in different parts of the country.

He wants to hear weather reports because he feels sure that if he can know slightly in advance that storms are coming or that the prediction is for fair weather or for rain or for possible killing frosts, he can arrange his work more satisfactorily than would be possible without such information. He knows that he can prepare for storms and house his stock against cold weather and thus save valuable crops and animals as well as a great deal of extra labor for himself.

Farmers want to hear the market reports because they know from experience that they can deal much more satisfactorily with the shippers and buyers of their commodities when they are on a par with respect to information regarding the demand and supply and prices in the markets.

Farmers want entertainment for the same reasons that other people want it, but the farmer wants and needs entertainment and relaxation to a much greater degree than those of us who live in town want it, and this is because he has not had entertainment as city folks have had. His love of music has been unsatisfied and his appreciation of song and story have not been gratified because they come to him so infrequently and have so often been of such poor quality.

It has been said that radio has been solving that greatest drawback to farm life, namely isolation, and that the farmer who has purchased a radio set has found in it a means of making the farm a less dreary place both for himself and his family. That radio is aiding in keeping many young people contented in farm life is a statement

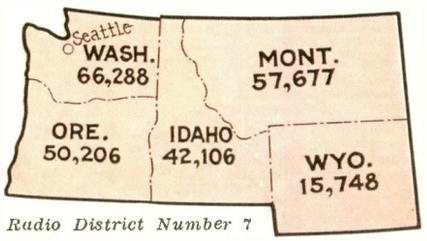
Farmers Are Buying $100 Radio Sets and Higher—

according to J. C. Gilbert, marketing specialist of the U. S. Department of Agriculture, and author of this article, which he has written exclusively for "Radio Retailing."

The very nature of the farmer's occupation, his often isolated, or semi-isolated locality, his distance from large cities and centers of business and learning, his need for a broad contact with the world and a close contact with his market, his need for amusement and entertainment place him high up on the list of preferred prospects.

Mr. Gilbert makes some very pertinent remarks about what the farmer wants in the way of a radio set and what's best to be done in order to sell him.

232,025 Farms



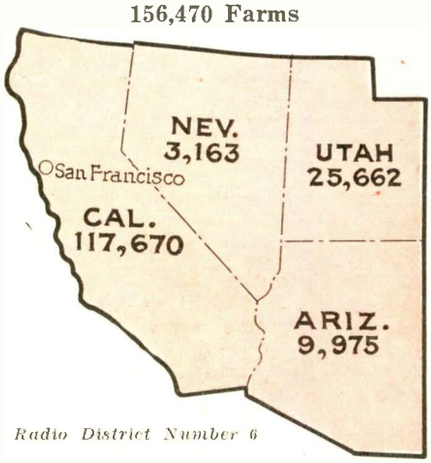
Radio District Number 7

often made, and some have gone so far as to say that radio is proving more of a blessing to farmers than to any other one group of people, unless perhaps it be shut-ins and the sick people in hospitals.

The problem of manufacturing in connection with the serving of the American farmer with radio sets is not, as I see it, necessarily one which has any particular bearing upon the manufacturing processes except that the manufacturers of crystal sets would have little basis of appeal to farmers because the average farmer is beyond crystal range of most broadcasting stations. True enough there are some crystal sets which seem to have long range powers but it is the exceptional crystal set owner who reports distant reception.

What I have to say then is of more interest to the manufacturers and dealers who sell tube sets and radio parts. Replies from more than 1,000 farmers received by the United States Department of Agriculture indicate that almost 50 per cent of the radio sets in use on farms are home-assembled. This is as was ex-

156,470 Farms



Radio District Number 6

pected, because anybody who knows the American farmer and the American farm boy knows that they are resourceful, that they have a considerable knowledge of handicraft and that many of the things with which they work on the farm are home made. This being true, home-made radio sets appealed to many of them from the very beginning.

In the survey mentioned the largest percentage of sets on farms were sets employing three or more tubes. This again bore out the expectations of those who conducted the inquiry because we knew that farmers would have to employ sets which were reasonably sensitive to weak signals, in order that they might hear stations at all. As already stated, the average farm is at some considerable distance from broadcasting stations, although certain sections of the country are almost over-supplied with reasonably powerful transmitting equipment.

It is not necessarily true that the farmer will buy only the less expensive sets. The survey made by the Department of Agriculture brought out the fact that many farmers had bought sets costing several hundred dollars, and that the average of all the manufactured sets purchased by the several hundred farmers replying to the inquiry was about $175. Since that time, however, the price of radio equipment has come down and the same quality of reception which the farmer paid $175 for he can now probably purchase for $100.

The main point in connection with the manufacturers' contact with the farmer market for radio seems to be that of distribution rather than that of production. The best sources of information regarding the number of radio sets on farms in American homes today indicate that not much over 5 per cent of all the farms are equipped with radio sets.

The United States Department of Agriculture estimates that there are about six and one half million farms in the United States; if 5 per cent of these farms are equipped with radio sets there remains the possibility of supplying the other 95 per cent or over six million farm homes with receiving equipment.

It might be claimed that the radio industry is not in a position to supply radio sets to farmers any faster than they are now being supplied and it might be said that the farmers are not in a position to buy more rapidly than they are now doing, or are not inclined to do so.

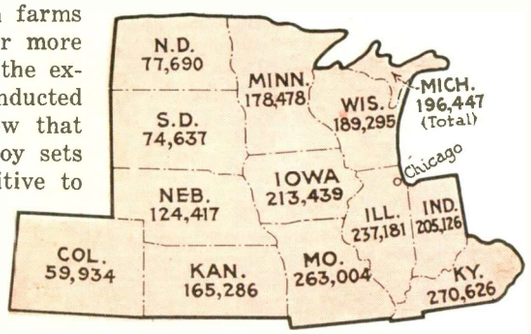
A careful investigation of the facts might, in some instances, prove this to be true, but I am inclined to believe that it is not the actual state of affairs in the case of the farmer. From a certain amount of investigation and inquiry I have come to the conclusion that there are many thousands of farmers in this country who know of radio only in the same way that they know of airplane travel, that is they have heard about it, perhaps have seen both airplanes and radio sets and yet may never have actually experienced the satisfaction

The Nine Federal Radio Districts

have been outlined and the total number of farms in each district and state given for the information of those radio dealers who serve this vast rural market.

According to official Government figures, there are 6,448,343 farms in the United States, of which only about 350,000 have radio sets, leaving a farmer market of over 6,000,000 prospects. The headquarters of each of the Federal Radio Districts is at the Customs House in those cities indicated on the maps.

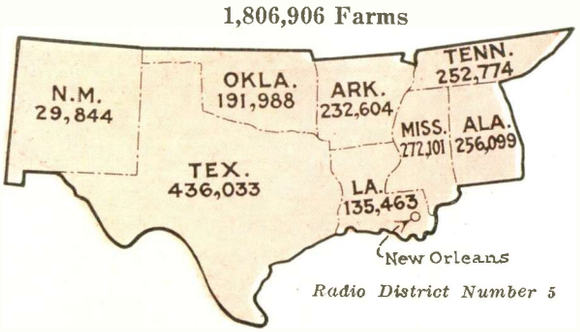
2,059,113 Farms



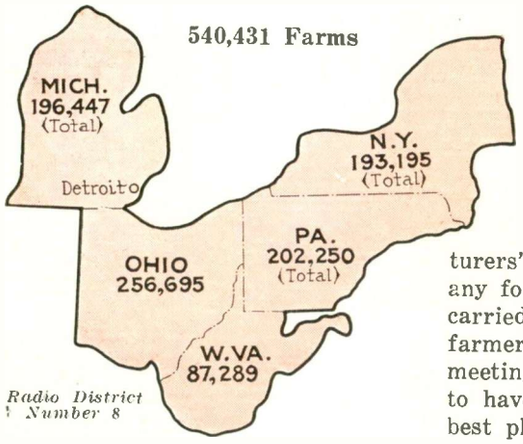
Radio District Number 9

(Note—This does not include the farms of Michigan—196,447—which were totalled in district 8 although the northern section of Michigan is in district 9.)

1,806,906 Farms



Radio District Number 5



Radio District Number 8

(Note—This does not include the farms of New York—193,195—which were totaled in district 2, nor the farms in Pennsylvania—202,250—which were totaled in district 3 although part of each of these states is in the eighth district.)

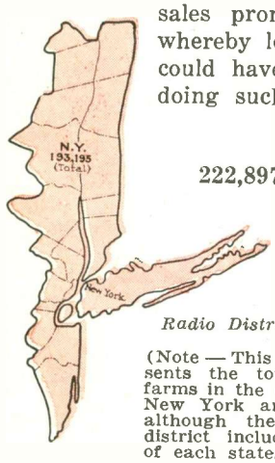
either of traveling through the air or listening to information which has come to them through the air.

I am quite convinced that a large volume of radio sales could be made if the right kind of appeal is developed, first on the part of the manufacturer, and then that followed up by the activities of both the jobbing and retail trade. I am quite aware that the bulk of sales of radio equipment are conducted through the regular channels and that these channels are the same for most electrical devices and equipment, and that the manufacturers, as a rule, do considerable of what is known as national advertising.

Actual Demonstrations Needed to Convince Farmers

This form of approach to the farmer is good so far as it goes. Farmers read national magazines and read daily papers but there are other forms of approach which are more personal and therefore more potent in developing farmer interest. Actual demonstration is undoubtedly conceded by everyone to be the most convincing form of sales argument. Everyone is more or less skeptical of a salesman's statements until the statements are proven by actual performance.

From the manufacturers' and dealers' standpoint, any forms of demonstration work carried on at places where farmers congregate, at farmers' meetings and at fairs, are bound to have considerable effect. The best plan of demonstration, however, is that of actually setting up a radio in the farmer's home and establishing to his satisfaction that he and his family will get everything that has been claimed for the set. If manufacturers of sets could develop sales promotion plans whereby local retailers could have support in doing such demonstration work, I am sure that this form of advertising would pay well for whatever it costs.



222,897 Farms

Radio District Number 2

(Note — This figure represents the total number of farms in the entire states of New York and New Jersey although the second radio district includes only parts of each state.)

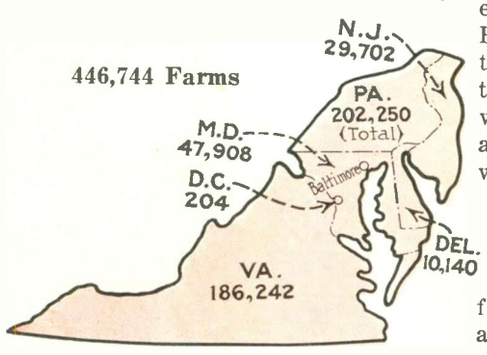
A farmer in a community having a satisfactory receiving set to which his neighbors can at times listen, is undoubtedly a better advertisement than many pages of printed matter.

County Agricultural Advisors employed by the County Farm Bureaus are expected to advise the farmers on many things pertaining to equipment and services which farmers use. If county agents could be impressed with the excellency of the various types of radio receiving equipment, I am sure that this information would be passed on to individual farmers and to farm groups in such a way as to very widely increase the sale of radio among farmers.

I do not believe that manufacturers or dealers in radio equipment have considered the possibilities of the farm market to the extent which its importance justifies. Neither do I think that the manufacturers as a whole have advertised to the farmers as extensively as they might have done. The reason for this perhaps is that radio sales have kept pace with or a little in advance of production, therefore much advertising was not necessary.

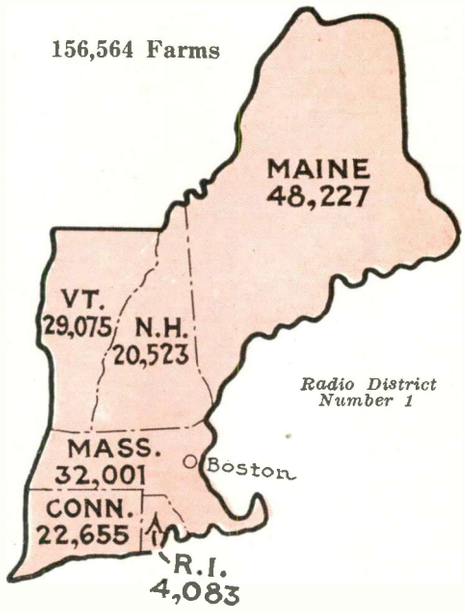
This condition cannot much longer continue and the manufacturer or dealer who goes after the farm trade in a definite and specific way, utilizing all the possible avenues of approach, will undoubtedly secure very satisfactory business returns.

The farmer needs and wants radio, he is capable and willing to pay for it, and he will buy from that dealer who brings it most directly to his attention.

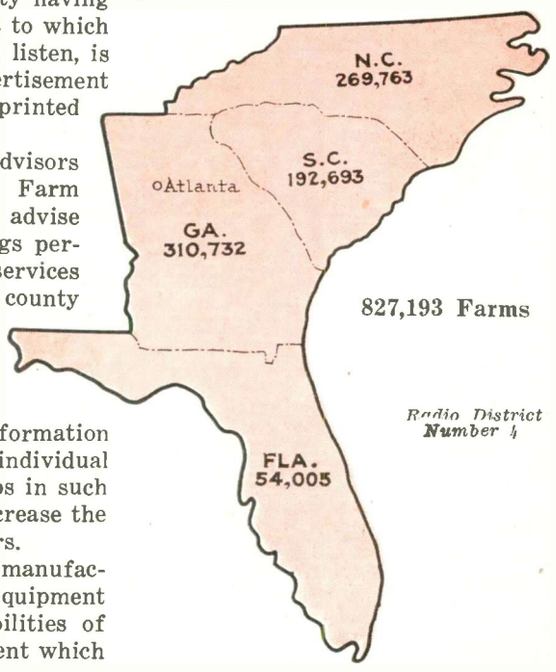


Radio District Number 3

(Note—This figure does not include the farms of New Jersey—29,702—which were included in the listing of the Second District.)



Radio District Number 1



Radio District Number 4

What I Would A Radio Dealer

By ALEX EISEMANN

Mr. Eisemann, treasurer and merchandising brains of the Freed-Eisemann Radio Corporation, Brooklyn, N. Y., is responsible, in a large measure, for the great increase in Freed-Eisemann products sold last year.

IT SEEMS to me that this problem of what the dealer should do is a very simple one if you recognize the fact that he is practically conducting a partnership business with his manufacturer and his distributor. And with a partnership each of the partners must contribute some very definite service to the combination or the plan won't work. The key to success as a radio dealer, I would say, is for the dealer to render to the manufacturer and distributor a kind of service that will merit and demand a high degree of support and protection.

Would Make His Store "Mean Something"

If I were a radio dealer, for instance, I would endeavor before all else to stand for something in radio in my town. I would not make my store just a jumble of anything the customer may ask for. I would decide what line I desired to handle. I would then get behind that line and I would stick to it. Naturally I would select a standard line that is backed by an organization and a policy—and this must be a policy that carries right through the distributor, for when the jobber and the manufacturer do not think alike the dealer invariably suffers.

Of course, if I were to get solidly behind a line and recommend it to my customers, I would not only have to believe in it, but it would have to be nationally advertised goods having a prestige before the public. The manufacturer would have to contribute publicity, and the distributor would have to contribute good service to me, if I were to contribute to our partnership an exclusive local headquarters' representation of the line.

Also, if I took on such a line, I certainly would not permit myself to be so undignified as to cut prices just to meet the competition of some "gyp." I would not destroy my standing and that of the line in the local market and sacrifice my proper profit, just because some cut-price pirate was attacking me. Neither would I suffer in silence. I would most certainly complain to my manufacturer at once, and I would expect him to discontinue selling any dealer who did not play the game and support the policy of the line. But I would be reasonable, and if I saw that the manufacturer and his distributor were honestly trying to support the market I would not demand the impossible. If the manufacturer did not give me the protection that I felt entitled to, however, I would certainly quit the line. I would not try to meet the "gyp" by featuring inferior low-price accessories.

Would Expect Manufacturer to Protect His Territory

You see, if I were to function as the exponent of that line in my community, as purchasing agent for my customers, selecting the best receiving set for them and advising them in radio, I would expect the line I sold to be kept out of the hands of unethical dealers. I would expect him to protect my territory against any distributor too, who sells at dealer discounts to consumers or purchasing agents or any one else with a card. I would demand an exclusive territory in return for exclusive representation and service. And this is fair.

I also would take a firm stand on another thing. If I made up my mind as to what line I should tie to and then stood by the manufacturer, I would expect the manufacturer to make up his mind what sets he would make and not continually change the line. Goods

(Continued on Page 370)

Do If I Were—

A Radio Manufacturer

By F. X. DONOVAN

Mr. Donovan is manager of the Musical Merchandise Department of the Pearson Piano Company, Indianapolis, Indiana. Established in 1873, this company has five branch stores throughout Indiana, all now carrying radio.

IF I were a radio manufacturer I would give my closest study to the problems of distribution. Believing that I could not build a permanent and stable business without providing for the permanence and stability of my retail distributors I would shape my policy to protect their interests as well as my own. I believe that manufacturer-jobber-dealer distribution is more satisfactory than a manufacturer to dealer method but in distributing through jobbers, the jobber should realize that he has a responsibility to his dealers beyond the mere filling of the dealer's orders.

Today, as the music dealer sees it, the jobber of radio does not accept his major responsibility to his dealers; that is, he makes little or no effort to protect their legitimate profits. If the manufacturer is to build successfully with and for his retail dealers he must see to it that the jobber situation is clean.

Would Use Discretion in Choosing Jobbers

The large music dealer is much sought today as a retail radio outlet by manufacturers and jobbers. If I were a manufacturer looking for the music dealer's business I would serve the music dealer through the class of jobber who has a knowledge of his problems and who has always had a policy that protected the music dealer.

As a manufacturer I would be guided in my decision to serve the music trade through its own jobbers by the following consideration; jobbers in the industrial fields have a large number of retail customers who are entitled to discounts. These are valuable customers, large buyers, and the jobber cannot easily deny them a discount on one radio set which they may buy for an employee, since to deny discount on a radio set might jeopardize a highly profitable account in supplies or equipment. The prevalence of this condition today gravely discourages the music dealer who sees his sales cost on radio mounting because of the time and effort he spends in selling a prospect only to have that prospect buy a set through wholesale channels and obtain a discount often equal to the discount the dealer himself receives.

Would Study Retail Selling Costs

If I were a manufacturer I should also study the dealer's selling cost and establish a discount which would be a fair compensation for the dealer. It is not the fact that radio can be sold on a smaller margin than other musical merchandise, phonographs for instance. The demand for radio is good today but no better than the demand was for phonographs some years ago. Competition is keen and radio sets have to be sold and this selling is expensive. The element of home demonstration which is necessary in radio sales costs money. Salesmen have to work in the evening to sell radio and must be paid for it. As a manufacturer I would therefore establish radio set discounts on a fairly equivalent basis with phonograph discounts.

If I were a manufacturer I would spend at least a part of my advertising appropriation in local newspapers and on a cost sharing basis with my dealers. Local advertising produces more direct sales results than national advertising and stimulates the dealer to a greater personal advertising and sales effort.

As a manufacturer I would build on these fundamentals of distributing policy, fair compensation and advertising, with confidence in the loyal support of the best class of dealers.

RADIO RETAILING, *A McGraw-Hill Publication*

How Music Dealers Are Selling Radio

Sales Methods and Practices, and Radio-Department Operating Costs, Margins, and Profits, as Revealed from Study of Music Trade

Compiled by "RADIO RETAILING" *with the Co-operation of the* MUSIC INDUSTRIES CHAMBER OF COMMERCE

WHAT selling practices and methods are being used by music and phonograph stores in handling radio today? What are the selling costs of such stores on their radio lines? What profits are they making on radio? And what do music and phonograph dealers think of this new radio business?

To get definite information on these and other points relating to radio sales by the retail music trade, *Radio Retailing* has been conducting a study of music stores, of which study this article is a preliminary report. To get at actual store-operating figures, questionnaires were in advance sent out to some 700 retail music dealers, this part of the inquiry being conducted with the co-operation of the Music Industries Chamber of Commerce, the leading music trades organization of the United States. Meanwhile, *Radio Retailing's* own individual investigators have been in the field to learn at first hand just how music stores are handling their radio business, what their sales policies are, and what their actual radio cost figures amount to.

Radio Activities in Average Music Store

Taking the country as a whole, probably six music stores out of every ten are today selling radio. Among those dealers who had previously handled phonographs, the ratio of dealers now handling radio sets is of course higher—perhaps 80 per cent—but the piano stores, which have been slower to take up radio, hold down the ratio for the music trade as a whole.

The average music store which is now handling radio, presents a picture something like the following, to summarize our reports:

Annual sales of radio
$5,000 to $20,000.

Investment in radio stock at cost valuation
$1,200 to $6,000.

Salespeople
Equivalent of total time of two or three men given over to radio selling. No women.

Selling methods
Store sales only. Little house-to-house solicitation.

Time-payments
85 per cent of all radio sales made on time-payments. Average terms, 25 per cent down, balance in ten months.

Installation
Charge lump price of $8 for installation, including antenna materials.

Service
$1.25 per hour.

Average margin secured (ratio to sales)
25 per cent.

Average profit on sales
2.6 per cent.

Average stock turn
3.7 times.

Few music or phonograph dealers are found to have a separate "radio department" for handling their radio business. Radio is considered by most of them as "just another musical instrument." Separate records or department accounts are kept in but a limited number of places, the general practice instead being to "lump" radio sales in with phonographs, pianos and players, and other musical merchandise. The records of a number of music stores which have segregated their radio operations were, however, obtained by questionnaires and by personal calls, and these figures on radio selling costs are summarized in the table on pages 356 and 357.

Radio broadcasting may have delivered a serious blow to the sale of phonographs and records. Dealers found their sales falling off at a terrifying rate. Action was necessary, and those music dealers who got early into radio were able to offset the ebbing tide, with a new golden flood from the sale of radio sets. Some phonograph dealers have thus actually built their total gross sales and net profits far above what they were in the old phonograph days, and some ex-phonograph dealers are now actually devoting all their time to radio selling.

Large, Varied Radio Stock Is Carried

Unlike the usual practice in the selling of phonographs, where the dealer has carried only one make, or at the most, two, the same dealer has felt it necessary in radio to carry as many as ten different makes of sets. In fact, some music stores were found which had even gone so far as to carry a stock of twenty to twenty-five different radio manufacturers' outfits, to meet the demands of the buying public.

Few of these stores under discussion carry "parts" other than such accessories as loud speakers, batteries, tubes, etc. The music dealers apparently have been willing to let the parts business go elsewhere, contenting themselves with only the better standard makes of complete radio sets to offer to the public. Sets observed in music stores ranged in price from $35 for the one- or two-tube set, up to $200 to $250 for five-tube sets. As to what is the most "popular-priced" set, it is difficult

to say. This is a question which varies of course, with each community's "per-capita buying power." However it is safe to say that such a popular-priced set runs between $50 and $150, including all equipment ready for operation. Above the $150 price sales are scarcer and much harder to make.

Most of the sales are made at the store itself, but many music dealers carry on the demonstration both at the store and in the home of the customer. In this connection there is one interesting conclusion which has apparently been reached by music dealers generally as regards the type of salesman they think should sell radio for them. "A salesman selling radio does not need to know all about the outfit. He does not need to know its electrical or mechanical makeup," sums up this opinion as expressed in the words of one music merchant, who added: "In fact many times I prefer that my salesman know little about the set he is selling, other than to be able to hook it up and operate it." When pushed further for his reasons, he said, "The salesman who knows nothing about the hook-up, etc., is the man who sells the set on its performance, its looks, its beauty. These are the things that appeal to the customer—not what make is the transformer, or that the set has a feed-back circuit. It is this untechnical type of salesman who is the most successful. The other type of individual is fine for trouble-shooting, but not for selling."

And this very illustration gives us an average picture of the type of salesman the music store has selling radio. In most cases he is one of the regular music sales people. His salary ranges from $30 to $35 a week. In a few instances he is paid a commission, but as a rule he is paid by way of a straight salary.

Music-Store Sales Made Mostly on Installments

Little house-to-house selling is carried on. True, prospects are followed up. Demonstrations are made in the home, more than often resulting in the set being left behind when the salesman leaves. But regular house-to-house canvassing has not come into the music-dealer's selling methods as yet.

Seventy-five per cent to 85 per cent of these sales are made on the installment plan. Especially is this true with the higher-priced sets. Twenty-five to 33⅓ per cent is required as an initial payment; the balance the customer is allowed to pay over a period of eight to ten months. In some cases the initial payment is lower—10 to 15 per cent but the period of time over which the payments shall run remains about the same, varying only in individual instances. For this financing an extra charge ranging from 6 per cent to 10 per cent is made, the customer's note being held by the merchant. This interest dates from time of delivery or installation, and is based on the unpaid balance. Most music dealers carry their own paper.

In most cases a charge of from $6 to $10 is made for installing a set. This amount includes cost of aerial, lightning arrester, ground, etc., plus the cost of labor. Some dealers do this installing free, but such a plan is fast being discarded. The music merchant has found it hard enough to make any profit from sales only, let alone supplying free installation and service.

Servicing Sets a Big Problem

It is this servicing problem that seems to be a bugbear with many music dealers, and there is no standardized or uniform policy with regard to handling it. By far the majority charge from $1.25 to $1.50 an hour. However there are some stores which give service free.

For this servicing or trouble-shooting, as many call it, the store usually has or calls in a well-trained radio mechanic or amateur. This "trouble-shooter" is the type of man who knows hook-ups and knows circuits. Even if regularly employed, he usually does little selling; most of his time is used by advising people at the store, or in the home.

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National Association of Sheet Music Dealers
Band Instrument Manufacturers' Association
National Piano Travelers' Association
National Association of Piano Tuners

Mr. Rudolph Wurlitzer,
The Rudolph Wurlitzer Co.,
Cincinnati, Ohio

Feb. 27, 1925.

Dear Mr. Wurlitzer:

The cost of selling radio at retail has become an important consideration to music merchants throughout the country. For this reason, the Chamber agreed to cooperate in the music field with Radio Retailing, a McGraw-Hill publication which has undertaken to make a comprehensive survey covering three groups of distributors - the department store, the specialty radio shop, and the music store.

Nine department stores have already been studied and a copy of the report on them is enclosed.

In order to make a study of music stores, and thus obtain a comparison which should be of interest to every merchant, as well as the radio industry as a whole, the enclosed questionnaire form is sent to you in duplicate, with the request that you fill it out and also retain a copy for your own use in comparing your figures with those of other music stores and also department stores and independent radio shops.

The information you give will be kept confidential, and only identified by number for the use of Mr. L.A. Hansen, the associate editor of Radio Retailing, who has further agreed to make an individual comparison of your costs in advertising and selling radio, in return for your cooperation. You will notice that your name will be detached from the question sheet, and only the identification number used for the purpose of returning your comparison.

Trusting you will co-operate in this study of radio selling costs, fill in the question sheet promptly, and forward to Mr. Hansen in the enclosed stamped envelope, I am.

Sincerely yours,
C. L. Dennis
Manager TRADE SERVICE BUREAU

P.S. If you do not find it convenient to fill out the form and would prefer to return your radio operating statement, (in confidence, of course,) Mr. Hansen will be glad to make the necessary entries from that, and forward you a duplicate.

Form of letter sent to 700 of the leading retail music dealers of the United States, by the Music Industries Chamber of Commerce, to secure radio information on which to base this and later articles concerning the cost of selling radio at retail.

When asked what was the chief reason for service calls, the greater number of dealers interviewed enumerated: Batteries run down, as first; tubes burned out as second—and, either aerial trouble or defective parts as third in importance.

After studying the costs of running radio businesses, as carried on by music merchants, there seems to be one outstanding situation which must soon be corrected if any substantial and appreciable profit is to be made.

The percentage ratio of merchandise cost to sales is far too high. For music stores with a gross annual sales volume of $25,000 to $50,000, this cost reached a figure of 75.2 per cent of the sales.

Merchandise Cost Ranged from 79 to 63 per Cent

The high was 79 per cent while the low was 63.9 per cent. This low figure of 63.9 per cent was more nearly the amount it should be and showed that the individual business was making the most advantage of the discount received from the manufacturer. The fact is—the store identified as store C in the accompanying statistical chart is doing one of the better radio businesses.

It follows that with such a high percentage of merchandise cost, the percentage ratio of the margin must be correspondingly lower. It is this margin which must be sufficiently large to cover operating expenses and leave a fair profit. As this is true, one can readily recognize that too much attention and too much thought cannot be given to these two phases of merchandise control.

The average margin for the stores reporting was not more than 24.8 per cent. The very highest point reached was that of 36.1 per cent, while the low was 21.2 per cent—an amount far too low to allow any substantial profit.

Mention has been made that the "margin" must be sufficient to cover operating expenses and leave a fair balance by way of profit. Hence, there are really two divisions to this "margin" amount: — (1) total expense and (2) profit.

In the total expense division, we find that selling expense is by far the largest division, as is true with practically all types of retail stores.

The music store seems to be no exception to the rule. The average figure for the radio department was 8.1 per cent. This is particularly interesting, especially so, when we remember that recently we found that "selling - salaries" expense alone reached a figure of from 9 to 10 per cent of the sales volume. However this figure of 8.1 per cent is explained by considering the difference attributable to the manager's salary. This salary is ordinarily charged to administrative expense and is not subdivided into selling and administration, though the manager's time is actually divided between the two.

Radio Selling Expense Low in Music Stores

Comparing the selling expense on radio in music stores, with selling expense in many other types of stores it is very low. We should not be surprised to have it run around the figure of ten to twelve per cent, though the highest of the stores was only 10.2 per cent, and that was in a store particularly well managed.

After considering selling expense and viewing the sales volume attained by any store, it is always interesting to see what the publicity or advertising expense has amounted to. In the classified expense account of "publicity," there are included all newspaper advertising, store advertising, direct by mail advertising, etc. It is this advertising which plays a big part in building the sales volume, and is responsible to a very large extent, in reducing selling expense as well.

Publicity and Advertising Averages 5.1 per Cent

Ordinarily we would look for such an expense to run fairly high. Radio is a new product, and the music store is a new merchant in the field. Therefore he must necessarily do a more extensive amount of missionary work in his community. He must tell the public, he now sells radio as well as phonographs. But the fact is that only 5.1 per cent of the sales is spent for publicity. Analyzing this account into those different expenses we have mentioned, window display, newspaper advertising, etc., we can readily see that the advertising expense itself did not run as high as we might expect. It undoubtedly did not average more than 4 or 4.5 per cent. The high figure, and well within what we might call a danger zone, was 7.3 per cent.

Any publicity expense running above a figure of 6 per cent or a little over should be very carefully watched. It denotes, undoubtedly, that the returns by way of sales are not commensurate with the amount expended for advertising. The low figure for these stores was 2.3 per cent and represents an amount which undoubtedly is not sufficient of itself to create any customer demand for radio merchandise resulting in any large sales volume.

Those who have read the results of *Radio Retailing's* survey into the cost of selling radio in the department store, published in the Febru-

Sales, Profits, and Operating Costs for Radio

Store	Gross Sales $	Returns and Allowances $	%	Net Sales $	Merchandise Cost $	%	Margin $	%	Total Expense $	%	Selling Expense $	%
A	10,394	519	5.	8,875	6,540	66.3	3,328	33.7	2,455	24.9	984	9.9
B	18,186	1,636	9.	16,550	13,200	78.8	3,517	21.2	2,598	15.7	721	4.3
C	38,364	6,138	16.	32,226	20,579	63.9	11,647	36.1	10,394	32.3	3,257	10.2
D	40,356	1,856	4.6	38,500	29,375	78.	9,174	23.6	8,133	21.2	2,726	7.
Average (based on entire number of stores reporting, 24)						75.2		24.8		22.2		8.1
High	50,000	11,700	23.3	38,500	37,500	79.	12,500	36.1	10,394	32.3	4,240	10.2
Low	10,394	519	5.	9,875	6,540	63.9	3,328	21.2	2,454	14.2	721	4.3
Average for Music-Store Radio Departments						75.2		24.8		22.2		8.1
Average for 9 Department-Store Radio Departments (from February issue *Radio Retailing*, pages 132, 133)						73.3		26.7		24.8		9.1

ary issue, will remember one very important statement. "Radio is worse than any style merchandise." It is. And because of this fact any merchant selling radio today should strive for a high rate of stock turn. For the music store, the radio stock was turned on an average of 3.7 times a year; very close to 4 times. The highest rate was 7.5 times while the lowest was only 2.

Here again is another point in which the music store is weak. Though its profit (2.6 per cent) is higher than that of the department store (1.9), this is somewhat offset by its lower rate of inventory turnover. This too, without question plays its part in increasing the merchandise cost ratio. Sets become obsolete, stock becomes old or damaged through handling, and reductions in price must be made if the store is to get anything at all out of its inventory investment. Perfectly proper and legitimate and in line with the best of merchandising policies, but it would be far better to sell the sets on hand long before such a depreciation takes place. By doing this, heavy losses might often be avoided.

Get Stock Turn to Reach Ten or Twelve

The whole question of stock turn in radio is an important one. No matter what store is handling it, there can be a uniform rule for all. Get the stock turn to a figure of ten to twelve times. Buy only in accordance with consumer demand. Buying expense may grow a little larger but the increased amount will be well taken care of through increased margin.

More attention to operating cost, more attention to the selling of the merchandise, reducing customer returns and allowances, and particularly more attention to the buying of radio stock, and the music store merchant should be more successful during his second year of radio selling than he was in the first.

All in all, though the music dealer feels that he has made nowhere near a fair profit on his radio business, he is optimistic as to the future of radio selling. He believes that another two or three years will see the radio industry more stable, resulting in a better profit for the retailer. He believes that—a more uniform practice will come among retailers as regards service charges, etc., that many of the so called gyps will be eliminated, that there will be more harmony in the trade, more co-operation among dealers, jobbers and manufacturers. And for him—well, more business and a better business, for radio, in his opinion, will show vast improvement, industrially and financially, as time progresses.

These Music Store Cost Figures Show

Three Things the Radio Dealer Can Do to Increase Profits—

1. **Reduce ratio of merchandise cost to sales**
2. **Carefully watch operating expenses, especially that expense of "service"**
3. **Increase stock turn without loss of full prices**

Reduce merchandise cost by bringing price reduction to a minimum—more careful buying and estimating community demands.

Reduce operating expenses by making merchandise stay sold through proper selling methods resulting in reducing customer returns and allowances.

Increase stock turn by knowing what is in stock, knowing what is in demand and then buying accordingly without cutting retail prices.

Encloses Return Post Cards with Each Set Sold, to Get "Friends' Names"

Here is a plan which has been inaugurated by M. A. Schuman, 63 Fourth Avenue, New York City, and which has produced good results.

Whenever Mr. Schuman sells a set, he encloses several return post cards which have printed on them the following:

"No doubt you purchased this radio set from us because you were confident that we would stand behind our guarantee to the limit of our ability. If you now feel that your confidence has not been misplaced, won't you kindly use the lines below and give us the names of a few friends whom you think would be interested in a set? Thank you.

This scheme starts an endless chain of live leads, Schuman reports, and is responsible for the sale of many sets.

Departments of Music Stores—Total of Twenty-four Stores Reporting

(Net Sales = 100 per cent)

Buying Expense		Publicity Expense		Occupancy Expense		Administrative Expense		Profit		Average Merchandise Investment	Annual Stock Turn
$	%	$	%	$	%	$	%	$	%	$	
103	1.1	445	4.5	480	4.9	442	4.5	873	8.8	3,269	2
156	1.	385	2.3	1,101	6.7	235	1.4	919	5.5	2,491	5.3
1,064	3.3	2,357	7.3	1,708	5.3	2,008	6.2	1,253	3.8		6.4
		1,907	4.9	1,500	3.9	2,000	5.4	1,041	2.4	3,916	7.5
	1.1		5.1		3.5		4.4		2.6		3.7
1,064	3.3	2,367	7.3	1,708	6.6	2,008	6.2	1,930	8.8		7.5
103	.9	385	2.3	480	3.9	441	1.4	873	1.4		2.
	1.1		5.1		5.4				2.6		3.7
	3.3		4.4		3.7		4.4		1.9		5.
							4 3				

Finding and Eliminating Radio Interference by Local Electric Lines

Dealers Are Often Called Upon to Remedy Noises in Radio Receivers—Here Is the "How" in Locating and Stopping Them

REPORTS of radio interference that are characteristic of troubles experienced generally, were discussed recently by A. M. Wilson, of the University of Cincinnati, speaking before the Ohio Electric Light Association.

One report cited from a town in New York state, gave the following results: A number of cases of radio interference were found to be due to defective heating pads. There was one case of a sparking commutator on a coffee-grinder motor, two defective electric stoves, one grounded fire-alarm circuit and two grounded transformers.

A report from another territory included the following: Grounded arc circuits were located by switching operations, and then the exact sources were located by the hot-cold method. There were grounds on two arc circuits. A 60-cycle hum in radio receivers was cut down when a high-tension line was cut out. A defective transformer bushing was located by inspection. A clicking sound in radio receivers was found to be due to railroad crossing bells. A loose connection in an antenna on an apartment house interfered with reception by neighboring sets, when the set connected to the defective antenna was in operation.

It has been determined that mercury-arc rectifiers are not sources of radio interference except during the brief starting period. Voltage regulators, even when they have been in service for years, are not sources of interference. Magnetite arcs do not cause trouble under normal conditions. The carrier effect in propagating radio interference can be stopped by inserting inductance in the leads of the cause of disturbance, and connecting capacity across the line between the inductance and the source; but it has not been feasible as yet, to develop these filter circuits for general use on a commercial basis.

Sensitive Sets Needed for Searching

With regard to the types of equipment to use in tracing sources of radio interference, it is generally recognized that, for the work of tracing down such sources of noise as household appliances or sparking commutators, a very sensitive set is essential. For locating such sources of trouble as arcing grounds, or leaky insulators, or transformer bushings, less sensitive sets seem to give best results.

Excellent results were obtained recently by the use of a loop aerial with a thoroughly shielded set, so that the maximum benefit could be secured from the directional value of the loop. In this case the coil aerial is connected to a primary coil in the set, making it aperiodic. The secondary is tuned to a detector, with regeneration, and one tube of amplification is used. It will be seen from this that sensitiveness has been sacrificed for compass action.

Others report satisfactory results by the use of a loop aerial connected directly to a pair of headphones, with one side of the loop connected to the frame of the machine. One case was reported of a man locating a bad insulator by walking along the line with a pair of headphones connected to a light aerial in one hand and a ground rod in the other.

When the possessor of a radio receiving set finds that it is noisy, there are several things he can do to satisfy himself as to the source of the trouble. If he finds upon inquiry that his neighbors have no unusual trouble, he should go over his own set, or investigate possible sources of trouble in his immediate surroundings. If he considers it necessary to complain to the power company, he should furnish, with his complaint, information which may help diagnose his case and save considerable time. If he is not willing to go to some trouble, his case cannot be very serious.

Points to Observe in Tracing Causes of Interference

1. Does the interfering noise have a definite pitch and quality?

2. Is the noise heard with the same intensity over a wide area or is it stronger in some places than others?

3. In what other locations, besides your own, does this noise occur?

4. Is the noise intermittent? If so, indicate at what time it occurs? If it varies in intensity, indicate at what times the variation is most marked?

5. Does the noise tune in to any particular wave lengths?

6. What types of receiving equipment are most affected by the interference?

7. Does anyone near you use electricity for some special purpose, in addition to the ordinary use for light and power? How close are you to high-tension lines?

8. When was the interference first observed?

Government May Act Against Annoyances

Governmental steps toward clearing the atmosphere of regenerative offenders is regarded as a matter of but a brief while. Contrary to the general belief this will not require any action on the part of Congress. Radio regulations already cover this, and every radiating receiver that is a known source of interference comes now under the jurisdiction of the radio supervisor. It is within his power to order the offending set made non-radiating on penalty of its use being prohibited. A radiating set is a transmitter and as such is under the control of the supervisor.

Despite educational efforts, ignorance and indifference continue to play large parts in radiation nuisances. Not that anyone who has read up even in a small way doesn't understand the evil and, vaguely the cause, but that they fail or refuse to recognize the fact that they themselves often are the means of ruining their neighbors' enjoyment.

Educate your customers in the proper use of regenerative sets and you will find that many radio knockers will turn into boosters.

Renting Sets Brings Added Revenue

Figures Show Average Profit from Sets Rented at $2 per Night Amounts to $120 a Year—Dealer, with 40 Sets out on Rental, Expects to Net $4,800 Annually from Unique Service to Hotel Guests

RADIO is becoming such an indispensable adjunct to our daily lives that even hotel guests are demanding that the hotel supply them with sets during their stay.

In at least five hotels of the first-class, the set renting idea is in vogue—the Drake, at Chicago, the Biltmore at Providence, R. I., the Roosevelt and the Biltmore in New York City, and the Benjamin Franklin, Philadelphia. The Roosevelt Hotel, New York, where the accompanying illustrations were made, has purchased a group of sets outright and rents them to its guests for the sum of $5 a night or $20 a week. A card in each room announces the privilege. Much the same system, with varying rates, is followed at the others.

At the Providence Biltmore, a special company, the Hersey Radio Corporation, has been formed and rents the sets to the hotel guests. Here, super-hets are used, the cabinet being equipped with a lock to prevent "investigation" by inquisitive users. The rates are lower than in the larger cities, being $2 a night or $10 a week. Forty sets are constantly in demand.

On an investment of $250 per set, this dealer sets aside out of the set's annual earnings $100, or 40 per cent, for depreciation. Battery and tube replacements run $109 per set per year, and operating expenses, salaries, interest, insurance, etc., total $150 per set annually. The total cost of the service is thus $359 a year for each set. Figuring that a set will be earning 240 nights at $2 a night, or $480 a year, a reasonable margin of profit remains for the set renting company.

The dealer who sells radio can turn this idea to his own advantage by making arrangements with his local hotel managements to supply their guests with radio sets on a rental basis. It is a new source of income for sets that might not, otherwise, bring in any revenue at all.

Applying this idea to summer resorts, in those localities where it is possible, may also be a means of securing added cash during the slow summer months. In addition, hotels are not the only prospects for set renting. Hospitals, sanitariums and institutions of all kinds present possibilities for the dealer to realize revenue from renting sets to guests or patients.

"Radio Retailing's" Complete Specifications of

LISTINGS of radio products, with the name and address of the manufacturer, together with complete information concerning each product is a monthly feature of *Radio Retailing*. This service is wholly for the benefit of readers and is without charge of any kind whatsoever to the manufacturers listed.. It is *Radio Retailing's* desire to make these lists a complete, representative directory of radio products, so that, by keeping and filing the lists each month, the dealer will always have at hand the information he wants to know about any radio set, reproducer or accessory. Manufacturers are invited to send specifications of their products for representation in these lists, which will be revised, brought up-to-date and published in rotation.

***For Radio Sets*—See February Issue, Pages 154-159**

***For Loud Speakers, Earphones and Phonograph Units*—See March Issue, Pages 252-255**

***For Portable Receivers and Loop Aerials*—See the next—the May—issue.**

Listings of various parts are now being prepared for publication next fall

"A" Batteries, Storage

Name of Manufacturer and Address	Trade Name	Model Number	List Price	Overall Dimensions	Weight Lb.	Weight Oz.	Type of Container	Terminal Voltage	Ampere Hour Capacity	Normal Charging Rate Amperes	Period of Guarantee
Advance Battery Mfg. Co., 227 East Lee Street, Louisville, Ky.	Powerfield	6-5 GA	$15.00				1-pce. container	6	60		None
	Powerfield	6-7 GA	18.00				1-pce. container	6	85		None
	Powerfield	6-9 GA	21.00				1-pce. container	6	115		None
	Powerfield	6-11 GA	26.00				1-pce. container	6	145		None
Arrow Battery Co., 1215 South Wabash Ave., Chicago, Ill.	Arrow		3.75					2			2 years
	Arrow		6.00					4			2 years
	Arrow		7.00					6	50		2 years
	Arrow		8.00					6	80		2 years
	Arrow		9.50					6	100		2 years
	Arrow		11.50					6	120		2 years
	Arrow		13.00					6	140		2 years
Carlisle & Doughty, Inc., 2530 N. Broad St. Philadelphia, Pa.	C & D	L38A	9.45	7¼x5 5/16			Wood	6	40–50	4	1 year
	C & D	L37A	11.55	7¼x6½			Wood	6	60–70	5	1 year
	C & D	L39A	13.65	7¼x7 1/16			Wood	6	80–90	6	1 year
	C & D	L311A	15.75	7¼x9 5/16			Wood or rubber	6	100–120	8	1 year
	C & D	L313A	17.85	7¼x10¼			Wood or rubber	6	120–140	9	1 year
Dixie Storage Bat. Co., 1412 W. Lafayette Ave., Baltimore, Md.	Dixie	6-60-AH	16.00	7¼x7 5/16x9¼	32		Wood or rubber	6	60	5	1 year
	Dixie	6-90-AH	20.00	9 1/16x7 5/16x9¼	45		Wood or rubber	6	90	5	1 year
	Dixie	6-120-AH	24.00	10 1/16x7 5/16x9¼	52		Wood or rubber	6	120	5	1 year
Edison Storage Battery Co., Orange N. J. See also "Power Units"	E. Ra. "A" Stor. Bat.	1-B-1	11.80	12¼x4¾x7¼	9	5	Special box	1⅓		2 to 3⅓	
	E. Ra. "A" Stor. Bat.	1-B-2	14.10				Special box	1⅓		5 to 7½	
	E. Ra. "A" Stor. Bat.	3-B-1	27.50	12¼x8x8	21	3	Special box	3⅓		2 to 3⅓	
	E. Ra. "A" Stor. Bat.	3-B-2	33.25	12¼x8x8	23	5	Special box	3⅓		5 to 7½	
	E. Ra. "A" Stor. Bat.	5-B-1	40.00				Special box	6		2 to 3⅓	
	E. Ra. "A" Stor. Bat.	5-B-2	52.20	12¼x8x12⅛	35	8	Special box	6		5 to 7½	
	E. Ra. "A" Stor. Bat.	5-B-4	74.80	12¼x8x18	52	8	Special box	6		5 to 15	
	E. Ra. "A" Stor. Bat.	1-B-1RC	34.65	11⅞x8x17⅞	22	8	With rectifier	1⅓		2 to 3⅓	
	E. Ra. "A" Stor. Bat.	1-B-2RC	36.90	11⅞x8x14	23		With rectifier	1⅓		5 to 7½	
	E. Ra. "A" Stor. Bat.	3-B-1RC	47.10	11⅞x8x17⅞	32		With rectifier	3⅓		2 to 3⅓	
	E. Ra. "A" Stor. Bat.	5-B-1RC	60.00	11⅞x8x23⅜	40		With rectifier	6		2 to 3⅓	
	E. Ra. "A" Stor. Bat.	5-B-2RC	78.50	11⅞x8x23¾	49		With rectifier	6		5 to 7½	
The Electric Storage Battery Co., Phila., Pa.	Exide	1-KZR-5	5.40	4½x6¾x6 13/16	5		Hard rubber	2	24	2	
	Exide	2-KZR-3	7.30	4½x6¾x6 13/16	6		Hard rubber	4	12	1	
	Exide	3-LXL-5-1	14.60	6¾x6¾x9	24	8	Hard rubber	6	50		
	Exide	3-LXL-7-1	16.90	8 1/16x6¾x9	33	8	Hard rubber	6	75		
	Exide	3-LXL-9-1	19.15	9¼x6¾x9	42	8	Hard rubber	6	100		
	Exide	3-LXL-11-1	22.10	11 1/16x6¾x9	51		Hard rubber	6	125		
	Exide	3-LXL-13-1	25.00	13¼x6¾x9	59	8	Hard rubber	6	150		
General Lead Batteries Co., Chapel St. and Lister Ave., Newark, N. J.	Titan	TWL-6-40		5¾x7¼x9½	30		Wood or rubber	6	40	3	4 years
	Titan	TWLN-6-60		6¾x7¼x9½	38		Wood or rubber	6	60	5	4 years
	Titan	TWLN-6-90		8 1/16x7¼x9½	55		Wood or rubber	6	90	7½	4 years
	Titan	TWLN-6-120		11 7/16x7¼x9½	69		Wood or rubber	6	120	11	4 years
	Titan	TWLN-6-150		12¾x7¼x9½	84		Wood or rubber	6	150	15	4 years
General Storage Bat. Co., 2005 Locust St., St. Louis, Mo.	"General"	172	15.50				Wood	6	60		1 year
	"General"	173	17.50				Wood	6	80	S=8, F=4	1 year
	"General"	175	21.20				Wood	6	100		1 year
	"General"	176	26.75				Wood	6	120		1 year
Gill Storage Bat. Co., Inc., San Bernardino, Calif.	Gill Non-Separator Storage Battery		22.50	9x7¼x9¾	52		Wood bucket handle cover	6	80	S=8, F=4	3 months
Globe Electric Co., Milwaukee, Wis.	Globe Radio "A" Bat.	705	15.60		29		Wood	6	60	S=7, F=2	Uncond'al
	Globe Radio "A" Bat.	710	18.00		32		Wood	6	80	S=7¼, F=2¼	Uncond'al
	Globe Radio "A" Bat.	715	20.00		45		Wood	6	105	S=11, F=3¼	Uncond'al
	Globe Radio "A" Bat.	720	22.30		55		Wood	6	125	S=12½, F=4	Uncond'al
	Globe Radio "A" Bat.	730	17.20		31		Rubber	6	60	S=7, F=2	Uncond'al
	Globe Radio "A" Bat.	735	22.00		47		Rubber	6	105	S=11, F=3¼	Uncond'al
	Globe Radio "A" Bat.	750	29.60		67		Glass Jars	6	120	S=11, F=3	Uncond'al
	Globe Radio "A" Bat.	755	34.50		88		Glass Jars	6	190	S=12½, F=4	Uncond'al
	Globe Radio "A" Bat.	760	41.00		112		Glass Jars	6	260	S=18, F=7	Uncond'al
	Globe Radio "A" Bat.	765	46.50		124		Glass Jars	6	330	S=24, F=8	Uncond'al
Gould Storage Bat. Co., Inc., New York City See also "Power Units"	Gould Radio "A" Bat.	R-6-80	21.00	10⅛x9 1/16x7 5/16	38	8	Rubber or wood	6	80	5 to 7½	6 months
	Gould Radio "A" Bat.	R-6-120	24.00	10⅛x11 1/16x7 5/16	52		Rubber or wood	6	120	5 to 10	6 months

Batteries, Chargers, Eliminators and Power Units

("A" Batteries—Storage—Continued)

Name of Manufacturer and Address	Trade Name	Model Number	List Price	Overall Dimension	Weight Lb.	Oz.	Type of Container	Terminal Voltage	Ampere Hour Capacity	Normal Charging Rate Amperes	Period of Guarantee
Hartford Bat. Mfg. Co., Milldale, Conn.	Hartford	RB50	17.60	7 3/16 x6 13/16 x9 1/2			Rubber	6	50	5	18 months
	Hartford	RB 70	19.80	8 1/2 x6 13/16 x9 1/2			Rubber	6	70	7	18 months
	Hartford	RB 90	23.10	9 3/4 x6 13/16 x9 1/2			Rubber	6	90	9	18 months
	Hartford	RB 110	27.50	11 1/4 x6 13/16 x9 1/2			Rubber	6	110	11	18 months
Hazelett Storage Bat. Co., Cleveland, Ohio	Hazelett	1-A	16.40	9 1/4 x7 1/4 x9 1/2	45		Composition	6	80–100	5–10	1 year
Hinsdill Elect. Co., Troy, N. Y.	Lincoln	6P11	38.50	9x7 1/4 x10 7/8			Wood	6			18 months
	Lincoln	6P15E	52.80	11x8 1/2 x9 3/8			Wood	6			18 months
	Lincoln	6H11J	35.00	8 3/4 x6 1/4 x10			Wood	6			18 months
	Lincoln	6H13	40.00	10 1/4 x5 3/4 x10			Wood	6			18 months
	Lincoln	6H15	44.00	11 1/2 x5 3/4 x10			Wood	6			18 months
	Lincoln	6HR15	37.00	11 3/4 x7 1/4 x9 1/2			Wood	6			18 months
	Lincoln	6HR15L	37.00	19 1/4 x4 3/8 x9 1/2			Wood	6			18 months
	Lincoln	6HR17	43.00	12 3/4 x7 1/4 x9 1/2			Wood	6			18 months
	Lincoln	6HR19P	47.00	14 1/2 x7 1/4 x9 1/2			Wood	6			18 months
	Lincoln	6HR19L	47.00	19 3/4 x5 3/8 x9 1/2			Wood	6			18 months
	Lincoln	6-11	19.50	9x7 1/4 x9 1/2			Wood	6			18 months
	Lincoln	6HR11	25.00	9x7 1/4 x9 1/2			Wood	6			18 months
	Lincoln	6HR11L	25.00	19 1/4 x3 3/4 x9 1/2			Wood	6			18 months
	Lincoln	6HR13	33.00	10 3/4 x7 1/4 x9 1/2			Wood	6			18 months
	Lincoln	6HR13L	33.00	19 3/4 x4 1/8 x9 1/2			Wood	6			18 months
Hobbs Storage Bat. Corp., Los Angeles, Calif.	Hobbs		18.00 up				Rubber and wood	2 up	50 and up	1 per pos. plate	None
Liberty Battery Co., 4241 Armitage Ave., Chicago, Ill.	Liberty Battery Co.	6–60					Hard rubber	6	60	5	18 months
	Liberty Battery Co.	6–80					Hard rubber	6	80	5	18 months
	Liberty Battery Co.	6–100					Hard rubber	6	100	5	18 months
	Liberty Battery Co.	6–120					Hard rubber	6	120	5	18 months
Marko Storage Battery Co., 1402 Atlantic Ave., Brooklyn, N. Y.	Marko	6W4	12.50	6 3/4 x7 1/4 x9	28		Wood	6	50	3 1/4	1 year
	Marko	6W6	16.00	9 3/8 x7 3/8 x9	41		Wood	6	80	6	1 year
	Marko	6W8	20.00	11x7 3/8 x9	50		Wood	6	110	8 1/2	1 year
	Marko	6W10	24.00	12 3/4 x7 3/8 x9	60		Wood	6	130	9 3/4	1 year
	Marko	6W12	28.00	14 1/2 x7 3/8 x9	70		Wood	6	150	11 1/4	1 year
	Marko	6W7	17.50	9 1/2 x6 1/4 x9 1/8	45		Rubberlith	6	90	6 1/4	1 year
	Marko	6W9	22.00	10 3/4 x6 1/4 x9 5/8	53		Rubberlith	6	120	9	1 year
National Lead Battery Co., 1704 Roblyn Ave., St. Paul, Minn.	National	65 TRF	12.50	7 1/4 x7 1/4 x8 1/16	30		Wood	6	50	2–3	18 months
	National	69 TRF	14.95	8x7 3/8 x8 1/16	44		Wood	6	100	2 1/2–4	18 months
	National	613 TRF	21.00	13 5/16 x7 1/4 x8 1/16	68		Wood	6	150	5–8	18 months
National Utility Battery Co., Mt. Prospect, Ill.	National Utility	W311R	20.90	9 1/2 x7 3/4 x8 1/2	48		Wood, Black or mahogany finish	6	100	10	2 years
Philadelphia Storage Battery Co., Phila., Pa.	Philco	SW42	2.00	2 3/4 x7 1/2	1	8	Glass Jar	2	12		1 year
	Philco	FR7	9.00	4 1/2 x8 1/2 x16	25		Glass Jar	2	120		1 year
	Philco	FR13	14.25	6 1/2 x8 1/2 x16	38		Glass Jar	2	240		1 year
	Philco	56-RW	14.50	6 7/16 x8 1/2 x16	28		Wood	6	60		1 year
	Philco	76-Rarx	24.00	9 7/16 x8 1/2 x16	45		Rubber	6	90		2 years
	Philco	96-Rarx	30.00	10 3/8 x7 5/16 x9 1/2	56		Rubber	6	120		2 years
	Philco	116-Rar	32.50	11 7/16 x7 5/16 x9 1/2	64		Rubber	6	150		2 years
	Philco	136-Rar	37.50	14 7/16 x7 5/16 x9 1/2	80		Wood	6	180		2 years
	Philco	UD-86	16.00	4 1/2 x10x6 1/4	20		Glass	6	30		1 year
	Philco	UD-44	8.00	2 1/16 x6 3/4 x6 1/2	8		Glass	4	15		1 year
Pioneer Home Light & Radio Co., Up. Sand.,O.	"Pioneer-A"	A-6		7 1/2 x9x9	46		Rubber	6	120	6 to 10	2 years
Prest-o-Lite Co., Inc., Indianapolis, Ind.	Prest-o-Lite	23MRR	4.75	2 5/16 x4 1/4 x6 1/2	6		Hard rubber	2	30	2	6 months
	Prest-o-Lite	69KPR	35.65	11 1/2 x7 5/16 x10 3/4	50		Wood	6	127	7	6 months
	Prest-o-Lite	69WHR	13.20	9 1/16 x7 5/16 x9	35		Wood	6	65	4	6 months
	Columbia	11WR	12.95	10 7/16 x7 5/16 x9	40		Wood	6	80	5	3 months
Re-Vi-Vo, Inc., N. Y. C.	Re-Vi-Vo	6-A	.65	6x2 1/2	1	15	Waterproof	16	12	1=16 hours	Money b'k
U. S. Light & Heat Corp., Niagara Falls, N. Y.	USL Radio	DXA-103	6.20	2 3/8 x7 5/16 x9 1/16	8		Hard rubber	2	30	2 1/2	Standard USL Guarantee
	USL Radio	1-CVX-5X	7.60	3 1/16 x7 5/16 x9 3/16	16		Hard rubber	2	93.5	7 1/2	
	USL Radio	DXA-303	14.00	5 1/8 x7 5/16 x9 1/2	20	8	Hard rubber	6	30	2 1/2	
	USL Radio	DXA-305	18.00	9 1/8 x6 3/4 x9 1/2	42		Hard rubber	6	75	4 1/2	Guarantee
	USL Radio	DXA-307	22.85	10 1/4 x6 3/4 x9 1/2	55		Hard rubber	6	105	6 3/4	Guarantee
	USL Radio	DXA-309	28.60	14 1/4 x7 1/8 x9 1/2	66	8	Hard rubber	6	140	9	Guarantee
Victor Storage Bat. Co., 1st Street and 4th Ave., Rock Island, Ill.	"SOS"	RM-9	16.00	8	43		Rubber	6	75	8	1 year
	"SOS"	RM-11	20.00	9 1/4	52		Rubber	6	100	10	1 year
	"SOS"	RM-13	23.50	10 1/2	63		Rubber	6	120	12	1 year
Western Cable & Light Co., Baldwin, Wisc.	Western Cable	600	6.70		45		Mahogany	6	60	5	
	Western Cable	601	8.95		58		Black wood	6	90	6	
	Western Cable	603	10.60		65		Black wood	6	108	6	
	Western Cable	605	13.00		75		Black wood	6	126	8	
	Western Cable	550	6.70		45		Mahogany	4	90	6	
	Western Cable	800	15.90		140		Glass Jar	6	110		
	Western Cable	801	18.10		147		Glass Jar	6	150		
	Western Cable	802	21.45		172		Glass Jar	6	180		
	Western Cable	803	24.93		190		Glass Jar	6	225		
	Western Cable	804	27.55		195		Glass Jar	6	270		
	Western Cable	602	9.70		55		Rubber case	6	90		
	Western Cable	604	11.55		60		Rubber case	6	108		
	Western Cable	700	10.70		58		Rubber case	6	90		
Westinghouse Union Battery Co., Swiss., Pa.	6-BRO-7	100290		7 3/8 x6 3/4 x8 7/8	26	4	Composition	6	60	5	90 days
	6-BRO-11	100339		10 3/8 x6 1/4 x9 1/4	40		Composition	6	100	8 1/2	90 days
Witherbee Storage Co., Inc., N. Y. C.	Witherbee	R6-110	24.00	10 1/4 x6 3/4 x9 1/4	46		Hard rubber	6	110	5	2 years
World Battery Co., 1219 S. Wabash Ave., Chicago, Ill.	World		12.25				Solid Rubber Container	6	100		
	World		14.25					6	120		
	World		15.00					6	140		

Key—V=Volts; S=Start; F=Finish; A.H.=Ampere Hour; M.A.=Milli-amperes.

"A" Batteries—Dry Cell

Name of Manufacturer and Address	Trade Name	Model Number	List Price	Overall Dimensions	Weight	Type of Container	Terminal Voltage	Voltage Taps
Burgess Battery Co., Chicago, Ill.	Burgess Burgess	6A 232 A	$0.50 .50	2½x6-Round 1⅜x7 Round	2 lb. 10 oz.	Cardboard Cardboard	1½ 4½	1½ 4½
Burns Boston Battery & Mfg. Works, Boston, Mass.	Addwater Addwater Addwater	No. 1 No. 6 No. 4 R	1.25 .75 2.50	2½x7½ 2½x6½ 4x8½	2½ lb. 2 lb. 8 lb.	Moisture Proof Moisture Proof Moisture Proof	1½ 1½ 1½	1½ 1½ 1½
Champion Carbon Mfg. Co., Cincinnati, Ohio	Ace	6A	.45	2½x6	2 lb.	Parafined Cardboard	1½	1½
French Battery & Carbon Co., Madison, Wisc.	Ray-o-Vac Ray-o-Vac Ray-o-Vac	1211 1212 1231	.45 1.10 1.80	2½x6⅜	2 lb. 2 lb. 2 lb.	Cardboard Cardboard Cardboard	1½ 1½ 1½	1½ 1½ 1½
Manhattan Electrical Supply Co., N. Y. C.	Red Seal Red Seal Red Seal Red Seal Red Seal	2445 2448 2434 2432 221	.80 .80 .80 .80 2.00	2½x6 2½x6 2½x6 2½x6 5½x2⅜x7½	2 lb. 2 lb. 2 lb. 2 lb. 5 lb.	Cardboard-Round Cardboard-Square Cardboard-Round Cardboard-Round Metal	1½ 1½ 1½ 1½ 1½	1½ 1½ 1½ 1½ 1½
National Carbon Co., N. Y. C.	Columbia	Ignitor	.40	2½x6	13 oz.	Cardboard	1½	1½
Stuart Products Corp., Chicago, Ill.	Stuart	5690	.60	2½x6	2 lb.	Cardboard-Round	1½	1½
Wireless Dry Cells, Limited, Niagara Falls, N. Y.	Maximite Maximite	Reliance A				Cardboard	1½ 1½	1½ 1½

"B" Batteries—Storage

Name of Manufacturer and Address	Trade Name	Model Number	List Price	Overall Dimensions	Weight, Lb.	Type of Container	Terminal Voltage	Milli-Ampere Hour Capacity	Normal Charging Rate	Period of Guarantee
American Battery Co., Chicago, Ill. See also "Power Units"	American & Powerwell	B B				Glass Glass	24 96	All Sizes		2 years 2 years
The Cleveland Eng. Labs. Co., Cleveland, Ohio	Storad Storad	4524 4548				Glass Cells Wood Rack	24 48			
Edison Storage Bat. Co., Orange, N. J.	Edison Radio B	18X 36X	$13.60 24.75	6½x4¾x7¾ 5¾x7 3/16x10	8¼ 16¼	Hard Rubber Hard Rubber	22½ 45	2000 2000	100 to 450 M.A. 100 to 450 M.A.	
Economic App. Co., Irwin, Pa.	Eaco		6.00	8½x3½x4	6½	Glass	30	250	10 M.A.	
Gen. Lead Batt. Co., Newark, N.J.	Titan	B-6000 48	17.50	12⅛x8x7⅞		Wood	48	6000	250 M.A.	4 years
Globe El. Co., Milwaukee, Wisc.	Globe	700	7.50		16	Glass	24	2500	S=¼ F=1-10a.	Uncond.
Gould Storage Battery Co., Inc., N. Y. C. See also "Power Units"	Gould	24 96	8.50 42.00	5½x6¾x3¼ 6½x8x18	7½	Rubber Wood	24 96	2000 2000	1/10 to ⅛ amp. 1/12 to ⅛ amp.	6 months 6 months
The Hartford Bat. Mfg. Co., Milldale, Conn.	Hartford Hartford	12W 24W	11.00 22.00			Rubber Rubber	24 48	4000 4000	250 M.A. 250 M.A.	18 months 18 months
Hazelett Storage Bat. Co., Cleveland, Ohio	Hazelett	B-41	19.50	13⅜x10x6⅞	24	Wood Box	96	2000	⅛ to ¼ amp.	1 year
Kimley Elec. Co., Buffalo, N. Y.	Kic-O Kic-O Kic-O Kic-O	PZ-100 PZ-130 PZ-70 PZ-45	27.50 36.00 21.50 16.00	11¼x13⅜x8	30	Oak Wood Oak Wood Oak Wood Oak Wood	100 130 70 45	2500 2500 2500 2500	150 M.A. 150 M.A. 150 M.A. 150 M.A.	3 months 3 months 3 months 3 months
Liberty Bat. Co., Chicago, Ill.	Liberty Bat. Co.	24	7.50			Glass Jars Rubber Case	24	2500	250 M.A.	2 years
Main Radio Bat., Inc., Cleveland, Ohio	Main Main	24 48	9.50 19.00	4⅜x13½x5 8⅛x13½x5	14 26	Hard Rubber Hard Rubber	24 48	4500 4500	500 M.A. 500 M.A.	Guar'teed Guar'teed
Marko Storage Bat. Co., Brooklyn, N. Y.	Marko Marko		9.95 19.25	6⅛x8⅛x7⅜ 8x12⅛x7⅜		Glass Cells Wood Container	24 48	4500 4500	250 M.A. 250 M.A.	1 year 1 year
National Utility Bat. Co., Mt. Prospect, Ill.	National Utility	Q242C	13.24	13¾x9½x6½	26	Wood	48	3000	500 M.A.	2 years
Philadelphia Storage Battery Co., Phila., Pa.	Philco Philco Philco	224RB DX248 DX272	6.90 20.00 27.50	10 3/16x3 3/16x2 1/16 11⅜x7½x6⅛	4½ 22 33	Rubber Wood Case Wood Case	24 48 72	3000 3000		1 year 2 years 2 years
Pioneer Home Light & Radio Co., Upper Sandusky, Ohio	Pioneer B-Jelo	A-6		7½x9x9	46	Rubber	24	5000	½ amp.	2 years
Prest-o-Lite Co., Inc., Ind.,Ind.	Prest-o-Lite	48LRR		19⅞x8x8⅞	45	Wood	48	4500	½ amp.	6 months
The Radio Ra-Bat Co., 1758 St. Clair Ave., Cleveland, Ohio	Ra-Bat Ra-Bat Ra-Bat Ra-Bat	B Unit Junior Senior Senior	.50 3.96 9.60 17.88	1½x4½ 2¾x7½x3¾ 4⅜x12x4⅞ 8⅜x12x4⅞		Glass Jar Wood Rack Wood Rack Wood Rack	2 24 24 48	1200 4200 4200		
Re-Vi-Vo Inc., N. Y. C.	Re-chargeable Dry-Cell	B B	3.00 6.00	3½x4½x6¾	4 7	Metal Metal	22½ 45		½ a. 15 hours ½ a. 15 hours	
Roberts B-Battery Co., 1120 Myrtle Ave., Brooklyn, N. Y.	Roberts Roberts Roberts	A B C D	21.50 24.50 27.50 31.00			Wood Rack Wood Rack Wood Rack Wood Rack	100 100 140 140	1250 1250 1250 1250	¼ amp. ¼ amp. ¼ amp. ¼ amp.	
Todd Electric Co., Inc., N. Y. C.	Todd	R-3 R-3	21.00 30.00			Glass Tubes Wood Rack	100 140	1250 1250	¼ amp. ¼ amp.	

("B" Batteries—Storage—Continued)

Name of Manufacturer and Address	Trade Name	Model Number	List Price	Overall Dimensions	Weight Lb.	Type of Container	Terminal Voltage	Mflli-Ampere Hour Capacity	Normal Charging Rate	Period of Guarantee
Universal Battery Co., 3410 S. La Salle St., Chicago, Ill.	Universal Universal Universal	RB-2 RB-24 RB-48	.60 8.00 15.00	1 $\frac{9}{16}$ round 8x5$\frac{1}{2}$x6$\frac{1}{2}$ 11$\frac{1}{2}$x7x6$\frac{1}{2}$	1 12 25	Glass Cell Steel Case	2 24 48			
U. S. Light & Heat Corp., Niagara Falls, N. Y.	USL Radio "B" Batteries	DXS-1202 DXS-2402 DXS-4802	8.75 17.00 34.00	8 $\frac{5}{16}$x6$\frac{3}{8}$x7$\frac{1}{2}$ 12 $\frac{5}{16}$x8 $\frac{5}{16}$x7$\frac{1}{2}$ 16$\frac{1}{2}$x12 $\frac{5}{16}$x7 $\frac{11}{16}$	13 26 55	Glass Cell and Wood Case	24 48 96	4500 4500 4500	$\frac{1}{4}$ amp. $\frac{1}{4}$ amp. $\frac{1}{4}$ amp.	Standard USL Guarantee
Vesta Battery Corp., Chicago, Ill.	Vesta-RB Vesta-RB Vesta-RC Vesta-RC	24-RB2 48-RB2 24-RC2 48-RC2	11.75 22.50 7.75 15.00	17x4$\frac{7}{8}$x8 17x9$\frac{1}{4}$x8 13x4$\frac{3}{8}$x6$\frac{1}{2}$ 13x8x6$\frac{1}{2}$		Wood Rack Wood Rack Wood Box Wood Box	24 48 24 48	5000 5000 2500 2500		Guar'teed Guar'teed Guar'teed Guar'teed
Western Cable & Light Co., Baldwin, Wis.	Western Cable Western Cable Western Cable Western Cable	6 10 14 16	.35 4.25 8.50 17.00	5x2 13x4$\frac{1}{2}$x5$\frac{3}{4}$ 13$\frac{3}{8}$x9$\frac{1}{2}$x6 13$\frac{3}{8}$x9$\frac{1}{2}$x18		Glass Jars in Wooden Tray Gl. Jars in Wood. Tray	2 24 48 96			
Westinghouse Union Battery Co., Swissvale, Pa.	24-RG-2	100292		7 $\frac{5}{16}$x5 $\frac{7}{16}$x4$\frac{3}{4}$	17$\frac{1}{2}$	Glass	24	3500	300 M.A.	90 days
Witherbee Storage Co., Inc., N. Y. C.	Witherbee	48	17.00	12$\frac{1}{2}$x8$\frac{1}{2}$x7$\frac{1}{2}$	32	Glass Cells Wood Case	48	5000	250 M.A.	2 years
World Bat. Co., Chicago, Ill.	World		3.50				24			

Key: M.A.=Milli-ampers; V=Volts; S=Start; F=Finish.

"B" Batteries—Dry Cell

Name of Manufacturer and Address	Trade Name	Model Number	List Price	Overall Dimension	Weight Lb. Oz.	Type of Containers	Terminal Voltage	Voltage Taps
Burgess Battery Co., Chicago, Ill.	Burgess "B"	4156	$1.50	3$\frac{3}{8}$x2x2$\frac{1}{2}$	1	Cardboard	22$\frac{1}{2}$	22$\frac{1}{2}$
	Burgess "B"	5156	1.75	2 $\frac{5}{16}$x4$\frac{1}{8}$x2$\frac{1}{4}$	1 9	Card. Parafined	22$\frac{1}{2}$	22$\frac{1}{2}$
	Burgess "B"	5158	1.75	2$\frac{1}{2}$x2$\frac{1}{2}$x6	2	Card. Parafined	22$\frac{1}{2}$	22$\frac{1}{2}$
	Burgess "B"	2158	2.00	4$\frac{1}{8}$x3$\frac{1}{2}$x7	5	Card. Parafined	22$\frac{1}{2}$	22$\frac{1}{2}$
	Burgess "B"	2156	2.00	6$\frac{1}{8}$x4x3	5	Card. Parafined	22$\frac{1}{2}$	16$\frac{1}{2}$+18+19$\frac{1}{2}$+22$\frac{1}{2}$
	Burgess "B"	5308	3.25	2$\frac{1}{2}$x4$\frac{1}{4}$x5$\frac{7}{8}$	3 4	Card. Parafined	45	22$\frac{1}{2}$+45
	Burgess "B"	2306	4.00	7$\frac{1}{2}$x6$\frac{1}{8}$x3	9 10	Card. Parafined	45	16$\frac{1}{2}$+18+19$\frac{1}{2}$+22$\frac{1}{2}$+45
	Burgess "B"	2308	4.00	3$\frac{1}{4}$x8 $\frac{7}{16}$x7	9 8	Card. Parafined	45	
Carbon Products Co., Lancaster, Ohio	Ace "B"	315	1.50	3$\frac{3}{8}$x2x2$\frac{1}{2}$	15	Fibre	22$\frac{1}{2}$	None
	Ace "B"	515	1.90	4 $\frac{1}{16}$x2 $\frac{9}{16}$x2$\frac{1}{2}$	1 7	Fibre	22$\frac{1}{2}$	None
	Ace "B"	115	2.00	6$\frac{1}{8}$x4x3	3 7	Fibre	45	16$\frac{1}{2}$+18+19$\frac{1}{2}$+22$\frac{1}{2}$
	Ace "B"	1301	3.75	8x6$\frac{1}{8}$x3	8 1	Fibre	22$\frac{1}{2}$	No
	Ace "B"	715	3.25	6$\frac{1}{8}$x3x4$\frac{1}{2}$	5 3	Fibre	22$\frac{1}{2}$	No
	Ace "B"	730	4.75	8^{3}x4 $\frac{7}{16}$x7 $\frac{7}{16}$	10 3	Fibre	45	22$\frac{1}{2}$+45
	Ace "B"	2151	1.75	3$\frac{1}{4}$x2$\frac{1}{8}$x5$\frac{1}{8}$		Fibre	22$\frac{1}{2}$	None
Champion Carbon Mfg. Co., Cincinnati, Ohio	Champion "B"	15Y	1.75	5x3x2$\frac{1}{2}$	1 14	Parafined Card.	22$\frac{1}{2}$	16$\frac{1}{2}$+18+19$\frac{1}{2}$+22$\frac{1}{2}$
	Champion "B"	30Y	3.50	6x5x2$\frac{1}{2}$	3 13	Parafined Card.	45	16$\frac{1}{2}$+18+19$\frac{1}{2}$+22$\frac{1}{2}$+45
	Champion "B"	15TY	1.75	3$\frac{1}{4}$x2$\frac{1}{8}$x5$\frac{1}{4}$	1 10	Parafined Card.	22$\frac{1}{2}$	22$\frac{1}{2}$
	Champion "B"	15X	2.00	6$\frac{1}{4}$x4x3	3 10	Parafined Card.	22$\frac{1}{2}$	16$\frac{1}{2}$+18+19$\frac{1}{2}$+22$\frac{1}{2}$
	Champion "B"	30X	3.75	8$\frac{1}{2}$x6$\frac{1}{8}$x3	6 14	Parafined Card.	45	16$\frac{1}{2}$+18+19$\frac{1}{2}$+22$\frac{1}{2}$+45
	Champion "B"	30TX	3.75	8x3$\frac{1}{4}$x7$\frac{1}{8}$	6 14	Parafined Card.	45	22$\frac{1}{2}$+45
Comet Battery Co., Cleveland, Ohio	Comet "B"	563	4.00	8x6$\frac{1}{2}$x3$\frac{1}{2}$		Cardboard	45	16$\frac{1}{2}$+18+19$\frac{1}{2}$+21+22$\frac{1}{2}$+24+25$\frac{1}{2}$+27
	Comet "B"	562	2.00	6$\frac{1}{2}$x4$\frac{1}{4}$x3$\frac{1}{2}$		Cardboard	22$\frac{1}{2}$	16$\frac{1}{2}$+18+19$\frac{1}{2}$+21+22$\frac{1}{2}$
	Comet "B"	570	1.90	4$\frac{1}{2}$x2$\frac{1}{2}$x3		Cardboard	22$\frac{1}{2}$	22$\frac{1}{2}$
	Comet "B"	560	1.75	4$\frac{1}{2}$x3x3		Cardboard	22$\frac{1}{2}$	16$\frac{1}{2}$+22$\frac{1}{2}$
	Comet "B"	559	1.50	3$\frac{1}{4}$x2x2$\frac{1}{2}$		Cardboard	22$\frac{1}{2}$	16$\frac{1}{2}$+22$\frac{1}{2}$
French Battery & Carbon Co., Madison, Wis.	Ray-o-Vac "B"		1.50	3 $\frac{7}{16}$x2$\frac{3}{8}$x2$\frac{1}{16}$	1	Cardboard	22$\frac{1}{2}$	None
	Ray-o-Vac "B"	5151BP	1.90	4$\frac{1}{2}$x2$\frac{1}{4}$x2 $\frac{1}{16}$	1 10	Cardboard	22$\frac{1}{2}$	None
	Ray-o-Vac "B"	1153	1.75	5$\frac{1}{2}$x3$\frac{1}{4}$x2$\frac{1}{8}$	2 6	Cardboard	22$\frac{1}{2}$	None
	Ray-o-Vac "B"	2151	2.00	6$\frac{1}{8}$x4 $\frac{1}{16}$x3 $\frac{1}{16}$	4 10	Cardboard	22$\frac{1}{2}$	16$\frac{1}{2}$+18+19$\frac{1}{2}$+21+22$\frac{1}{2}$
	Ray-o-Vac "B"	2153	2.00	7$\frac{1}{8}$x4$\frac{1}{2}$x3$\frac{1}{8}$	4 13	Cardboard	22$\frac{1}{2}$	None
	Ray-o-Vac "B"	2301	3.75	8$\frac{1}{8}$x6$\frac{1}{2}$x3$\frac{1}{2}$	9 2	Cardboard	45	16$\frac{1}{2}$+18+19$\frac{1}{2}$+21+22$\frac{1}{2}$+45
	Ray-o-Vac "B"	2303	3.75	8x7$\frac{1}{8}$x3$\frac{1}{2}$	9 6	Cardboard	45	22$\frac{1}{2}$+45
	Ray-o-Vac "B"	9151	2.50	6$\frac{1}{8}$x4$\frac{1}{2}$x4$\frac{1}{2}$	6 13	Cardboard	22$\frac{1}{2}$	16$\frac{1}{2}$+18+19$\frac{1}{2}$+21+22$\frac{1}{2}$
	Ray-o-Vac "B"	9303	4.75	8 $\frac{5}{16}$x4 $\frac{7}{16}$x7 $\frac{9}{16}$	14	Cardboard	45	22$\frac{1}{2}$+45
National Carbon Co., 30 East 42nd St., N. Y. C.	Eveready "B"	763	1.50	3$\frac{3}{4}$x2x2 $\frac{9}{16}$	13	Cardboard	22$\frac{1}{2}$	No
	Eveready "B"	768	1.90	4 $\frac{1}{16}$x2 $\frac{5}{16}$x2$\frac{1}{4}$	1 8	Cardboard	22$\frac{1}{2}$	No
	Eveready "B"	764	1.75	3$\frac{1}{2}$x2$\frac{1}{4}$x5$\frac{1}{8}$	2 8	Cardboard	22$\frac{1}{2}$	No
	Eveready "B"	766	2.00	6$\frac{1}{2}$x4$\frac{1}{8}$x3 $\frac{1}{16}$	5	Metal	22$\frac{1}{2}$	16$\frac{1}{2}$+18+19$\frac{1}{2}$+21+22$\frac{1}{2}$
	Eveready "B"	767	3.75	8x6$\frac{1}{2}$x3 $\frac{1}{16}$	8 11	Cardboard	45	16$\frac{1}{2}$+18+19$\frac{1}{2}$+21+22$\frac{1}{2}$+45
	Eveready "B"	772	3.75	8 $\frac{5}{16}$x3$\frac{1}{2}$x7$\frac{1}{8}$	9	Cardboard	45	22$\frac{1}{2}$+45
	Eveready "B"	770	4.75	8 $\frac{9}{16}$x4 $\frac{7}{16}$x7 $\frac{9}{16}$	13 12	Cardboard	45	22$\frac{1}{2}$+45
National Elect. Nov. Co., N.Y.C.	Nenco	522	3.75	3x6$\frac{1}{2}$x7$\frac{1}{8}$	10	Paper	45	16$\frac{1}{2}$+18+19$\frac{1}{2}$+21+22$\frac{1}{2}$+45
Stuart Products Corp., Chicago, Ill.	Stuart "B"	5671	1.50	3$\frac{3}{4}$x2$\frac{1}{4}$x2$\frac{3}{4}$	16	Cardboard	22$\frac{1}{2}$	No
	Stuart "B"	5672	1.90	4 $\frac{1}{16}$x2 $\frac{5}{16}$x2$\frac{1}{4}$	1 8	Cardboard	22$\frac{1}{2}$	No
	Stuart "B"	5680	4.00	8$\frac{1}{2}$x6$\frac{1}{8}$x3	9 4	Cardboard	45	16$\frac{1}{2}$+18+19$\frac{1}{2}$+21+22$\frac{1}{2}$+45
	Stuart "B"	5683	2.00	6$\frac{1}{8}$x4$\frac{1}{2}$x3	4 10	Cardboard	22$\frac{1}{2}$	16$\frac{1}{2}$+18+19$\frac{1}{2}$+21+22$\frac{1}{2}$+45
	Stuart "B"	5684	4.00	8 $\frac{5}{16}$x3$\frac{1}{2}$x7$\frac{1}{2}$	9 4	Cardboard	45	22$\frac{1}{2}$+45
	Stuart "B"	5687	1.75	3$\frac{1}{4}$x2$\frac{1}{8}$x5$\frac{1}{8}$	2 12	Cardboard	22$\frac{1}{2}$	No
The Usona Mfg. Co., Inc., 103 East 125th St., N. Y. C.	Kwik-Lite "B"	225	2.00	6$\frac{1}{2}$x4$\frac{1}{2}$x3	4 4	Cardboard	22$\frac{1}{2}$	16+18+19$\frac{1}{2}$+21+22$\frac{1}{2}$
	Kwik-Lite "B"	145	3.75	8$\frac{1}{8}$x2$\frac{1}{2}$x7$\frac{1}{2}$	7 10	Cardboard	45	16+18+19$\frac{1}{2}$+21+22$\frac{1}{2}$
	Wwik-Lite "B"	245	3.75	8$\frac{1}{2}$x6$\frac{1}{2}$x3	8 8	Cardboard	45	16+18+19$\frac{1}{2}$+21+22$\frac{1}{2}$
	Kwik-Lite "B"	345	4.75	8$\frac{1}{2}$x4x7$\frac{1}{2}$	12	Cardboard	45	16+18+19$\frac{1}{2}$+21+22$\frac{1}{2}$
	Kwik-Lite "B"	210	1.90	4x2$\frac{1}{2}$x2$\frac{1}{2}$	1 9	Cardboard	22$\frac{1}{2}$	No
	Kwik-Lite "B"	220	1.75	3$\frac{1}{4}$x2$\frac{1}{2}$x2$\frac{1}{2}$	2 4	Cardboard	22$\frac{1}{2}$	No
Wireless Dry Cells, Limited, Niagara Falls, N. Y.	Maximite	415				Cardboard	22$\frac{1}{2}$	None
	Maximite	115 T				Cardboard	22$\frac{1}{2}$	16$\frac{1}{2}$+18+19$\frac{1}{2}$+21+22$\frac{1}{2}$
	Maximite	130 T				Cardboard	45	16$\frac{1}{2}$+18+19$\frac{1}{2}$+21+22$\frac{1}{2}$+45
	Maximite	130 V				Cardboard	45	16$\frac{1}{2}$+22$\frac{1}{2}$+45
	Maximite	215 V				Cardboard	22$\frac{1}{2}$	16$\frac{1}{2}$+22$\frac{1}{2}$
	Maximite	330 T				Cardboard	45	16$\frac{1}{2}$+18+19$\frac{1}{2}$+21+22$\frac{1}{2}$+45
	Maximite	1430 V				Cardboard	45	22$\frac{1}{2}$+45
	Maximite	1415 T				Cardboard	45	16$\frac{1}{2}$+19$\frac{1}{2}$+22$\frac{1}{2}$+45

"C" Batteries—Dry Cell

Name of Manufacturer and Address	Trade Name	Model Number	List Price	Overall Dimensions	Weight	Type of Container	Terminal Voltage	Voltage Taps
Burgess Battery Co., Chicago, Ill.	Burgess Burgess Burgess	5360 2370 5540	$0.40 .60 .85	2 1/16 x 1 3/16 x 2 3/8 4x1 1/2 x3 4x2 1/2 x2 7/8	4 oz. 1 lb. 9 oz.	Parafined Cardboard Parafined Cardboard Parafined	4 1/2 4 1/2 7 1/2	1 1/2—3—4 1/2 1 1/2—3—4 1/2 1 1/2—3—4 1/2—6—7 1/2
Carbon Products Co., Lancaster, Ohio	Ace	013	.60	4x1 3/8 x3		Cardboard Parafined	4 1/2	4 1/2
Champion Carbon Mfg. Co., Cincinnati, Ohio	Champion	3X	.60	4x1 1/4 x3	14 oz.	Cardboard Parafined	4 1/2	1 1/2—3—4 1/2
Comet Battery Co., Cleveland, Ohio	Comet	565	.60	4x1 3/8 x3 1/4		Cardboard Parafined	4 1/2	3—4 1/2
French Battery Co., Madison, Wisc.	Ray-o-Vac		.60	4x1 1/2 x2 7/8	15 oz.	Cardboard Parafined	4 1/2	1 1/2—3—4 1/2
National Carbon Co., N. Y. C.	Eveready	771	.60	4x1 3/8 x3	14 oz.	Cardboard Parafined	4 1/2	1 1/2—3—4 1/2
Stuart Products Corp.	Stuart	5685	.60	4x1 1/4 x3	14 oz.	Cardboard Parafined	4 1/2	1 1/2—3—4 1/2
Usona Mfg. Co., Inc., N. Y. C.	Kwik-Lite	120	.60	4x1 3/8 x3	14 oz.	Cardboard Parafined	4 1/2	—3—4 1/2
Wireless Dry Cells, Limited, Niagara. Falls, N. Y.	Maximite Maximite	13-C 13-C				Cardboard Parafined Cardboard Parafined	4 1/2 4 1/2	1 1/2—3—4 1/2 —3—4 1/2

Battery Chargers

Name of Manufacturer and Address	Trade Name	Model Number	List Price	Overall Dimensions	Weight Lb.	Operates from D.C. or A.C. House Current	Maximum Charging Rate, Amps.	Maximum "B" Battery Charging Voltage	Current Consumed by Charger	Type of Charger
The Acme Elect. & Mfg. Co., Cleveland, Ohio	Acme Double Duty Radio Charger		$8.50 15.50 12.50 20.50	5x7x10 7 1/4 x8 1/2 x9 1/4 5x7x10 7 1/4 x8 1/2 x9 1/4	8 16 8 16	Both Both Both Both	2 1/2 6 2 1/2 6	No. No. 120 120	75W. 175W. 75W. 175W.	Bulb Bulb Bulb Bulb
Acme Eng. Co., Louisville, Ky.	Acme	B-23	12.00	6x5x5	17	A.C.	5	100	60W.	Bulb
Allen-Bradley Co., Milwaukee, Wisc.	Allen Bradley Allen Bradley L-2120 Allen Bradley L-2120	Size 2 Size 12 Size 12A	27.00 45.00 75.00	29x10 1/2 x4 20x10 1/2 x4 20x10 1/2 x4	11 31 75	D.C. D.C. D.C.	15 15 15	Line Volt Line Volt Line Volt		Graph. disc Rheo. Graph. disc Rheo. Graph. disc Rheo.
Apco Mfg. Co., Providence, R. I.	Apco Apco	77 88	18.50	6x5 6x5	6 6	A.C. A.C.	7 1/2	None	60W.	Vibrating Vibrating
The Butler Belle Elect. Co., Chicago, Ill.	"Butler Belle"		18.00	8x7x6 1/2	22	A.C.	7	48	60W.	Vibrating
Can'n West'hse. Co., Ltd., Hamilton, Ont. Ca.	Rectigon		24.85	12x14	11	A.C.	2	90	60W.	Bulb
The Electric Storage Battery Co., Phil., Pa.	Exide B-Battery Charger	14881	2.00	4x6	4	A.C.	1/2	96	75W.	Chemical
Fansteel Prods. Co., Inc., N. Chicago, Ill.	Balkite	H	19.50	6x6 3/8 x8 1/4	21	A.C.	2.8	6v.-m.	100W.	Electrolytic
Fore Elect. Mfg. Co., Inc., St. Louis, Mo.	Fore	Master Fore	18.50	6 1/2 x8 1/4 x7 1/2	18	A.C.	6	120-m.	75W.	Vibrating
Forest Elect. Co., Newark, N. J.	Unitron Unitron Unitron	1 1 2	130.00 155.00 220.00	13x10 3/8 x12 13x10 3/8 x12 15x15x15 1/2		A.C. A.C. A.C.	6 6 6	None None None	Dep. on Load Dep. on Load Dep. on Load	Bulb Bulb 2 Bulbs
The France Mfg. Co., Cleveland, Ohio	France France France	Super Model-A-B Model-6	22 00 20.00 16.00	6 1/2 x6 1/2 x9 9x5 7x5	15 7 3/4 7	A.C. A.C. A.C.	5–8 8 6	120 120	80W.	Vibrating Vibrating Vibrating
General Electric Co., Schenectady, N. Y.	Tungar Tungar	277153 219865	18.00 28.00	7 1/4 x7 1/2 x5 1/2 9 11/16 x7 5/16 x6 5/16	10 15	A.C. A.C.	2 5	96 48	70W. 160W.	Bulb Bulb
The Hobart Bros., Troy, Ohio	H B 8-home Charger	80 amp.	233.00	21x11x22	237	Any	100	Any	9-Amps.	Motor-Generator
Interstate Elect. Co., St. Louis, Mo.	Handy Handy	Ultra Simplex	18.00 16.00	8x7x6 1/2 8x7x6 1/2	11 17	A.C. A.C.	7 7	48 48	60W. 60W.	Vibrating Vibrating
King Electric Mfg. Co., Inc., Buffalo, N. Y.	Electron Junior Electron		18.00 29.00		12 19	A.C. A.C.	2 1/2 6	120 120	90W. 200W.	Bulb Bulb
Liberty Electric Corp., N. Y. C.	Full Wave Full Wave	A-B A	20.00 18.00			A.C. A.C.	4 8	100 None	60W. 80W.	Vibrating Vibrating
Amer. Battery Co., Chicago, Ill.	Powerwell Powerwell Powerwell	1 2 3	24.00 32.00 48.00							
Ohio Elect. & Controller Co., Cleveland, Ohio	Ohio Ohio Ohio Ohio Ohio		70.00 80.00 90.00 100.00 72.00	12x19 12x19	60 60	A.C. A.C. A.C. A.C. D.C.	18 25 18 25 18	None 160 None 160	160W. 250W. 160W. 250W. 160W.	Motor-Generator Motor-Generator Motor-Generator Motor-Generator Motor-Generator
Philadelphia Storage Battery Co., Phil., Pa.	Philco Philco	Double Single	15.00 9.75			A.C. A.C.	1 1/2	96 96		Chemical Chemical
Pioneer Home Light & Radio Co., Up. Sand., O.	Pioneer	200W	90.00	24x36x36	125	Gasoline Engine	10 at 20v.	40	Depends on Load	Gasoline Motor-Generator
The Radio Ra-Bat Co., Cleveland, Ohio	Ra-Bat Charger	Senior	4.80	4x6	4	A.C.	1/3	48	60W.	Chemical

(Battery Chargers, Continued)

Name of Manufacturer and Address	Trade Name	Model Number	List Price	Overall Dimensions	Weight Lb.	Operates from D.C. or A.C. House Current	Maximum Charging Rate	Maximum "B" Battery Charging Voltage	Current Consumed by Charges	Type of Charger
Roth Bros. & Co., Chicago, Ill.	Rothmotors Rothmotors Rothmotors Rothmotors	MBC-1 MBC-2 MBC-5 MBC-7½	250.00 350.00 700.00 845.00	25x13x25 28x23x33 58x22x26 64x27x27	275 375 900 1200	A.C. A.C. A.C. A.C.	80 150 350 500	None None None None		Motor-Generator Motor-Generator Motor-Generator Motor-Generator
Re-Vi-Vo Inc., N. Y. C.	Re-Vi-Vo		1.25	4x6	3	A.C.	½	90	100W.	Chemical
Universal Battery Co., Chicago, Ill.	Unitron Unitron	E-530 E-535	30.00 18.00		15 18	A.C. A.C.	5 2	90 90	96W. 48W.	Bulb Bulb
Valley E. Co., St. L., Mo.	Valley Battery Charger	ABC	18.50	6x6¾x7½	21	A.C.	6	96	100W.	Vibrating
Western Cable & Light Co., Baldwin, Wisc.	Western Cable Charger	10	1.25	4x6	3	A.C.	½	96	75W.	Chemical
Westinghouse Elect. & Mfg. Co., S. Bend, Ind.	Rectigon Rectigon	424501 376336	20.00 28.00	6x8x8⅜ 7x9x10	15 18	A.C. A.C.	2 5	96 48	75W. 150W.	Bulb Bulb

Key—W=Watts; A.C.=Alternating Current; D.C.=Direct Current.

Battery Eliminators

Name of Manufacturer and Address	Trade Name	Model Number	List Price	Overall Dimensions	Weight Lbs.	Operates from D. C. or A.C. House Current	Det. and Amp. Voltage Delivered	Normal Current Consumed	Number of Controls
Acme Eng. Co., Louis'le, Ky.	Acme Power Bee		$32.50	8½x7x4½	26	A.C. or D.C.	D-0-50 A-0-140v.	5 Watts	Two
The Amer. Bosch Magneto Corp., Springfield, Mass.	Nobattery Nobattery	BAN BDN	49.50 30.00			A.C. D.C.	D-15-50 A-90-150 D-15-50 A-90-150	15 Watts 10 Watts	One One
Apco Mfg. Co., Prov., R. I.	Apco	66	50.00	5x6½x12	16	A.C.	D-22-45 A-0-130v.	10W. per hour	One
Audiola Radio Co., Chic., Ill.	Audiola		34.50	8x9x4	11	A.C.	D-15-50 A-90-100v.	Depends on load	One
The Dubilier Condenser & Radio Corp., N. Y. C.	Super-Ducon Super-Ducon	800 801	47.50 30.00	8½x5½x10 6¾x6x10	16	A.C. D.C.	D-15-50 A-90 D-15-50 A-90	25 Watts 6-10 Watts	One One
Fansteel Prod. Co., Inc., North Chicago, Ill.	Balkite	B	55.00	6¼x7¼x9	19	A.C.	D-20-50 A-100-120	10 Watts	None
Foreign & Dom. Electrical Commod., Inc., N. Y. C.	Fordec		38.50			A.C.			Two
Kellogg Switchboard & Supply Co., Chicago, Ill.	Trans-B-Former		50.00			A.C.			
MacFadden & Co., Phil., Pa.	B.-Power Generator		35.00	8x8x8		A.C.			Two
Mu-Rad Lab., Inc., N. J.	Mu-Rad	B-Radicator	45.00	6x4½x10	12½	A.C.	D 30 A-90v.	10 Watts	None
Rader Appliance Co., West New York, N. J.	Run-A-Radio Run-A-Radio	A.C. D.C.	75.00 85.00			A.C. D.C.			
Radiogem Corp., N. Y. C.	A-B Power Unit		25.00			D.C.	D-22½ A-60-90		None
Timmons Radio Prods. Corp., Germantown, Pa.	Timmons B-Liminator		35.00	8½x7x3	8½	A.C.	D-22-45 A-45-130v.	15 Watts	Two
Valley Elect. Co., St. L., Mo.	Valley Eliminator	WEU	30.00	6x6¼x6	15	A.C.	D-22 A-90	15 Watts	Two

Key: W=Watts; A.C.=Alternating Current; D.C.=Direct Current; D=Detector Voltage: A=Amplifier Voltage.

Power Units

Name of Manufacturer and Address	Trade Name	Model Number	List Price	Overall Dimensions	Weight lb.	A.C. or D.C.	Type of Charger	Current Consumed	Type of Battery
American Battery Co., 2153 N. Racine Ave., Chicago, Ill. See also "B Batteries, Storage"	Power Well Power Well Power Well	No. 1 No. 2 No. 3	$24.00 32.00 48.00			A.C. A.C. A.C.	Chemical Chemical Chemical	60W. 60W. 60W.	Storage B-24v. Storage B-48v. Storage B-96v.
Edison Storage Battery Co., Orange, N. J. See also "A Batteries, Storage"	Edison "A" Edison "A" Edison "A" Edison "A" Edison "A"	5B-2R 5B-1R 3B-2R 2B-2R 1B-1R	$85.00 65.00 51.00 40.00 37.50			A.C. A.C. A.C. A.C. A.C.	Bulb Bulb Bulb Bulb Bulb		Edison-6v. Edison-6v. Edison-4, 5v. Edison-1.5v. Edison-1.5v.
Gould Storage Battery Co., 30 E. 42nd St., N. Y. C. See also "A Batteries, Storage" and "B Batteries, Storage"	Gould Unipower Battery Gould Unipower Battery Gould Unipower Battery Gould Unipower Battery Gould Unipower Battery Gould Unipower Battery Gould Unipower Battery Gould Unipower Battery Gould Unipower Battery Gould Unipower Battery Gould Unipower Battery Gould Unipower Battery Gould Unipower Battery Gould Unipower Battery	ACA-3 DCA-3 ACA-30 DCA-30 ACA-2S ACA-3S ACB-3E ACB-4E DCB-3E DCB-4E ACC-33E ACC-34E DCC-33E DCC-34E ACC-303E ACC-304E	45.00 40.00 60.00 55.00 36.00 45.00 80.00 85.00 75.00 80.00 130.00 135.00 110.00 115.00 140.00 145.00	7 5/16x15⅝x9¾ 7 5/16x15⅝x9¾ 7¾x21¼x9⅝ 13x15x9⅝ 15¼x17 5/16x8 15¼x17 5/16x8 15¼x17 5/16x8 15¼x17 5/16x8 14 5/16x25 1/16x11⅝ 15¼x25 1/16x11⅝ 14 1/16x23 5/16x11⅝ 14 1/16x23 5/16x11⅝ 17 1/16x26x12 17 1/16x26x12	50 40 75 65 50 50 55 70 50 60 115 122 95 95 150 160	A.C. D.C. A.C. D.C. A.C. A.C. A.C. A.C. D.C. D.C. A.C. A.C. D.C. D.C. A.C. A.C.	Electrolytic Resistance Electrolytic Resistance Electrolytic Electrolytic Electrolytic Electrolytic Resistance Resistance Electrolytic Electrolytic Resistance Resistance Electrolytic Electrolytic	66W. 250W. 120W. 500W. 66W. 66W. 25W. 30W. 25W. 30W. 99W. 99W. 250W. 250W. 150W. 120W.	Storage A-6v. 60A.H. Storage A-6v. 60A.H. Storage A-6v. 120A.H. Storage A6-v. 120A.H. Storage A6-v. 60A.H. Storage A-6v. 60A.H. Storage B-96v. Storage B-120v. Storage B-96v. Storgae B-120v. B-96v. A-6v.-60A.H. B-96v. A-6v.-60A.H. B-96v. A-6v.-60A.H. B-96v. A-6v.-60A.H. B-96v. A-6v.-96A.H. A-6v.-120A.H. B-120v.

Key: W=Watts; A.C.=Alternating Current; D.C.=Direct Current; A.H.=Ampere Hour.

"The Gyp Must Go!"

"Radio Retailing's" Readers Unanimous in the Opinion That Trade Evils Must be Eliminated

How They Operate in Philadelphia

Editor, *Radio Retailing:*

The Philadelphia gyps have it over most of your current samples. Here's the way they get 'em: Procure a lot of defective standard goods, say R.C.A. tubes, and if they are not sufficiently defective, make them so. Advertise as genuine brand new stuff. Sucker comes in, buys, and goes home singing. Back next day, tubes no good. Tubes exchanged for "worser" ones. Again goes home singing. Now if victim has nerve enough to come back, he can easily be sold the real thing at regular price, or a tube that works at lower cost. Defective tube goes out again to next customer for a similar run.

They advertise standard horns at less than cost, and then say, "All sold," when you get there. "But they were not good anyway, here's a real horn," etc. One fellow told me they had to do it, or close up, "competition is so fierce." Then he excused it by saying, "They deserve it all; the public wants things for nothing." If there's no other way of landing these gyps, Pennsylvania has a law providing a heavy fine and jail for misleading advertising.

Berwyn, Pa. PADRAIC LAGAN.

Dealer Co-operation Is Greatest Need

Editor, *Radio Retailing:*

To answer the question, "What is a gyp?" seems to me a very difficult problem. Ask the question of most any radio dealer in California and he will tell you his biggest competitor is such. There seems to be little organization and no co-operation among the present day radio dealers.

Some time ago I attended a meeting, fathered by the radio dealers of a certain city, who wished to organize against the possibility of their city becoming infested with the price-cutting methods of a neighboring city. They all agreed that business was none too good and certainly they had a terrible menace to fear in one lone dealer who had put on a sale to raise money for the already overdue month's rent.

But the conversation led from one thing to another, finally one dealer accused another of taking his best customer away from him. This customer turned out to be a "neighborhood set builder," built sets for all his friends and their friends just for friendship's sake. He was a good customer, buying a couple of hundred dollars' worth of merchandise a month, so one dealer offered him a discount and still another a larger discount, and another still a larger discount. This is only one illustration. This problem can be solved by getting to the bottom and facing the facts. Get together. Know one another. I have met some mighty fine men in the radio business.

I believe the manufacturers are doing their part, and the jobbers are doing their part and that it is up to the dealers to quit "gyping," to learn the meaning of brotherhood, fair play and how to be an honest competitor. Individually stand for what you know to be upright and fair. If the other fellow falls, still be what you know you should, trusting the buying public. By so doing the dealers' influence will bring back the weaker ones, eventually establishing the radio business upon a sound, dignified basis.

H. O. STANTON,
121 So. Central Ave.
Glendale, California.

Manufacturers to Blame for Cut Prices

Editor, *Radio Retailing:*

The reason for the existence of the "cut rater" has its foundation among the manufacturers themselves. They have learned their advertising methods from the manufacturer. They have been misled and it is only natural for them to follow the same lines as are followed by those who sold the merchandise to them.

The radio industry must realize that every set on the market is not the "best set in the world," and they must also realize that the public is coming to the point where it discounts all of the claims made by the manufacturers in their advertising. Why not let it be said of a set that it is good, and not the best? The advertiser immediately puts himself on the defensive when he makes extravagant claims for his merchandise.

The familiar lines, "gets the coast every night," "three thousand miles on the horn" and a host of like phrases are familiar to all of us, and when the buyer finds that he is unable to achieve such results he questions the quality of the merchandise. The advertising has fallen short of its aim—just some more money thrown away. The automobile industry went through the period of superlatives and found that it did not pay, and now the superlative is seldom, if ever, seen in automotive advertising.

It would be unwise for the manufacturer to start prosecution of the "gyp" retailer when the shirts of the manufacturer are none too clean. The aim should be to allow a fair margin of profit to the channels of distribution and guarantee the quality of the product when it arrives in the hands of the buyer.

The margin of profit should permit the dealer to give a reasonable service guarantee to the purchaser, and not leave the impression on the buyer that everything is at his risk. Make it possible for the dealer to back up the quality standard of all merchandise. Certainly the time has arrived when service is to become one of the important elements of the retail trade.

It is not every buyer who can purchase a receiving set and loudspeaker with all of the accessories, take it home and put it into immediate and satisfactory operation. This often requires more than a passing knowledge of radio, and your merchandise does not have an opportunity to live up to the claims you have made for it.

We are glad *Radio Retailing* has taken up the matter of the "gyp" and we feel sure that much can be done for radio in general if all radio advertising comes down to a sound basis of truth.

EDWARD H. JEWETT,
President, Jewett Radio and Phonograph Company.
Detroit, Mich.

Cut Off Supply Is One Solution

Editor, *Radio Retailing:*

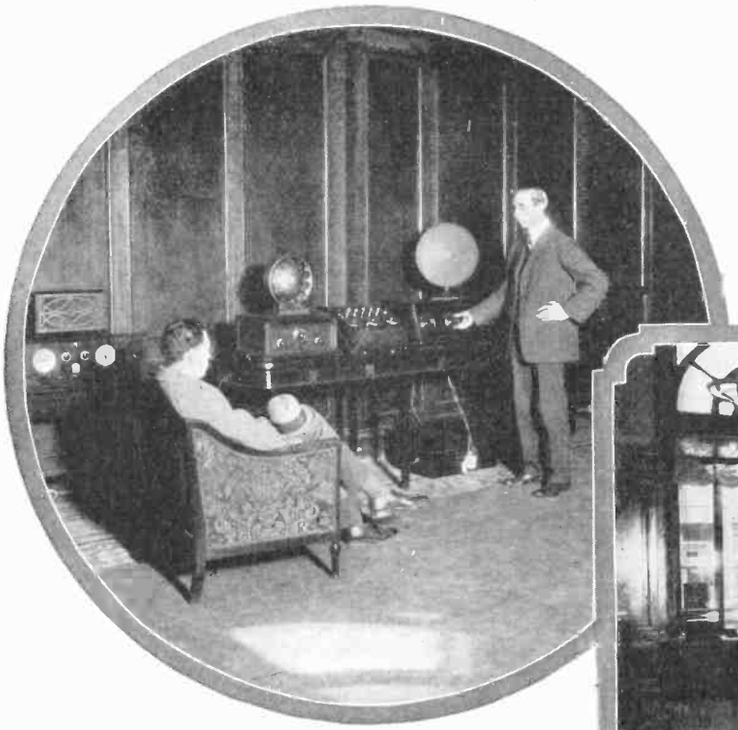
When we find our "Amplion" loudspeaker being sold at cut prices, we have a way of knowing the source of supply, and we cut off that source of supply as soon as we find it out. We know of no better way of controlling this class of trade. If every manufacturer would immediately cut off shipments to jobbers who quote discounts below the established discount, and if the jobber is also obliged to stop supplying our loudspeaker to dealers who cut prices, we believe that this situation could very soon be remedied.

If the manufacturers would get together and take a stand along these lines, we think the "gyp" situation would very soon be cleared up.

The chief trouble at the bottom of this situation is the desire on the part of some manufacturers to make a lot of money by selling as much goods as possible, whereas our policy is to sell our product only to a good class of trade which will maintain prices.

AMPLION CORPORATION OF AMERICA,
S. B. Trainer,
President.

Reaching Out After Fifth Avenue Trade



A Store of the Type That Attracts Women Buyers

In *Radio Retailing's* gallery of radio shops de luxe, a place well up front should be reserved for this new radio store recently opened in the Waldorf-Astoria Hotel, Fifth Avenue and Thirty-fourth Street, New York City. The store is noted for its quiet and well-appointed display. After listening to a demonstration in such solid comfort, can you blame the customer for signing on the dotted line?

At the right is a view of the main showroom and window, looking out on crowded Thirty-fourth Street. The long table at the right holds a line-up of four sets, wired to a uni-power system, and may be demonstrated in rotation by simply throwing a switch. A better view of the table is seen above.

George E. Brightson, president of the company which operates the Waldorf radio shop, was founder and president of the Sonora Phonograph Company, and is a firm proponent of the belief that there is a great market for better radio merchandise among the well-to-do, who can be sold if the sets are displayed in a way which will appeal to them. In the photo at the left, a corner of a writing desk may be seen at the extreme left, for use of the patrons.

Mrs. Edmund J. Brewster, who for eight years had charge of a phonograph salon on Fifth Avenue, is at the head of the retail radio department. Evidences of the "feminine touch" are the ferns and the mirror, where "milady" may powder her nose if she thinks a radio demonstration has made it too shiny. In the back ground is the entrance to the main lobby of the Waldorf-Astoria.

What a Customer Thinks About

When He Comes in to Buy a Radio

How You Can Analyze the Purchasing Motives and the Requirements in the Customer's Mind — As Pointed Out in the New Radio Salesmanship Course Prepared for the "DeForest Radio Institute"

By the Business Training Corporation
New York City

THE typical radio prospect of today, including broadcast-listeners or "B C L's" as well as "heathen," is much more interested in what a receiving set can bring than in how it works. What can it bring?

When we answer that question, we shall know more definitely what facts to use and what motives to appeal to in order to build up the prospect's interest to the point where it turns into real buying desire.

Music Makes Strongest Appeal

1. *Music For Every Taste.* Undoubtedly the strongest popular appeal in broadcasting programs is made by music. The musical selections available from the various stations now range from popular ditties up through the best grades of modern dance music to the singing of grand opera stars and to the great masterpieces played by world-famous orchestras. There is sufficient variety here for all kinds of musical taste. Don't overlook the fact that love of music, counting in all forms of music, is almost universal; that the average home, even though there may be a silent piano standing in one corner, enjoys very little music; and that through the radio the best and the latest in music are daily at the owner's command.

2. *Amusement.* Next to music in popularity come the various other forms of entertainment, vaudeville skits, monologues, readings of plays, bedtime stories and so on through a long list. Bringing entertainment into the home helps to make it a place of peace and joy. The radio is the first great invention of the last twenty-five years to make the average home more attractive to stay in. To many a harassed father or mother the most powerful sales argument you can present is the simple truth that radio keeps the young people at home—and for that matter, the parents as well.

3. *Education.* Great numbers of educational talks and lectures on all kinds of topics are daily sent out. The busy housewife can listen, as she goes about her tasks, to practical talks on domestic science; the farmer can "sit in" while agricultural experts discuss methods of raising larger crops and making more money on the farm; the business man can hear authoritative treatments of economic questions; the man or woman who wants a wider culture can "attend" scholarly lectures on history, art, current topics, and many other subjects. New York University Air College one of the pioneers in this field, conducts examinations based on its lecture courses and grants credits; and more and more, other institutions are adopting the same practice.

4. *News.* The daily reports of stock and produce markets and announcements of other news are well-known features of a number of broadcasting stations. They are especially useful and attractive to residents in small towns and in the country where daily newspapers are not immediately to be had. It is difficult to see how an up-to-date farmer can reconcile himself to getting along without prompt crop reports and other news which is of so much interest and value to him.

5. *Broader Contacts.* The radio opens up to millions of people an opportunity to enrich their lives by keeping in touch with the currents of thought and affairs in the great outside world. This applies not only to "shut-ins" in the narrow sense—that is, old people and invalids—but to all who feel themselves confined to a humdrum existence. Relatively few people are ready to admit, at any rate to a stranger, that they have that feeling; yet it is beyond doubt very common, and it is one of the strongest motives to buy a radio set.

6. *Satisfaction of Curiosity.* A great many people have read and heard much about radio but have never made even the slight effort required to look into the advisability of purchasing a receiving set. This does not necessarily mean that they lack curiosity. It means only that they are by nature passive—that they prefer to sit still waiting for some person or some chance event to demonstrate this new marvel to them. An offer to tell them about it and to show them what it can do would bring an instant favorable response.

Making Use of Buying Motives

These six benefits from the ownership of a good receiving set—(1) music for every taste, (2) other entertainment, (3) education, (4) news, (5) broader contacts and (6) satisfaction of curiosity—constitute *the actual motives* that will lead most prospects eventually to buy a radio set. How many radio salesmen are today making effective appeals to these motives? The number is surprisingly small.

In the preparation of this course scores of radio stores and departments—enough to get a cross-section of retail sales practice at the present time—have been visited. In only three cases did the salesman make any effort whatever to "sell radio" to a prospect who was obviously uncertain as to whether he should buy any receiving set. And in only one case was an effective sales appeal made to the average prospect's true motives.

This record speaks for itself. It leaves no room for doubt that a change from the line of selling talk which has been customary and effective in the past is called for. To give

"Capitalizing the Customer's Requirements"

The accompanying article is taken with the permission of the DeForest Radio Institute, 347 Madison Ave., New York City, from the first chapter of the latter's new text-book for radio dealers. The complete text-book, which is copyrighted, is made up of chapters with headings as follows:

I. Capitalizing the Customer's Requirements.
II. Selling Radio Satisfaction.
III. Taking Care of the Customer.
IV. Handling the Customer's Questions.
V. Closing More Sales.
VI. Reaching Out for Customers.

just one specific example, the constant insistence upon *distance* as a prime sales argument needs to be coupled for the present-day prospect with an equally strong argument based on *fidelity of reproduction*. The salesmen who adapt themselves most quickly to the new type of prospect will be the ones to reap the largest harvest of increased sales.

We will come back later in this course to a more specific treatment of selling methods. In this chapter we still have to consider what kind of a receiving set will best meet the average prospect's requirements and give him full satisfaction.

Basic Requirements

Every radio-buyer, no matter to which of the four classes of prospects he belongs, makes certain basic demands of his receiving set. First, it must have a high degree of *sensitivity*.

Second, the multiplication of broadcasting stations has intensified the demand for high *selectivity*. The problem of tuning in with precision on a given wave length and tuning out all other waves is especially difficult, as we all know, in cities and under certain other conditions to be discussed in the next chapter. But it is everywhere a vital problem. This second requirement is one of growing importance.

The third basic requirement is *good volume of sound*. Ear-phones which were once universal are today replaced to a large extent by loud-speakers. Prospects usually demand the reproduction of sound, even from distant stations, on a loud speaker.

Convenience of Installation

We have called these three requirements "basic" because they must be met in order to make a receiving set satisfactory to a prospect of any type. They are essential, therefore, in any modern set; but they are by no means the only essentials. The typical prospect of the third and fourth classes imposes six additional requirements. And unless a set complies with all of them, it is not suitable for the great new radio market which is just opening up.

The fourth requirement of our typical present-day prospect is *convenience of installation*. Remember that he—or she, for more and more radio-buyers are women—is far from being an electrical or radio expert; in most cases he is not even "handy" with tools. Putting up an antenna or making the simplest wiring connections may look to him like a mountainous task. Possibly the dealer reassures him by offering to take care of the expense and bother of the installation. But that still leaves him disliking the idea of having his receiving set permanently set up in one spot and being unable to move it about as he might move a phonograph. As the circle of radio-buyers widens and includes a larger proportion of professional and commercial people and of women, the importance of this factor steadily grows.

For much the same reasons the fifth requirement, *ease in tuning in*, is becoming more and more important. The typical user wants simple, easily-explained and easily-handled dials, not requiring excessive delicacy of touch and patience in order to get good distance and selectivity. He wants to be able to "log" his dials and be sure of getting the same station at approximately the same settings under all normal conditions.

Sixth, comes *reliability of performance*. The buyers who have predominated (of the first and second classes—the "bugs" and the "fans") have been willing to study their sets closely and to make their own repairs and adjustments. But the newer type of buyer requires that his set be fool-proof. Since this ideal is not literally attainable, he demands at least sufficient local service to correct his own errors of carelessness. Here is a problem that can be solved only by the joint efforts of the manufacturer, jobber, dealer, and salesman. It is of no use to throw the task of keeping his set in good working order back on the buyer's head; for he will not accept it, and the customer is king.

Economy of Operation

The seventh requirement is *economy of operation*. The general impression among radio-buyers is that there will be almost no expense of maintenance; and within reason this is quite correct. The buyer is justified in expecting only a small outgo

Find out what's in the customer's mind when he comes into your store to buy a radio set. Invariably he wants one of six things:

(1) He has a desire to hear music, either popular or classical, or——

(2) He wants entertainment and amusement, or——

(3) He wants to listen in on lectures and other educational programs, or——

(4) He is interested in last minute news, stock quotations or market prices, or——

(5) He wants to keep himself or some "shut-in" in touch with the world's activities, or——

(6) He may be simply satisfying his curiosity about radio in general.

for charging and replacing batteries and for necessary replacements of tubes and other parts.

Eighth on the list is *pleasing appearance.* For many women buyers this is one of the most important characteristics of all. The radio set is no longer relegated to the attic or work room. It occupies its place of honor in the living room and must harmonize with its surroundings. The batteries and all parts of the set must be out of sight. The casing must be attractive, compact, and in good taste.

Final Requirement Is Fidelity of Reproduction

The final requirement is *fidelity of reproduction* of every shading of musical tone and every inflection of speech. This was not so essential when most owners were interested in radio for its own sake. The new buyers, however, are chiefly concerned with the pleasure of hearing fine music and the living voices of famous singers and speakers. When conditions are favorable to reception, they demand exact reproduction and pure tones.

Fidelity of reproduction involves not only freedom from interfering noises, but ability to get those finer shadings that give beauty to music and character to the speaking voice. When a great orchestra sends its myriad-toned music through the ether, the receiving set, if it is to give entire satisfaction, must bring to the listener not only the blare of the wind instruments and the deep notes of the bass viols, but also the sweeter and more delicate tones of violins, all mingled in harmony and yet each one clearly distinguishable, just as if he were seated in the concert hall.

Getting the Customer's Point of View

These nine requirements—(1) sensitivity, (2) selectivity, (3) good volume of sound, (4) convenience of installation, (5) ease in tuning in, (6) reliability of performance, (7) economy of operation, (8) pleasing appearance and, (9) fidelity of reproduction—have been outlined without attempting at this time to discuss receiving instruments. They constitute, we believe, a complete list of the specifications to which a modern receiving set that is to be widely salable and thoroughly satisfactory should conform. We will see later to what degree different types of sets meet these requirements.

Note that we speak here of "specifications" not in the customary sense of a description of the physical make-up of a set, but in the sense of a statement of the *performance* which the customer desires and expects. From the customer's viewpoint the results that he can get are the all-important factors in securing his order and his good will.

Tying Up with Western Union Window Displays

Usually, the Western Union Telegraph offices are in the best of locations. The Chandler and Farquhar Company, of Boston, recently co-operated with a local WU branch by loaning it a display of sets and speakers for its windows, tying up with the idea of sending radio applause by telegraph. Chandler and Farquhar were, of course, prominently mentioned in the display.

What I Would Do If I Were a Radio Dealer

By Alex Eisemann

(Continued from Page 353)

that are forever changing cannot be given national prestige because they cannot be backed by national advertising long enough to put them over.

The most important thing therefore is that the manufacturer should have a policy—a policy that is sustained by the distributor and by the retailer so that the consumer comes to understand and have confidence in it. To keep in intimate touch with the policy, although I might be buying every bit of goods through the distributor, none the less I would maintain a contact with the manufacturer also, because distributors sometimes are not the true mouthpiece of the manufacturers.

Would Sell a Secondary Line of Merchandise

If I were a new dealer just entering the radio field, I would like to be starting up as an already established merchant in some other line, because the hardware store, the music store or the electric store has a better opportunity than the exclusive radio dealer, because he has a broader line. I would certainly organize to do a time payment business. It cannot be avoided because the modern householder desires to buy that way. I would also meet the demand to trade in old sets because it will be forced upon the dealer by the mere fact that it is the standard practice in so many lines of home equipment. But to protect myself, I would sell a line with a national reputation that would have a good second hand value.

Would Buy from a Jobber With a Consistent Policy

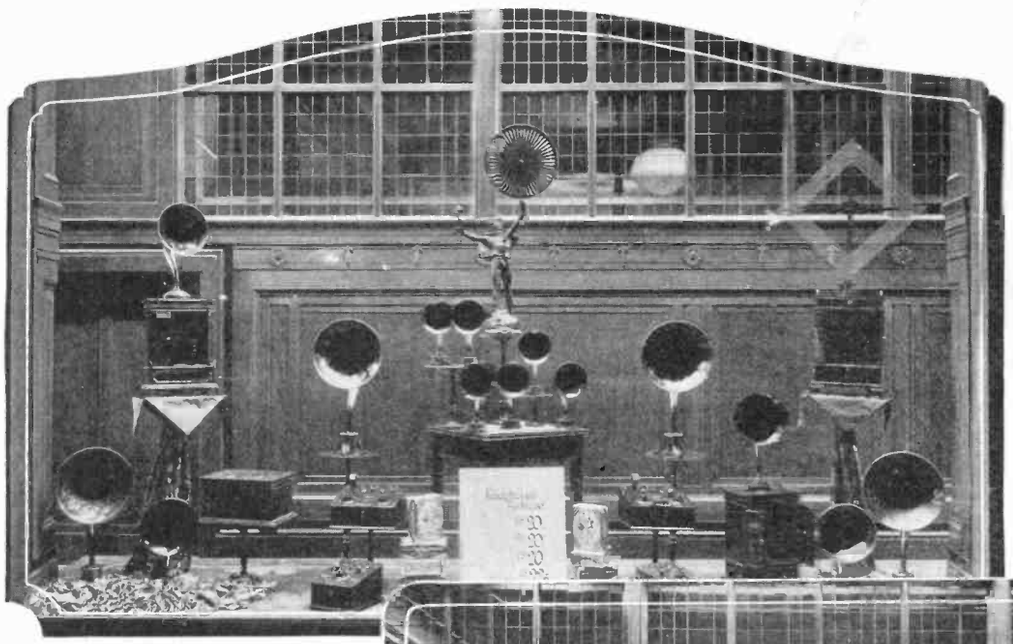
What kind of a distributor would I prefer to buy from? I don't think it makes much difference—a radio jobber, a music jobber, an electrical, hardware or drug jobber *with a policy* that ties him up to the manufacturer, and the retailer of the line is better than any one of them *without a policy.* I would rather sell a line that is less well known, provided that it is backed consistently with a well defined policy than a more popular line where the policies of the house keep changing which would result in confusion in the consumer's mind, as well as within the trade itself.

From a Reader in London—

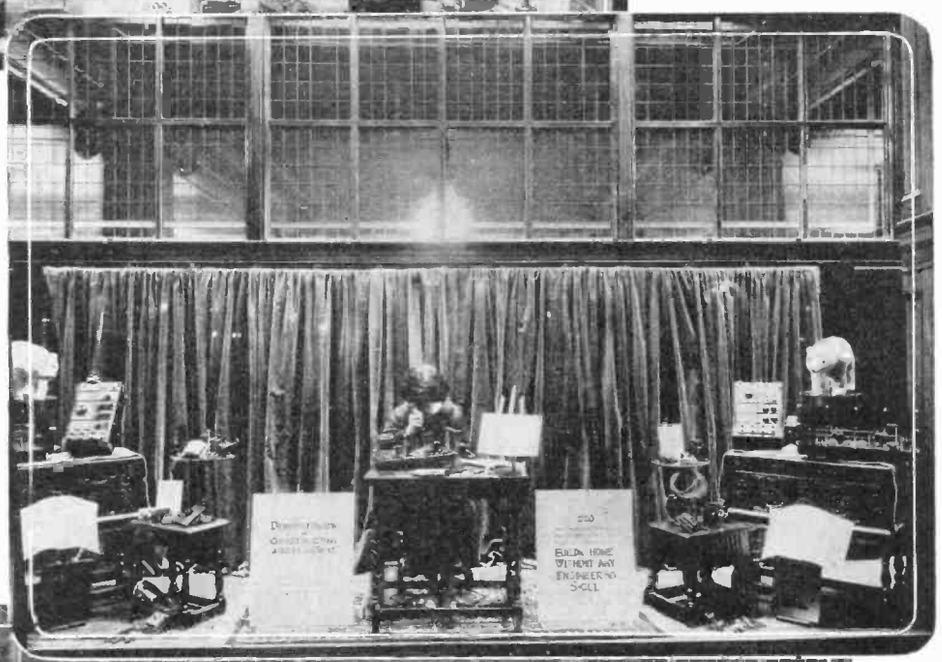
Three Window Displays and a Letter from Selfridge's

Editor, *Radio Retailing*:

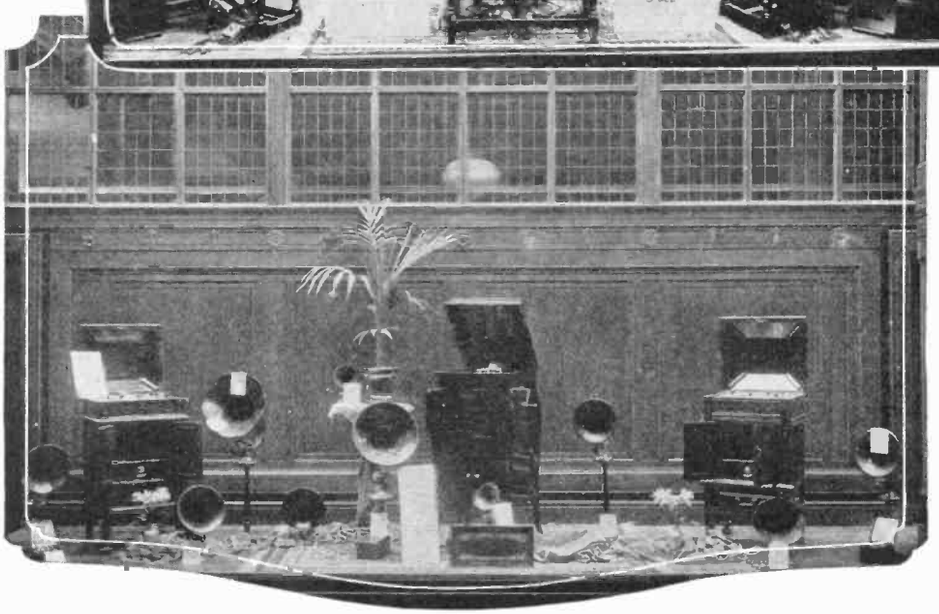
We subscribe to and have read with great interest the first numbers of your very interesting publication. It may interest your readers to see something of what is being done in this country, with a view to pushing sales of radio apparatus. We therefore have the pleasure of sending you the accompanying photographs, showing the displays which have been made in our windows during the past month.



The loudspeaker window (above) contains products manufactured by the British Thomson-Houston Company of Rugby. An interesting point is the table lamp loudspeaker, shown in the center of the picture.



Picture No. 2 (right) shows a large window containing a demonstrator actually making up circuits, which were published in the morning edition of the *Daily Express*. The system used was the Polar Blok, manufactured by the Radio Communication Company.



The third photograph (right) shows another window also demonstrating the products of British manufacturers.

We trust that this information will be of interest to your readers, and if there is anything further that you might care to have, we shall be only too pleased to send it on to you.

SELFRIDGE & CO., LTD.
Alfred Wragge
London, England

The Aladdin of Radio Sales

SELL the radio set that makes a real profit with the least sales effort—that's Thermiodyne. Just as Aladdin rubbed his lamp to command its magic powers, just so the dealer demonstrates Thermiodyne's command of the air—by a one-hand turn of Thermiodyne's Master Control.

Ask your prospective customer to give you, from your newspaper program, the wavelength of a wanted station that is on the air. With one turn of Thermiodyne's Master Control to that wavelength, you bring in that station—*instantly!* Calibrated in wavelengths, hence no fishing—no logging. And no squeals—no howls. As for DX—

Thermiodyne is guaranteed to bring in any station that it is possible to get—and in loud speaker volume.

Demonstrate Thermiodyne's Easy Mastery of Radio Channels—Reap the Profits of Thermiodyne's Easy Mastery of Radio Sales.

Thermiodyne

TF6

Reg. U. S. Pat. Off. [Ther-MŸ-odyne]

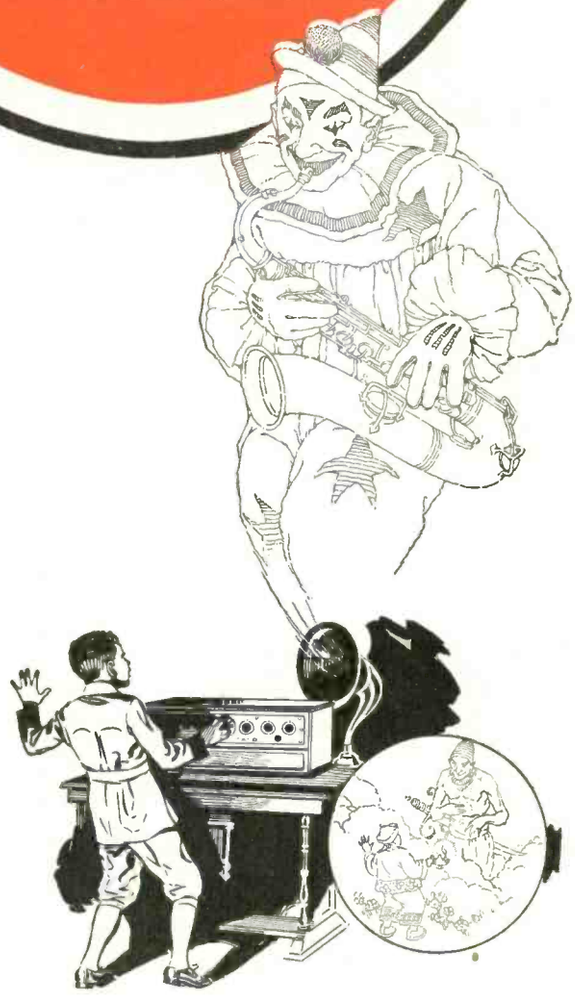
Licensed under Trube and other patents pending

ALADDIN ADVERTISING *"Brings In" Radio Prospects* TO YOUR STORE

Price $150

Without Accessories (any accessories may be used.)

Every THERMIODYNE unconditionally guaranteed



THE Aladdin wonder of Thermiodyne's Master Control is told with continuity to 40,000,000 periodical and newspaper readers—full pages in Saturday Evening Post and big space in leading city and town newspapers. And we furnish — effective dealer's newspaper advertising service and complete dealer's store service helps.

Readers of Aladdin Advertising Come to You "Strong" for Aladdin

Thermiodyne sales are easy because Thermiodyne advertising creates Thermiodyne pre-sales favor. Five-minute demonstration tells the story, irons out resistance, closes the sale.

No other set like it for for quick sales, fast turnover and handsome profit. Ask your jobber—or write us —about franchise to sell the most remarkable receiving set on the market.

THERMIODYNE RADIO CORPORATION

Executive and Sales Office: New York City

Gotham National Bank Building, 1819 Broadway
Works and Plants:

PLATTSBURGH, NEW YORK

Canadian Sales Offices: Dominian Thermiodyne Radio Corp., Ltd., 427 Phillips Place, Montreal, Quebec

Thermiodyne TF6

Reg. U. S. Pat. Off. [Ther-MŸ-odyne]

Licensed under Trube and other patents pending

The Editors Have

The Outside Salesman Is Bringing Home the Radio Bacon

RADIO today is being sold by the dealer who goes out after sales. This is the fact that stands out from interviews with a large number of dealers and jobbers handling radio in seven cities recently visited by an associate editor of *Radio Retailing*. In these representative cities of from 20,000 to 350,000 population, it is especially striking that the dealers with the best location, highest advertising appropriation, greatest store traffic and long established clientele are not depending on these advantages for their radio business.

Among the most aggressive firms selling radio today through an outside selling force are just these big concerns, department stores, music stores, large electrical dealers who receive a volume of business from store sales alone; but the sales records of these firms show that it is the *outside men* who are keeping their radio volume up.

Something Coming Out of the Smoke

OUT of the tumult that marked the early boom days of radio, now come some fundamental economic principles to take their guiding place in this as in all other industries. For one thing men are beginning to realize that the relationship between manufacturer, wholesaler and retailer must rest comfortably on a helpful mutual service.

Also we shall see, as the clock ticks on, that manufacturers more and more will recognize the right of the jobber and dealer to protection in exclusive territories. And in return for this and a guarantee of adequate supply, the retailer will specialize in the upbuilding of prestige for that line and the creation of local demand, while the distributor contributes support and service to the store.

Don't Worry About Two Businesses

THE dealer who ignores his competition can beat that competition in almost every instance. A recent analysis of conditions in the Middle West has proved conclusively that the fellow who worries about both his business and that of his competitor, is interesting himself in the affairs of two companies, and as a consequence, neither profits him. Certain cities are now suffering from that very contagious disease "Price-itis"—an illness that can reach critical proportions more quickly than a stroke of apoplexy.

You, Mr. Dealer, have one business; your own. It took work, time, and money to build the foundation of it. What sort of business potential are you building by casting a weather-eye on your competitor a couple of blocks down the street?

Stores That Succeed—Stores That Fail

"WHAT'S the use of all these figures on store costs?" chortles the "practical" reader. "The hard-headed business man doesn't need a lot of cost figures to tell him whether he is making money or not. He knows what he is doing, all right."

Yet records of business show that these very same hard-headed merchants fail in business, regularly, and to the extent of 90 per cent of their number who go into trade! And any accountant or jobber can tell of dozens of merchants who *thought* they were making money and instead proved to be losing it when their books were checked over. On the other hand, scientifically managed stores which keep expense records carefully and compare them with other stores continually, know what they are doing and seldom incur unconscious losses. Indeed, the records of such businesses show a ratio of success not far from 100 per cent,—in sharp contrast with the record of failures and bankruptcies of businesses run by intuition and "hunches" alone.

The Merchandise Must Now Seek the Buyer

"MERCHANDISE is now seeking the consumer and follows the crowd," declared Alvin E. Dodd, manager of the domestic distribution department of the Chamber of Commerce of the United States, in an address before the Federated Retailers of Nebraska.

"The consumer and his wants have become the determining factor. A few years back the customer sought the merchandise, and the whole distribution system—retailers, wholesalers and producers—was designed to supply his needs. But the balance is now shifting. It is the distributor who hunts up the consumer and gives him not merely what he needs but what he would like to have. The consumer, in the aggregate, is the magnet. The retailer makes it his business to

"After All, It's What the Readers Think

You have rung the bell. "Radio Retailing" is by far the best we have seen. It is aimed right, covers the needed points, and will prove a tremendous influence for good.

N. C. EWING,
Cincinnati, O.

We want to express on behalf of our association commendation of recent articles appearing in your excellent publication on the radio "gyp."

The character of "Radio Retailing" in general, and especially your method of taking up this subject, cannot help but build for the good of radio.

C. H. Schmidt,
Chairman
Trade Interests Committee.
RADIO TRADE ASSOCIATION OF MICHIGAN, DETROIT, MICH.

You are to be congratulated on the very constructive preachings which you are making in the work of radio-dealer development.

P. BOUCHERON,
Radio Corporation of America, New York City

This to Say—

get as close to him as possible. Thus the customer is importuned through mail-order catalogues, and house-to-house canvassers haunt his doorstep."

Mr. Dodd cites facts which every radio-shop owner must take into account in his future selling. For the only way to reach the vast "hesitant buying market" with radio goods, will be to take the merchandise to customers' homes, and demonstrate and sell them on the spot. And don't forget that five homes out of every six, right now await the radio salesman's call.

Raising the Average Sales Check

WHEN a certain New Jersey dealer sells a radio receiver, he also makes sure of the sale of a loudspeaker and other accessories.

In the first place, he doesn't quote the manufacturer's list unless the prospect definitely asks for it. He quotes a price on a *set complete* with a moderate-price loudspeaker. When such an outfit is sold and delivered to the home of a prospect, he also sends out a more expensive loudspeaker "just to let the customer see how it works." He has found that the customer usually keeps the more expensive one, and sends back the cheaper one with a check for the difference.

By selling a set complete with loudspeaker, a dealer can be sure of making the loudspeaker sale himself, and can also make sure that the customer does not run into a store next door and pick up a "gyp speaker" which will interfere with clear reception by the set. He makes more money out of each sale, and secures good-will.

Beware the Bootlegger of Vacuum Tubes

NAMELESS, "fancy-named," and "bootleg" tubes are being offered to dealers, many times by mysterious strangers who drop into town with attractive offers. Certain dealers have been tempted to stock up on these bootleg tubes, which are imitations of the standard articles in every respect, apparently—except performance. Large discounts and low prices play a siren song.

But when the defective tubes start rolling back in and the dealer tries to get adjustments he finds that many of these tube manufacturers, like the Arabs in the night, have silently passed away. Besides he has lost his customers' confidence, which is something no dealer can afford in this day of keen competition. There are many good tubes on the market, made by established concerns who uniformly produce a high quality of product. The tube is "the heart" of a radio receiver. It is wise policy therefore to stick to generally-known makes rather than be swayed by the bigger profits of inferior goods of unknown antecedents.

Radio Salesmen Read This!

THE writer of this paragraph spent an afternoon recently in the radio department of a large store in the Middle West. The salesman in charge certainly knew radio. Customers came in and out, bought, and asked questions, which questions he answered invariably to their satisfaction. He was a trained radio expert and had been hired because of that expert knowledge of his.

But his salesmanship did not match his radio knowledge. Three prospects for expensive radio sets came in, looked them over—and went out. This salesman did not try to close these sales. He did not even get the names for further follow-up. This is not a unique or even an highly unusual case. The radio expert who has come into the business of selling radio can profitably give a little—no, a lot of thought to Salesmanship.

"Profits in Proportion"— to Time, Effort, Money

DESPITE the wonderful changes which have taken place in radio within the past few years, the whole industry is still in process of becoming settled. Those "in on" the ground floor will reap the benefit.

The radio man's own sound judgment must serve him in merchandising radio material. If he were selling groceries, drugs, hardware or other staples he could fall back on precedents for guidance. But present radio dealers, having no traditions to follow, are establishing their own background for the future of the radio trade. The dealer who has learned to rely on his own judgment and to have faith in himself, will find his position a strong one.

Profits—and substantial ones—are being made in radio, but one must not think that because the radio business is comparatively new, these profits are to be fabulous. Radio, like other more firmly established lines, will pay only in proportion to the time, effort and money put behind its sale.

That Counts"— More Comments by Radio Men, from the Editors' Mailbag

"Radio Retailing" is the best radio trade journal yet.
THE VAN BLARICOM CO.,
Helena, Mont.

"Radio Retailing" is a real magazine for the dealers.
WEBB PHONO. CO.,
Lima, Ohio

This issue of "Radio Retailing" is simply another evidence of the ability and versatility of the McGraw-Hill organization.
CHAS. L. EIDLITZ.
New York City

I believe "Radio Retailing" is what the radio dealer needs and fills the same want that "Electrical Merchandising" does to the electrical dealer.
J. HARVEY BUTLER,
Greensburg, Pa.

"Radio Retailing" is doing great work in helping the dealer.
SPENCER MFG. CO.,
Aurora, Neb.

"Radio Retailing" is fine—great. Keep it up.
ARTHUR F. BREISCH.
Bethlehem, Pa.

How Manufacturers Promote Dealer Sales

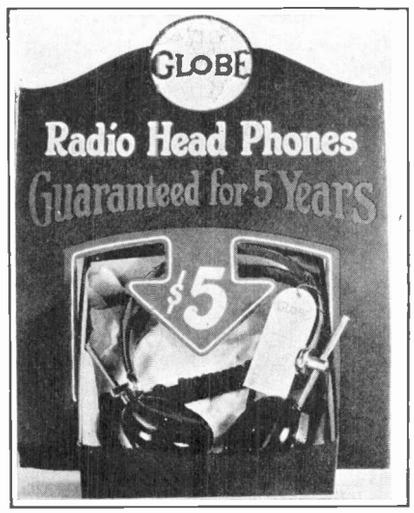
New "Dealer Helps" Offered to the Radio Retailer by the Manufacturer to Increase the Merchant's Radio Profits

Good Window Displays Make People Want to Buy

So much has been said about the value of attractive window displays that the dealer takes it for granted a certain amount of time and effort must be devoted to his windows. But the average dealer is a very busy man and because every day is a busy day he is not always able to give the matter of window display the thoughtful attention he knows it deserves. That's where a service like that announced by the Radio Corporation of America is a real "dealer help," for someone has planned his displays for him.

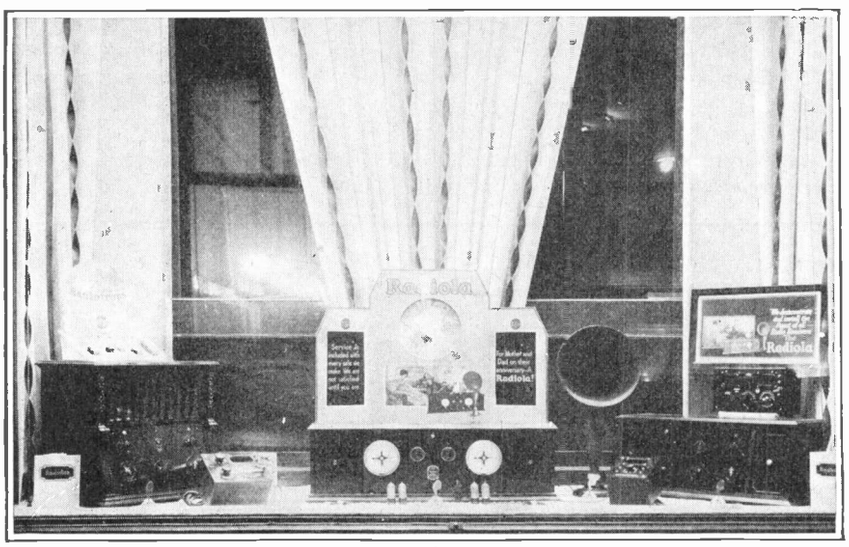
This new RCA service will enable dealers to obtain excellent window displays with the use of inexpensive materials for backgrounds and by appropriately placing window cards, illustrations or cut-outs (furnished by the company) to attract and interest the passers-by. Briefly, here is an outline of what this service constitutes:

1. Diagrams with full directions for arrangements of displays will be furnished.
2. In cities where RCA sales offices are located, service to distributors and dealers will be given by a window display expert who will dress a window and instruct the dealer in methods of reproducing similar displays when expert is not available.
3. Dealers are invited to write to the Radio Corporation of America Window Display Service Bureau, 233 Broadway, New York City, attention of W. J. Flynn, for full information.



Headset Display

A red arrow directs attention to the headset which is inserted in the opening provided in the new easel-back display of the Globe Phone Manufacturing Company, Reading, Mass.

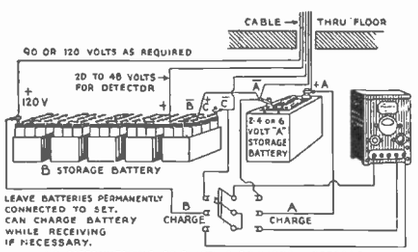


The cost of material used to trim this window does not exceed $1.50. A background of crepe paper is used, with a two-color combination as spiral streamers. The reading matter, you will note, is placed at convenient levels for the eye of the passers-by. The window cards and cutout are part of the "sales help" material.

Why Not Install Radio Batteries in the Basement?

Many an otherwise good-looking radio set is converted into a messy, slovenly arrangement because of unsightly batteries which are not properly concealed. But aside from the appearance of a careless installation, there is another advantage derived from installing the batteries in the basement or cellar. That advantage is, of course, in charging the batteries without the possibility of damaging rugs and furniture by spilled acids. Then too, the batteries will be more convenient to the charger and less liable to be neglected.

In a folder issued by the France Manufacturing Company, Cleveland, on "Keeping Your Storage Battery Working," a suggested layout for basement installation of batteries is given. One of the sketches, showing the batteries arranged for use with the France "Super-Charger" is here reproduced. By this arrangement the batteries are permanently connected to the set and may be charged while receiving, as no disconnecting or shifting of wires is necessary, it is explained. Contained in the folder is also a wiring sketch showing the use of the company's Type AB charger as well as instructions on the care of storage batteries and across the two inside pages, a broadcasting station directory.



This diagram shows the layout for permanent installation of radio batteries in the basement, giving as well, the arrangement for use with the France "Super-Charger" which is designed to charge 2, 4, 6 or 8 volt radio or automobile batteries at a 5 to 7 amp. rate and up to 120 volts of "B" battery in series at varying rates as desired.

Radio Assortment Display

A radio department that will do its own advertising and selling is the "Go-Getter" display illustrated, of Henry Hyman & Company, Inc., 476 Broadway, New York City. This cabinet, together with a vacuum tube tester, is given radio dealers free with each assortment of "Bestone" radio parts and accessories. It shows the goods, quotes the price, holds the stock and tests tubes.

Who Is the Favorite Radio Artist?

Every listener-in has some favorite artist for whom he will forfeit the best radio program available. But who is the universal choice of the radio audience? The results from the contest put on by the Eagle Radio Company of Newark, N. J., will give some indication of the choice of those listeners who are interested enough to submit the name of the radio artist who heads their list of favorites.

The votes are to be cast on applause cards obtainable through local radio dealers or directly from the Eagle Radio Company. Here are the rules of the contest:

1. Votes should be mailed to the Eagle Radio Company, Newark, N. J., before midnight of May 10, 1925.
2. It is desired that votes be cast on applause cards but votes sent in by letter or other cards will also be considered official.
3. One person may vote for several artists but the votes must be sent in on separate cards or by separate letter, each communication counting for one vote.
4. Write name and address plainly, also name of artist and station from which the performance is heard.

An Eagle, Model B, neutrodyne receiver will be awarded to the artist receiving the greatest number of votes. In case two or even three artists tie in the contest, getting the same number of votes, each one will receive a prize. A list of the artists receiving the greatest number of votes will be published from time to time. Winners will be announced as soon as possible after the contest.

The "Miles-per-Gallon" Idea in Radio

Radio fans, generally, are in need of enlightenment on the subject of "B" battery costs. While it is possible to get results on a multiple-tube set with even the smallest size "B" battery, the experiment will prove costly, because of the rapid depreciation of current supply and consequent need of frequent renewal.

The number of tubes and type should dictate the size of battery required. Only on single-tube sets, or on portable sets where space and weight limitations are factors, should the small sizes be used. The initial cost seems uppermost in the purchaser's mind when renewing batteries, and if the dealer would point out the fact that on five and six tube sets the small batteries cost, in the long run, as much as four to thirteen times more he would help reduce the fan's operating cost as well as win his good will, which of course builds future sales. A satisfied customer is worth his weight in advertising.

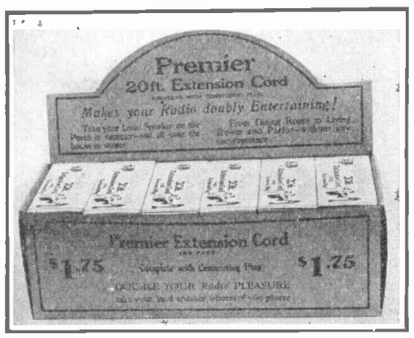
It is difficult to prepare a table of costs for "B" batteries, owing to the variation in sizes and capacities in most cases not being given, nevertheless the following figures, prepared by the National Carbon Company for its product, will help illustrate the point:

Relative "B" Battery Operating Costs

Current Drain in Milli-Amps	No. 763	No. 768	No. 764	No. 766 767
3.0	450	198	175	100
10.0	980	520	425	100
15.0	1,350	780	550	100

Who's Afraid of Lightning?

Believing that the unreasonable fear of lightning and its effect on radio installations can be overcome by a little education on the safety of radio and the function of the lightning arrester, the Electric Service Supplies Company, Philadelphia, Pa., has prepared a poster for distribution to dealers to help them spread their campaign of safety. This poster, in three colors, measures 8½ in. x 10½ in. and accompanies every package of "Keystone" lightning arresters.



Selling the Extension Cord

There are many radio accessories for which users have felt a vague need but have never actually seen the device for which they are looking. A counter display, prominently placed, will remind radio customers that here is something they want. Such a display is the one illustrated, of the Crescent Braid Company, Providence, R. I., showing the company's 20-ft. extension cord which permits the receiver to be placed in one room and the loudspeaker in another.

The Battery Equipment & Supply Company, Chicago, has issued a new catalog on its line of "Besco" products. Described in the catalog is a counter display carton of the No. 202 hydrometer, a small hydrometer for use with radio storage batteries. Each carton contains ten hydrometers, one of which is mounted on the display, inviting attention and inspection.

The Jewett Radio & Phonograph Company, 5680 Twelfth Street, Detroit Mich., has prepared for distribution to its dealers a window or store poster on its "Superspeaker" lithographed in many colors. It measures approximately 26½ in. x 41 in. and shows a happy family group, listening-in, with a revolving world above them. The entire picture is bordered to simulate a frame, making an attractive display for the radio store.

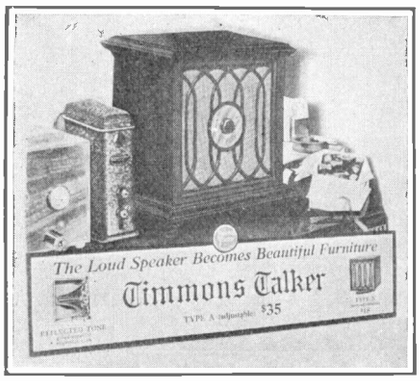
The Mohawk Electric Corporation, Logan at Diversey Boulevard, Chicago, is furnishing to its dealers a window display of its "Mohawk" one-dial, five-tube set. The display is unusually well illustrated, pointing out the dominant "one-dial-to-tune" feature of the receiver. The company announces that other displays are now being prepared.

The American Electric Company, Chicago, has a window or store card on its "Burns" loudspeaker. "For Sale Here" is conspicuously imprinted on the card, together with a reproduction of the speaker in natural colors.

The Radio Specialty Company, Inc., 25 West Broadway, New York City, has prepared several attractive display cards for its small radio parts. One of the cards displays the "Rasco" vernier attachment, fifty of which are mounted on the card, while another display contains one hundred dial markers.

"What Makes a Rheostat Good" is told in a small folder issued by the Klosner Radio Corporation, 1022 East One Hundred and Seventy-eighth Street, New York City. The twelve outstanding features of the Klosner vernier rheostat are pointed out in this interesting folder.

What's New in Window and Counter Cards



That they thoroughly reflect the beauty and dignity of their originals can be said of the two new display cards issued by the Timmons Radio Products Corporation, Philadelphia. The sign illustrated features the Timmons Type A Talker but shows as well the "B-Liminator" recently brought out by the company. A window or counter card, similar to that of the Talker, showing the "B" battery eliminator in actual size is also available to Timmons dealers.

"The Wizardry of Wireless" —A Movie

Among the twenty-two motion picture films made and distributed by the General Electric Company, Schenectady, N. Y., is No. 40, "The Wizardry of Wireless," which portrays the development of signal communication, showing the beacon fire, heliograph, semaphore, Indian smoke blanket, wig-wagging, the electric telegraph and telephone. By animated drawings the electrical action and function of the vacuum tube and other apparatus employed in radio transmission and reception is visualized. The picture is primarily intended to assist those interested in the study of radio, but the attractive scenes and manner of presentation will hold the interest of any audience. The films listed in the 47-page booklet, "Motion Pictures," are loaned without charge for exhibition in the United States in the interest of commercial development, education and other purposes. Copies of the booklet and the films themselves may be obtained from the General Electric Company.

"Buying a Radio"

"What's What in Radio Receivers" heads a brief description of the various types of radio sets now on the market, contained in the booklet "Buying a Radio" recently issued by the Freed-Eisemann Radio Corporation, Brooklyn, N. Y., for distribution to uninformed radio purchasers.

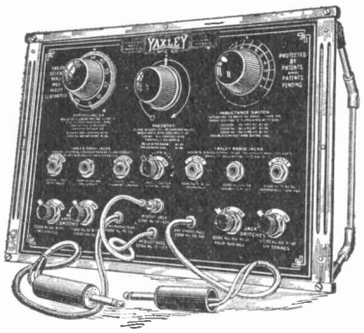
As a final word the company says: "You will be offered all sorts of apparatus with strange names and even stranger claims. Beware of nondescript makes and the type put together by some neighborhood electrician. You must weigh the advantages and disadvantages of each type of receiver and make your own decision."

The Garod Corporation, Newark, N. J., has recently issued some new sales help material including booklets, "How to Select a Radio Receiving Set" and "A Little Less Noise Please," with which is combined a previously-published leaflet on "More Stations on the Loudspeaker." A very complete instruction book for the installation and operation of the company's "Georgian" and Garod V receiving sets is also being distributed.

A Radio Atlas and complete station log has been compiled by the George F. Cram Company, 111 North Market Street, Chicago. This Atlas has been suggested as a premium for dealers to present to their customers. It contains a complete series of double-page maps showing location of broadcasting, leading commercial and government radio stations, world radio station lists, time divisions, radio districts and headquarters, American Radio Relay League Districts, etc.

The Philmore Manufacturing Company, 105 Chambers Street, New York City, has prepared a number of new folders on its line of plugs and jacks, sockets, dials, rheostats, potentiometers, binding posts, etc., as well as a complete price list showing list prices of Ajax radio products.

A Time-Saver for Both Dealer and Customer



The different parts mounted on the display stand of the Yaxley Manufacturing Company, Chicago, are shown exactly as they appear in a regular radio set. The customer is given an opportunity to examine them carefully under natural conditions, to see the construction and operate them. The parts are mounted on a heavy brass panel finished in blue, with the name, code number, price and a brief description of the products etched in brass. A rubber-covered easel supports the stand, which is actually distributed free to the dealer as he is asked to pay only for the parts mounted on the board, less his usual discounts.

"How to Solder" is the title of the little guide to soldering prepared by the E. D. Fahlberg Manufacturing Company, Madison, Wis. Soldering is described as the uniting of two metals by a metallic substance of much lower melting point than either of the metals. Here are the five steps in the soldering process, pointed out in the booklet: 1, clean the surface; 2, use the flux sparingly; 3, tin the copper; 4, heat the metal to be soldered; and 5, clean the joint.

Mu-Rad Laboratories, Inc., Asbury Park, N. J., has prepared for distribution to its dealers a number of sales aids including window posters, mailing cards, folders and booklets.

Brighten Up Your Radio Displays with Color

There are so many show windows along both sides of a busy street, each trying to outbid the other for the passer-by's attention, that some novel arrangement or touch of color must be employed to make a window stand out from those to its right or left. With this thought in mind, the General Radio Company, Cambridge, Mass., has used as the color scheme of the new window display illustrated, buff and red. The message of the display is inscribed on a red background. Besides this piece of display material, the company has prepared for distribution to its dealers a new radio catalog and folders on its condensers, transformers, wavemeters, filters and low loss coils. All this new "dealer help" material is available upon request.

Why You Should Sell Radio on Time

(Continued from Page 341)

per cent of the people are honest, and the careful scrutiny of the credit and responsibility of the customer to whom the dealer sells on term contracts, is all the protection he needs. The big credit companies figure that their losses on these accounts will be less than one-tenth of one per cent! The whole trick lies in the careful selection of customers. If you extend this easy payment credit only to people who are responsible there is no loss, and almost invariably the accounts are paid up before the full term because the customer gets tired of it and pays more than is due to clean the matter up.

Down Payments Vital

The most important point in selling radio is to secure an ample down payment. It has been the practice in selling phonographs—a $100 machine, we'll say—to take $10 down and nine monthly payments, or to spread it over a year, with or without interest as the dealer might decide. But a phonograph is a simple affair. The skill of the operator is not an element in its enjoyment. You simply wind her up and put on a record. There is practically no cause for customer dissatisfaction. Not so with radio, however. For a man buys a radio set and learns slowly to manipulate it. Or he may drain his batteries through carelessness. Or a tube may break. Or static may happen to be bad the first few weeks. Or some night a friend may ask—"How loud can you get Kokomo, Keokuk and Kankakee?"

"I don't get 'em at all," says the owner.

"That's a fine set you've got!" says the friend.

The customer is apt to become finicky and dissatisfied and may want to quit paying and let you take the set back, if he has only paid $10 down on it. This $10 would probably not pay the dealer his cost if he should repossess the set and have to scrap the batteries or lose a tube. Also, many radios are sold to people living in hotels, or rooming houses, and they may move and think that perhaps they better give it up and sacrifice the $10. But if the customer has already paid in $25 or $30 he will not sacrifice so much. His investment is sufficiently great to hold him to responsibility. A larger down payment also makes the term of the subsequent payments shorter and closes up the deal with less delay. It is cleaner business.

One other thing the credit companies make a point of. Be careful with contracts that will extend payments over the summer months, when static is bad and people are out doors and radio is in at least partial eclipse. On spring contracts, therefore, the dealer should get larger down payments and shorter terms, or tighten up on credit and only sell people who are super-sure financially.

The credit company leaves it up to the dealer to pass on the credit of his customers, though he receives helpful advice that guides him from the start. But it is a simple matter to decide whether a man looks good for a radio set. If he owns his home or rents in a good neighborhood and has children and a bank account and gives some good references—all these are evidences of responsibility. Every successful dealer knows how to read credit to this extent or he would not be successful in his regular business affairs.

The credit companies who are old in the installment business look upon radio as the great coming source of easy payments. Already an astonishing amount of business is being done by installment sales. The reason is, as I said before, that the public desires to buy radio that way. The thing for the radio dealer to do therefore, is to take advantage of this appeal and sell this easiest way. For it does not affect the people who desire to pay cash. It merely brings into the market thousands of other families where radio must be fitted into the budgett and can only be bought by installments.

Window Broadcasting One Way of Stopping Traffic

How to make passers-by stop and look at your window displays is a problem that has been solved in more ways than one, but none is quite so effective as the idea of setting a microphone up in your window and broadcasting a program in full view.

This can be done in towns of any size where there is a local broadcasting station. The O. K. Houck Piano Store, Memphis, Tenn., recently tied up with station WMC, and demonstrated transmission in one window and reception in the other.

Two popular singers, Addie Britt and Dick Finch, broadcast the program, which was tied up with a contest whereby the Houck Company gave away a Zenith set to the person who made up the best sentence containing the titles of the songs, "Jealous" and "Where's My Sweetie Hiding," which were featured in the program.

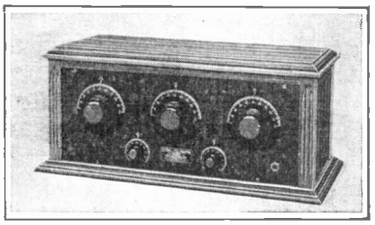
The police were called out to handle the crowds and traffic was halted for such a time that it was feared the police might put a stop to the stunt before it was finished.

Traffic Halts to View Window Broadcasting

Broadcasting in one window and receiving in the other was a novel demonstration used by the O. K. Houck Piano Company, of Memphis, Tenn., to attract crowds to its store. Traffic became so congested that police were called to clear the streets.

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.



Receiver With New Tuning Element

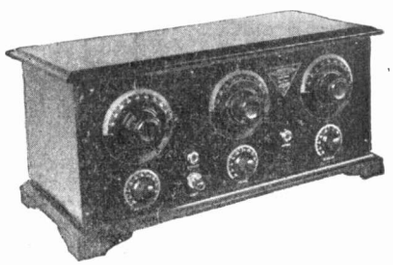
Radio Retailing, April, 1925

By the elimination of variable condensers and the employment of a new tuning element—the "Refractoformer"—five-tube efficiency with unusual selectivity is provided by the four-tube circuit of the new "Ultra-Marvel" receiver of the Industrial Radio Service, Saginaw, Mich., its manufacturer claims. Two stages of radio frequency, rectification and two stages of audio frequency amplification are secured. Both the primary and secondary circuits of each stage of amplification are simultaneously tuned to a given frequency. Three dials are provided for tuning the "Refractoformers" separately. Mahogany cabinet. Intended retail price, $120.

Receivers With Two-Dial Control

Radio Retailing, April, 1925

Simplified tuning by two-dial control, with only one dial to log, is a feature of the new "Meco" receivers announced by the Metropolitan Electric Company, Des Moines, Iowa, manufacturer of the "Meco" tube. Three different models are being made. All of the sets are similar in operation, circuit and size and operate on radio frequency action, with two stages of radio frequency amplification, two stages of audio amplification and detector. Intended retail prices, $60, $100, and for period-design console model, $250.



Tuned Radio Frequency Set

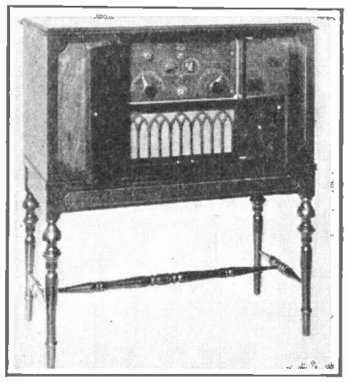
Radio Retailing, April, 1925

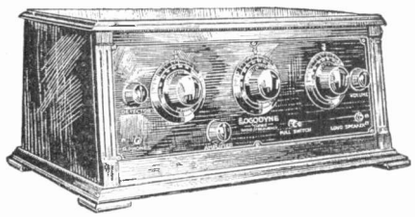
The outstanding feature of the circuit of the new "Akradyne" five-tube receiver announced by the Sunbeam Radio Sales Company, Inc., 1834 Broadway, New York City, is based on the special construction of the stabilizer. This feature, it is pointed out, enables any one operating the set to tune in any station on any wave length and clear it up so that there will be the desired volume with absolute clarity of tone. Enclosed in a mahogany cabinet, its intended retail price is $75.

Console-Type Receiver

Radio Retailing, April, 1925

All controls, including loop, are located on the etched Malloy panel of the console-type receiver of the Priess Radio Corporation, 693 Broadway, New York City. The cabinet is two-tone walnut and has concealed loop and loudspeaker. The circuit is the same as that used in the P. R. 3 model—three stages of radio amplification, two detectors—one adjustable and one fixed—followed by three stages of audio amplification. The intended retail price of the P. R. 5, console model, is $225.





Five-Tube Receiver

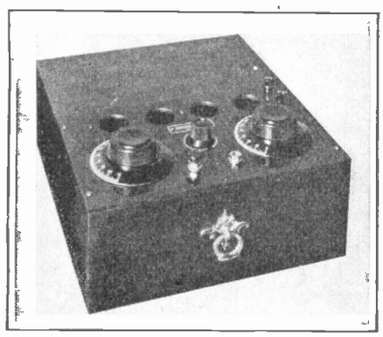
Radio Retailing, April, 1925

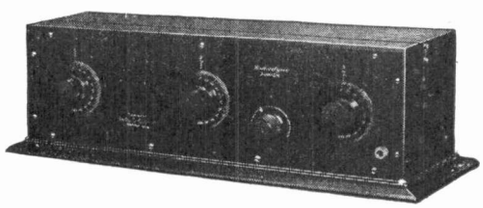
Two stages of self-balanced tuned radio frequency amplification, non-oscillating tuned detector and two stages of audio frequency amplification make up the circuit of the new "Logodyne" receiver brought out by the Kodel Radio Corporation, 118 West Third Street, Cincinnati, Ohio. The cabinet, which is finished in Adam brown mahogany, has sloping panel and provides space for 90-volt vertical-type "B" battery. When dry cell tubes are employed, sufficient additional space is available for housing the required "A" battery within cabinet. Intended retail price, $82.50.

Receiver for Phonograph Installation

Radio Retailing, April, 1925

For use with the upright type of phonograph, the Jos. W. Jones Radio Manufacturing Company, 40 West Twenty-fifth Street, New York City, has designed its J-80 receiver which is a four-tube, non-oscillating, tuned radio-frequency set, consisting of one stage condenser-tuned radio frequency amplification, non-regenerative detector and two stages of audio frequency amplification. The receiver, as can be seen from the illustration, is drawer-type and fits in the record compartment of upright phonographs occupying a space equal to two shelves of the record rack. As it is designed for UV-199 tubes, "A," "B" and "C" batteries are housed within the receiver. Intended retail price, $80.





Five-Tube Receiver

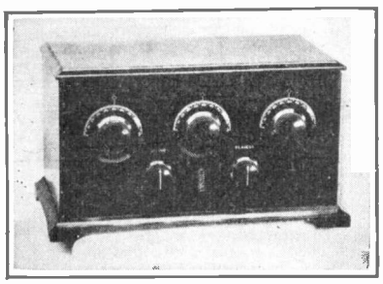
Radio Retailing, April, 1925

The "Radiodyne" WC-14A receiver illustrated, made by the Western Coil & Electrical Company, Racine, Wis., employs two stages of radio frequency, detector and two stages of audio frequency amplification. It has three wave length or "finder" controls, all of which can be logged, if desired. In addition to this, there is, in the form of a small knob with a pointer, a volume control. Intended retail price, without accessories, $65. Other models of "Radiodyne" sets range in price from $59.50 (for the working unit only, without cabinet) to $250.

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 Set

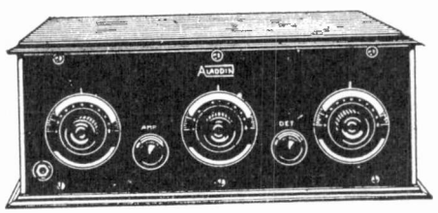
Radio Retailing, April, 1925

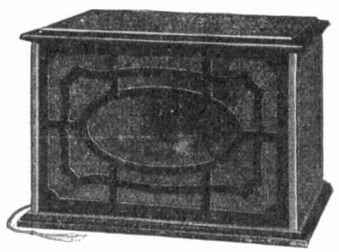
Two stages of tuned radio frequency, detector and two stages of audio frequency amplification with potentiometer stabilization control are provided by the five-tube tuned radio frequency receiver designed by R. B. Radio Company, 117 West Fifty-first Street, New York City. The mahogany cabinet in which the set is enclosed, measures 14 in. long, 7 in. high and 7 in. deep. Intended retail price, $37.50. The set is known as the "Page 5."

Tuned Radio Frequency Receivers

Radio Retailing, April, 1925

The Moe Manufacturing Company, Fall River, Mass., has designed a five-tube receiver with tuned radio frequency circuit. Enclosed in polished mahogany cabinet, it is intended for retail sale at $65. The company has also brought out a De Luxe "Aladdin" receiver, with sloping panel, in two-tone walnut cabinet, listing at $115 and a kit containing three radio frequency transformers and three low-loss variable condensers, together with wiring diagrams and instructions. The kit is listed at $17.





Cabinet-Type Loudspeaker

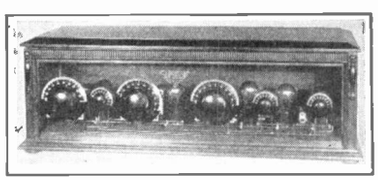
Radio Retailing, April, 1925

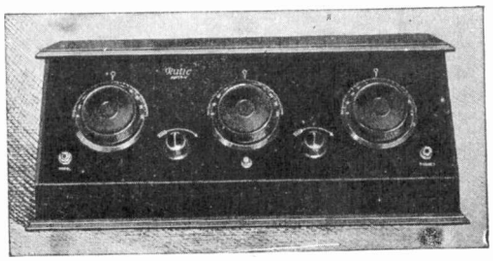
No metal is employed, except the unit, in the construction of the new cabinet-type loudspeaker illustrated, its manufacturer, the Manhattan Electrical Supply Company, 17 Park Place, New York City, points out. It is made of solid wood and the long air column connecting the reproducing unit with the bell of the horn, permits perfect re-creation of the low as well as the high tones, it is explained. The measurements of the new loudspeaker are 11¼ in. high and 8 in. deep. Intended retail price, $30.

Five-Tube Receiver With Glass Panel

Radio Retailing, April, 1925

The "Supertone Five" receiver of the Cleveland Automobile Accessories Company, 7819 Carnegie Avenue, Cleveland, Ohio, employs a five-tube tuned radio frequency circuit, using two stages of tuned radio frequency, detector and two stages of audio frequency. The entire set is wired with a red insulated wire which in combination with the red sockets gives a pleasing effect through the glass panel. The cabinet may be obtained with walnut or mahogany finish. Intended retail price, $100.

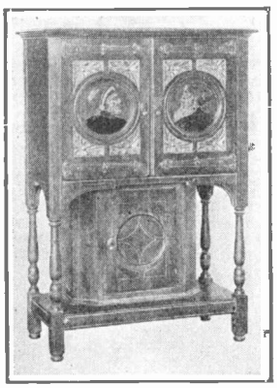




Five-Tube Receiver

Radio Retailing, April, 1925

A new method of neutralizing oscillation, for which patent has been applied for, is embodied in the "Ruulc Super V" receiver brought out by John Ruckelhaus, Inc., Newark, N. J. The tuning circuit consists of the new one-piece stator, single end plate condensers and a new type of impregnated coil. The coils used are only about half the size of coils used in many current receivers and are immersed several times in a parafin composition to prevent distributed capacity and broad tuning. Intended retail price, $65.



Radio Cabinet

Radio Retailing, April, 1925

One of the more elaborate models of radio cabinets recently introduced, is the cabinet illustrated, No. 2400 of Burt Brothers, Inc., 2000 South Ninth Street, Philadelphia, Pa. It is made of American walnut with antique finish, with gold-leaf and hand-painted carvings, and will accommodate sets measuring from 6 in. by 18 in. to 10 in. by 32 in. Provision is made for batteries and horn. Intended retail price, about $112.

Four-Tube Receiver

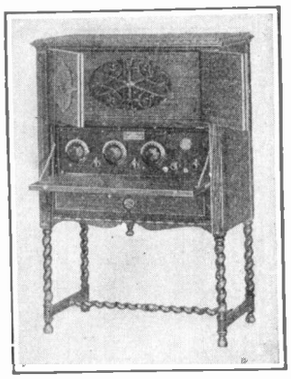
Radio Retailing, April, 1925

A tuned transformer-coupled radio frequency amplifier, detector, and two stages of audio frequency amplification are employed in the circuit of the No. 41 receiver brought out by the Air-Way Electric Appliance Corporation, Toledo, Ohio. The set is designed for use where space requirements demand a smaller set than the company's No. 51 model. It is made to operate loudspeaker. Intended retail price, $65.

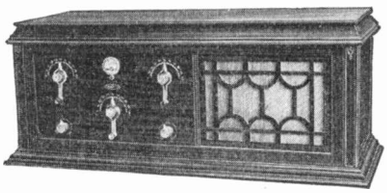
Console-Type Receiver

Radio Retailing, April, 1925

Housed in an attractive console. Italian walnut finish, is a five-tube receiver. The cabinet has a built-in loudspeaker and provides room for batteries through two removable panels in the rear. The cabinet may be obtained separately, if desired, without radio set or loudspeaker. Intended retail price, with receiver and loudspeaker, $220. The manufacturer is the Vitanola Talking Machine Company, Chicago, Ill.



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



Five-Tube Receivers

Radio Retailing, April, 1925

The two receivers illustrated employ five tubes and tuned transformer circuits with aperiodic primaries. Both models are especially designed for dry battery operation and use C-299 or UV-199 tubes. Type 12-B has enclosed loudspeaker and removable battery container. It is listed at $155. Type 12-C, below, provides battery space but has no built-in loudspeaker. Its intended retail price is $120. Manufacturer: Hartman Electrical Manufacturing Company, Mansfield, Ohio.

Set of Three Radio Frequency Transformers

Radio Retailing, April, 1925

The Toroid Coil Company, 276 Fifth Avenue, New York City, has announced a set of three "Toroid" transformers providing three stages of radio frequency with regeneration equal to the super-heterodyne circuit, the company claims. The magnetic flux of the "Toroid" is confined and dense, it is pointed out, and the ratio of primary to secondary is high. Intended retail price of set of three transformers, $10.

Small Radio Table with Built-in Loudspeaker

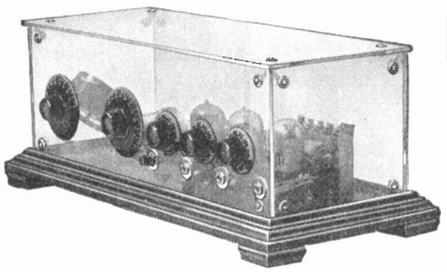
Radio Retailing, April, 1925

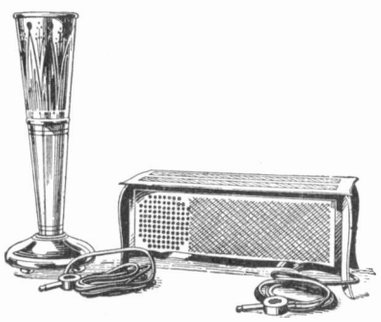
Designed specially for use with the Ware model T or Work Rite receiver is the small radio table illustrated, with built-in loudspeaker, made by the Console Master Speaker Company, 15 East Fortieth Street, New York City. The loudspeaker is concealed behind a silk-covered grill. The table is finished in mahogany. Intended retail price, including loudspeaker, $34.

Glass Panel and Cabinet

Radio Retailing, April, 1925

A clear view of every part of the radio set may be obtained with the use of a glass cabinet, similar to the model illustrated, made by August W. Hornig, 3921 Dickens Avenue, Chicago The panel is 7 in. high, 21 to 26 in. long and may be fitted to a great variety of wooden cabinets. An outstanding feature of the panel is the safety bushing which reinforces the glass at points where instruments are connected, thereby relieving the panel of strain. Intended retail price, panel only, $12; complete cabinet and base $55.





Two Unique Loudspeakers

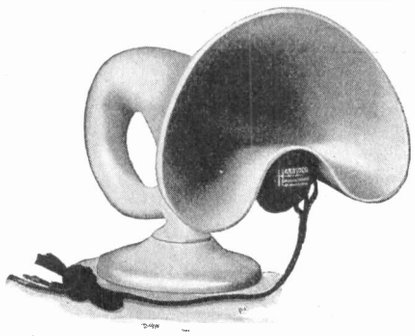
Radio Retailing, April, 1925

"Custeloid" is described by the Custeloid Company, Inc., Ozone Park, L. I., N. Y., as a durable material that closely resembles tortoise-shell in all its beauty. The two "Puratoan" loudspeakers illustrated are newcomers in the radio market, one model being a cabinet reproduction of a Seventeenth Century Venetian jewel case, richly chased and ornamented with gold banding. The other model illustrated is in the form of a flower vase, with compartment for artificial flowers. A celluloid base is featured in each model, together with a standard type unit. The cabinet, measuring 11½ in. x 5 in., is intended for retail sale at $20, while the vase, measuring 14 in. high, is listed at $14.

Loudspeaker

Radio Retailing, April, 1925

The unique design of the new reproducer brought out by the Hardsocg Manufacturing Company, Ottumwa, Iowa, can be seen from the accompanying illustration. The manufacturer's intention, it is pointed out, was to get away from the tall, top-heavy type of horn and yet provide plenty of tone chamber length (about 34 in.). The speaker is 9⅛ in. high, 11⅛ in. wide and 14 in. deep. It is made of heavy wood pulp paper and is intended to retail at $10. On the market about June 1.



All-Wood Loudspeaker

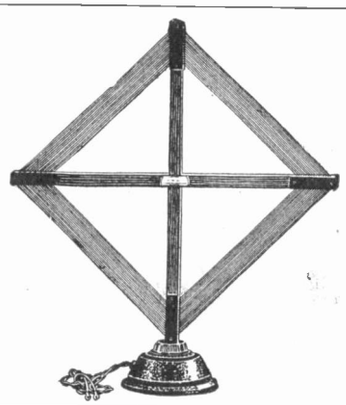
Radio Retailing, April, 1925

"Orchestrion De Luxe" is the name of a new loudspeaker recently introduced by F. Bremerman & Sons, Indianapolis, Ind. It is made of wood throughout, with the exception of the reproducing unit. The tone arm or "goose neck" is made of spruce pine and maple, finished in stippled ebony, as contrasted with the bell (15 in. in diameter), which contains twenty-four separate ribs, alternated in natural-finished walnut and mahogany. The outer edge of the bell is bound with black and white celluloid inlay. Height overall, 27 in. Intended retail price, $37.50.

Loop Aerial

Radio Retailing, April, 1925

Ornamental cast iron forms the stand for the loop aerial illustrated, a product of the Music Master Corporation, Philadelphia, Pa., while the frame is made of wood, with highly polished mahogany finish. Wire ends brought into contact terminal plug permit free rotation of loop in base without twisting of leads, it is pointed out, and the loop may be removed from base without disconnecting leads. Intended retail price, $10.

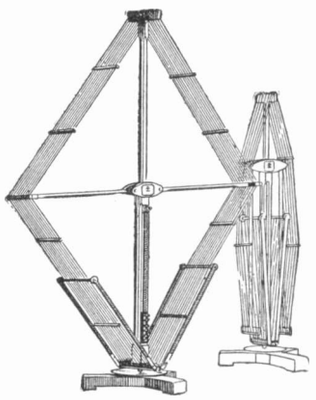


News of Latest Products Gathered by the Editors

Collapsible Loop

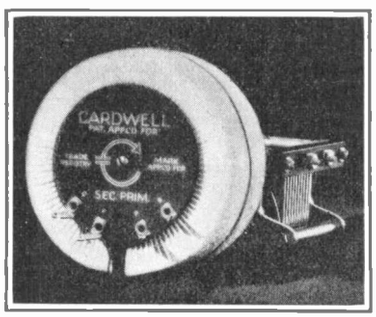
Radio Retailing, April, 1925

Tobe C. Deutschmann, 46 Cornhill, Boston, Mass., is distributor for a collapsible radio loop which is made across the Atlantic. The inductance consists of 14 turns of high frequency Litzendraht wire, made up of 60 strands of No. 38 enameled copper wire, woven into three cables of 20 strands each, which in turn are wound into one strand, with double green silk insulation. The woodwork is mahogany, with metal parts nickel-plated. A metal table graduated into degrees of an arc is placed at the base of the loop so that the angle of reception may be determined. Attention is directed to the tapped loop winding by means of which it is possible to use the loop equally well on long and short waves. Because of its center tap, the manufacturer explains, the loop fits all types of superheterodynes. Intended retail price, $25.



Tuned Radio Frequency Unit

Radio Retailing, April, 1925

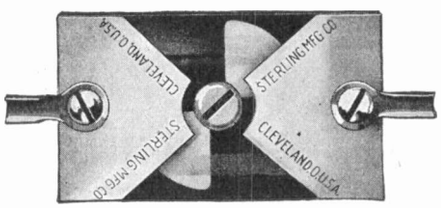


The Allen D. Cardwell Manufacturing Corporation, 81 Prospect Street, Brooklyn, N. Y., has brought out a new radio device—the "Toro-Tran"—which is described by the company as an ideal balanced coupling inductance for all radio frequency work. It is claimed to eliminate signal energy picked up by ordinary coils from nearby stations and magnetic feed-back in multi-stage radio frequency circuits. The "Toro-Tran" is mounted in any tuned radio frequency circuit by substituting it for the ordinary coil. Most .00035 mfd. variable condensers will tune the "Toro-Tran" although, of course, the company's condenser is recommended for use with it. Intended retail price, with balancing Potentiodon, $4.

Microcondenser

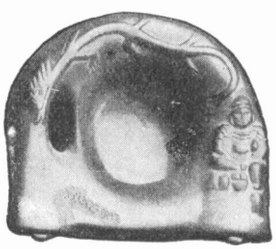
Radio Retailing, April, 1925

That it has a maximum capacity of approximately 5 micro microfarads and an extremely small minimum capacity is claimed for the R-311 microcondenser made by the Sterling Manufacturing Company, 2831 Prospect Avenue, Cleveland, Ohio. The device is especially useful for neutralizing the detrimental effects of grid to plate capacity of receiving tubes in neutrodyne and other similar circuits, the manufacturer points out. It measures 1 in. by 1¾ in. Intended retail price, $1.



Reproducer

Radio Retailing, April, 1925

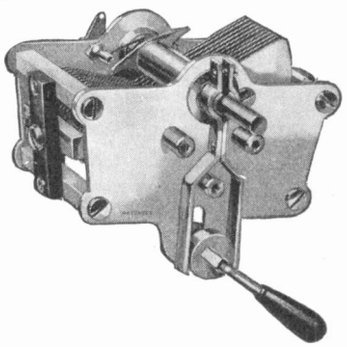


That it is a reproduction of the human throat and that its principle is founded on the human vocal organs, is explained of the new "Graefone" reproducer developed by Graef & Trecartin, 10 Alvin Place, Upper Montclair, N. J. The instrument has a double opening, the small one representing the nose and the wide open one the mouth. The design includes the Chinese god of happiness and the dragon while the finish is green or oxidized. Intended retail price, $20.

Condenser

Radio Retailing, April, 1925

The vernier control used on the new model "C" condenser of the Hammarlund Manufacturing Company, Inc., 424 West Thirty-third Street, New York City, is a patented feature, the company points out, which tunes to a hair's breadth by moving the entire set of rotor plates by minute degrees, it being possible to split each degree on the condenser scale into fifty or more parts, each giving its distinct variation in capacity. The condenser is made to take any size dial. It may be obtained in 43, 23, 17, 13 and 11-plate types. Intended retail prices range from $6 (43-plate) to $4.50 (11-plate).



Pedestal-Type Loudspeaker

Radio Retailing, April, 1925

Because of a shaded electric showcase lamp (operating on house current), concealed within the case, behind the upper edge of the grille, the pedestal-type loudspeaker illustrated, made by the Music Master Corporation, Philadelphia, Pa., reflects a soft, diffused light through the silk screen, providing subdued illumination for restful radio reception. The concealed pull socket is equipped with gold and blue silk cord and tassel. The top section of the reproducer contains the wood bell while the base contains the Music Master unit. This mahogany loudspeaker measures 63 in. high and 15½ in. wide. Intended retail price, $100.

Storage "B" Battery

Radio Retailing, April, 1925

The new storage "B" battery brought out by Main Radio Batteries, Inc., 7016 Euclid Avenue, Cleveland, Ohio, has a 5,000 m.a. capacity, and is built in 24- and 48-volt sizes. It has hard rubber tray and large, removable vent plugs. Intended retail price, 24-volt size, $8.75; 48-volt size, $17.50.

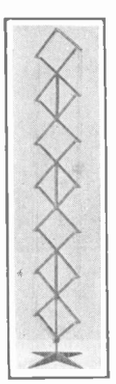
Radio Kit

Radio Retailing, April, 1925

"Step by Step" instructions for building a 5-tube receiver accompany the "Famous Masterpiece T. R. F5" kit of the Lieber Radio Company, 109 Reade Street, New York City. The kit consists of three "Micrometric" low loss brass condensers and three "minimum loss" tuned radio frequency coils. Intended retail price, $15.

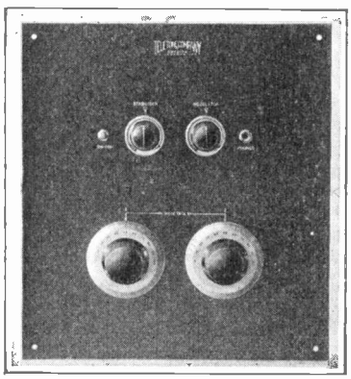
Folding Loop

Radio Retailing, April, 1925



The Volumax loop antenna, manufactured by the Scott & Fetzer Company, Cleveland, Ohio, has a swinging radius of 7½ in. When set up it is 7½ ft. high, but folds up to fit into a box 20 in. long by 7½ in. wide. The wood parts are finished in brown walnut, and waxed; the wire spreaders are of brown molded bakelite, and the wire, 65 strand, non-sag, is brown silk covered, the ensemble making a pleasing appearance. It is made in two types—"R" for the Radiola Superheterodyne—covering a broadcast wave band using .00075 variable condenser and "S," which has a center tap and tunes with .0005 variable condenser. Intended retail price, $17.50.

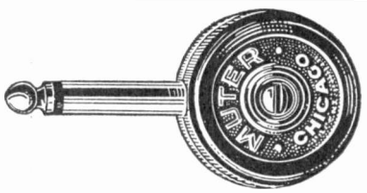
What's New in Radio and Where to Buy It—



Phonograph Panel

Radio Retailing, April, 1925

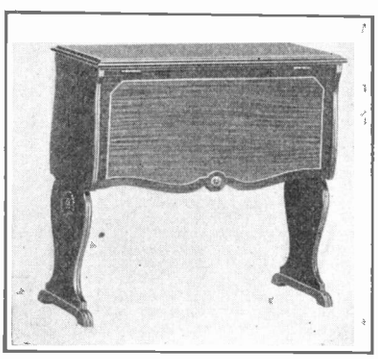
Designed to fit the console type of phonograph, the new five-tube radio panel of the Teletone Company of America, 449 West Forty-second Street, New York City, is gold engraved and has gold-finished dials to harmonize with metal parts of high grade phonographs. The panel itself is bakelite. Intended retail price, $90.



Phone Plug

Radio Retailing, April, 1925

By reason of its automatic instant change feature, the new automatic, shock-proof phone plug brought out by the Leslie F. Muter Company, Seventy-sixth Street and Greenwood Avenue, Chicago, permits easy insertion of the phone tips into the shell where, the manufacturer points out, they are securely held under a brass lip, giving a full contact the entire length of the phone tip. A slight outward pull on the cord causes instant release. The shock-proof feature is designed to eliminate the possibility of contact with the phone tips as they are completely enclosed in the plug shell. The plug is made with molded special composition shell in brown finish. Intended retail price, 50c.



Radio Table

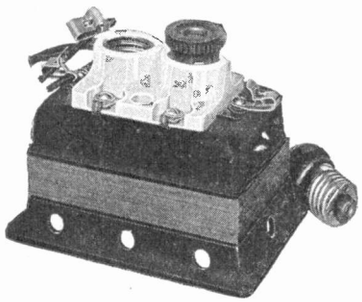
Radio Retailing, April, 1925

Space for batteries is provided back of the drop leaf of the radio table pictured. No. 1025, made by the Vitanola Talking Machine Company, Chicago, Ill. It is 30 in. wide and 28 in. high and has brown mahogany finish. Intended retail price, $20.

Battery Charger

Radio Retailing, April, 1925

The "Autocharger" of the Holmes Electrical Manufacturing Company, 1810 Leland Avenue, Chicago, with 2-amp. charging rate, is made to charge any storage radio or automobile battery from 2 to 12 volts, also radio "B" batteries from 24 to 96 volts. A fuse is inserted in the battery circuit in such manner that when the charger is in use, the bulb is fully protected against short circuits or any wrong connection. The transformer is incased in a metal case, japanned with smooth black enamel. The "Autocharger" is made for use on alternating current, 110 volts, 60 cycles only. Intended retail price, without bulb, $8.50.



Automatic Radio Plug

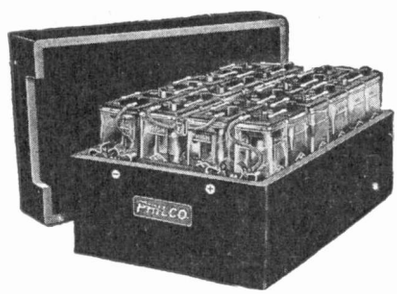
Radio Retailing, April, 1925

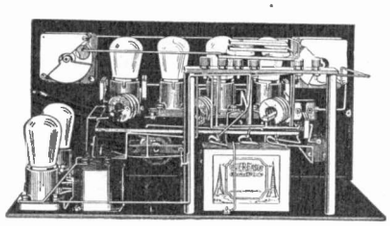
A slight touch releases the tips of the headphones or loudspeaker from the automatic plug of the Saturn Manufacturing & Sales Company, Inc., 48 Beekman Street, New York City. The terminal tips, as soon as inserted, are instantly held fast; release is effected by slight pressure on the release lug. The case is made of bakelite, shaped to fit the hand. Intended retail price, 75c.

Rechargeable Storage "B" Battery

Radio Retailing, April, 1925

An exclusive feature of the "Philco" Type 248 DX, 48-volt "B" storage battery illustrated, made by the Philadelphia Storage Battery Company, Philadelphia, Pa., is the charge indicator, visible in two front cells of each battery unit which shows at a glance the exact state of charge. Other characteristics of the battery are its glass cells with acid-tight sealed covers, its capacity, and Drynamic feature, that is, the batteries are shipped dry charged and their life does not start until the electrolyte is poured in. Intended retail price, with de luxe mahogany-finished case, with cover, $20; in case without cover, $16.50.





Superheterodyne Kit

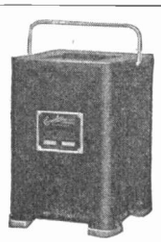
Radio Retailing, April, 1925

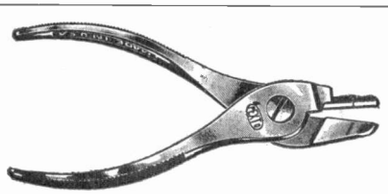
The "Superunit" kit brought out by Allan T. Hanscom, Woonsocket, R. I., consists of a blocking tube to prevent radiation from the oscillator, one stage of untuned radio frequency amplification, the oscillator, three tuned stages of intermediate frequency amplification and the detector, employing for this hook-up only four tubes. The unit includes all the necessary parts for a superheterodyne set except tuning condensers, rheostats, jacks, panel and audio frequency stages. Intended retail price, $37.50. The illustration shows a back view of a set using the "Superunit" hook-up.

Battery Charger

Radio Retailing, April, 1925

Automobile and radio "A" batteries, and "B" batteries too, may be charged, without special attachments for the "B" batteries, with the new "Everyman's" charger brought out by the Austin-Brandmeier Corporation, 365 Broadway, New York City. The charger operates from the ordinary lighting circuit and is made in two sizes, 6-amp. size, which complete, is intended for retail sale at $29.50, and the 2-amp. size, listed at $18.50.



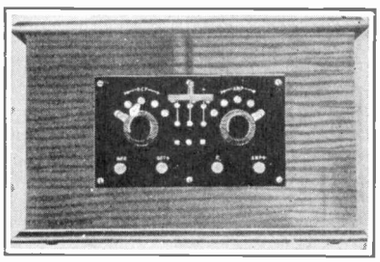


Radio Pliers

Radio Retailing, April, 1925

One of the jaws of the radio pliers, No. 32, made by the Peck, Stow & Wilcox Company, Southington, Conn., has a double barrel construction of two diameters for forming the terminals or loops on bus bar and wire. It is made to form loops to slip over 6/32 and 8/32 screws. Intended retail price, $1.25.

News of Latest Products Gathered by the Editors



Radio Power Unit

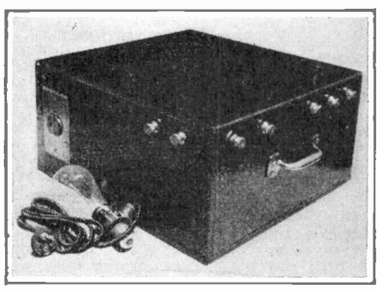
Radio Retailing, April, 1925

The "Kic-O" Multi Power unit announced by the Kimley Electric Company, Inc., Buffalo, N. Y., combines one Multi-Polar recharger outfit and a heavy-capacity, nickel-zinc alkaline storage "B" battery into one compact, well-built unit. The manufacturer calls attention to its simplicity and ease of operation, pointing out that it requires little more attention than the so-called "B" eliminator. The device operates from the ordinary house-lighting circuit and it has sufficient capacity, the manufacturer explains, to successfully operate large heavy-drawing neutrodyne and superheterodyne receivers. Intended retail price, 100-volt type, $35; 130-volt type, $43.50. For a.c. use only, 25 or 60-cycle.

Combined Battery and Charger

Radio Retailing, April, 1925

The "PowerWell" is the name of a new device introduced by the American Battery Company, 2053 North Racine Avenue, Chicago. It combines a storage battery and rectifier all in one case and operates from the ordinary lighting circuit. The storage battery has a jelly instead of a fluid electrolyte. The rectifier for changing the alternating current to direct current is of the chemical type. The "PowerWell" is made in three sizes, 24-volt, 48-volt and 96-volt, and the intended retail prices are, respectively, $27, $36 and $54.



Pre-Amplifier

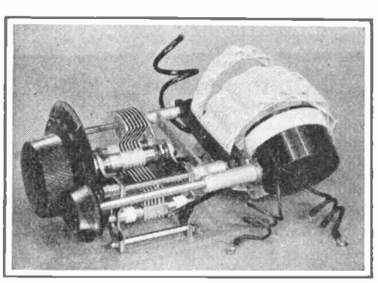
Radio Retailing, April, 1925

The S. A. Twitchell Company, 1925 Western Avenue, Minneapolis, Minn., has brought out a radio frequency amplifier which is designed for use with any type of receiving set. The instrument is, in fact, one stage of tuned radio frequency neutralized, the manufacturer explains, the energy being transformed to a receiving set to which it may be attached by use of a spider-web or duolateral coil connected to the output of the instrument, which is the plate circuit. It is enclosed in a mahogany-finished cabinet. Intended retail price, complete with tube, $25.

Tuner Unit

Radio Retailing, April, 1925

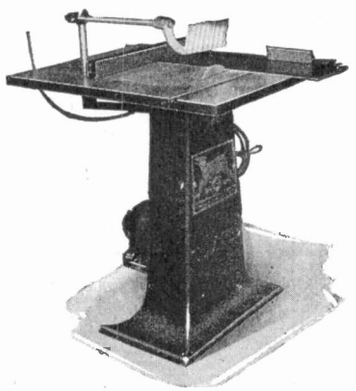
The antenna coil of the new REL low-loss tuner unit designed by the Radio Engineering Laboratories, 27 Thames Street, New York City, is "stagger-wound" as is also the secondary coil. The "ticker coil," it is explained, is wound on a small tube and is mounted on a shaft which projects through the front panel. The inductance of this coil, the manufacturer declares, is so proportioned that it will give a very gradual degree of feed-back control. The variable condenser used is manufactured by the General Instrument Corporation. The 4-in. dial and knob are of bakelite. Intended retail price, $12.



Aerial Device Using Telephone Wires

Radio Retailing, April, 1925

When placed under the telephone, the new "Antennaphone" aerial device brought out by the Antennaphone Company, 90 West Street, New York City, utilizes the telephone wires as an aerial. As radio reception is obtained by induction and not by contact, explains the company, it is unnecessary to interfere or tamper with the telephone in any way. The telephone is merely set upon the "Antennaphone" and the insulated wire which is furnished with and attached to the "Antennaphone" is then connected to the aerial binding post of the receiving set. No lightning arrester, it is pointed out, is necessary with this aerial. Intended retail price, $1.



Portable Panel Saw

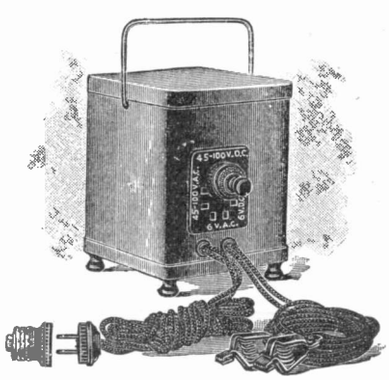
Radio Retailing, April, 1925

That is has table sufficiently large to handle full size panels is a feature of the new electric radio panel saw brought out by R. L. Barker & Company, 642 West Washington Boulevard, Chicago. The motor is a ½-hp., General Electric repulsion, induction or compound-wound type, operating from the ordinary light circuit. The equipment includes a special saw, cross-cut and rip guides, guard, motor, plug, cord and wrenches. The table measures 35 in. x 28 in. x 26 in. high. Intended price, $198.

Radio Kit

Radio Retailing, April, 1925

The "Ranger" Super-Het kit of Baldwin-Pacific & Company, Pacific Building, San Francisco, Cal., consists of one No. 30 oscillator coupler, three No. 25 intermediate frequency transformers and one No. 20 filter transformer. The intended retail price of this kit is $20. The "Pacific Quintet" kit, designed to give maximum amplification on a frequency band of from 40 to 50 kilocycles (40,000 to 50,000 cycles) is listed at $15, while the "Rainbow" kit which get its name from the green silk-covered windings of the oscillator and the maroon baked enamel trim of the transformers, is listed at $20.

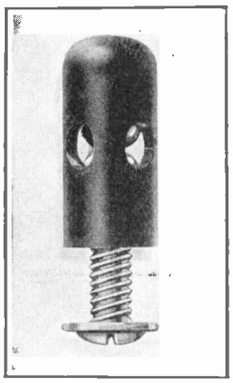


Battery Charger

Radio Retailing, April, 1925

Operating on either alternating or direct current and on any cycle, the "Chargall" battery charger of the Gold Seal Electric Company, 2110 Woodland Avenue, Cleveland, Ohio, is made to charge "A" or "B" batteries. It is of the bulb type, using a standard Rectigon tube. "Chargall" may be had in 2-amp. or 5-amp. size, listing respectively, (without bulb), at $4 and $6.

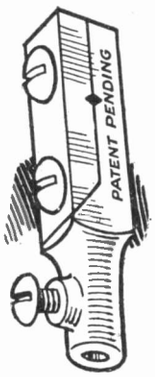
What's New in Radio and Where to Buy It



Binding Post

Radio Retailing, April, 1925

With the "Ballgrip" binding post of the Quality Molded Products, Inc., Jersey City, N. J., the wire or phone tip is assured a perfect electrical contact, as the ball, with the spring pressure behind it, the manufacturer explains, causes the wire to make a perfect contact with the "live" circuit to which it is connected. Besides its use as a binding post, the "Ballgrip" is recommended for connection on "A" and "B" batteries, tube sockets, transformers, or on any other part of the set which has screw connections. Intended retail price, 20c. each.



Lead-in Connection

Radio Retailing, April, 1925

For use with any type of antenna whether round wire or ribbon, the Colonial Brass Company, Middleboro, Mass., has brought out the "Silver-tone" adjustable, solderless lead-in connection illustrated. By means of this device, the antenna is securely fastened with the two adjusting screws though it can be easily disconnected or moved. Intended retail price, 50c.

Wrench for Radio Work

Radio Retailing, April, 1925

As its name "Reachit" implies, the new wrench brought out by the Caufman & Clough Company, 413 East Thirteenth Street, Wilmington, Del., is made to reach into difficult positions and to hold screws and nuts until firmly in place. It is made to take all types of screws and nuts, including round, fillister and flat-head screws and round, square and hex nuts. Finished in nickel. Intended retail price, $1.

Rheostat

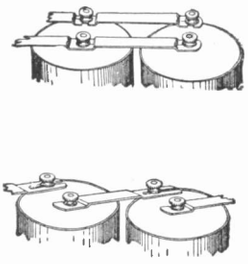
Radio Retailing, April, 1925

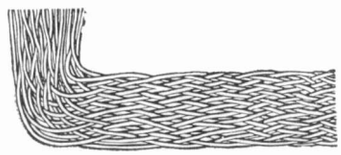
The new "Low Loss" rheostat brought out by the General Instrument Corporation, 423 Broome Street, New York City, comes in three parts: the knob, the dial and the base proper. It is provided with a fixed bakelite panel dial so that the operator may know the relative position of his contact arm. Windings of 6, 20 and 30 may be had. Potentiometers of 200 and 400 ohms resistance are also available in the same style. Intended retail price, $1.50.

Rigid Battery Connectors

Radio Retailing, April, 1925

The H. B. Sherman Manufacturing Company, Battle Creek, Mich., is bringing out a line of rigid battery connectors which are put up in an attractive display box containing properly balanced quantities of all sizes. Included in the assortment are connectors for series connection which are made to snap on instantly without removing nuts and four sizes, for two to five cells, for parallel connection. For replacement the five numbers are packed separately in cartons of fifty. Intended retail price of assortment of 102 pieces, $9.





Ribbon Antenna

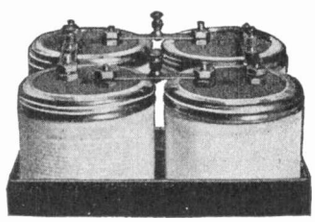
Radio Retailing, April, 1925

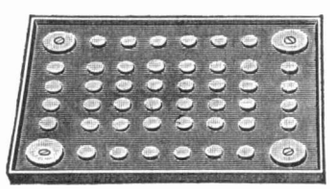
Seventeen copper wires, No. 21, are braided in one flat ¾-in. ribbon, explains the W. C. Shinn Manufacturing Company, 154 Whiting Street, Chicago. It is known as "Amplitone" and provides one continuous length for aerial and lead-in. Intended retail price, 50 ft., $2; 100 ft., $4.

Four-Cell Chemical Rectifier

Radio Retailing, April, 1925

One, two or three "Eaco," 24-cell "B" batteries in parallel arrangement can be charged by the new "Eaco" rectifier brought out by the Economic Appliance Company, Irwin, Pa. It will also charge one or two 22-volt "B" batteries of any type in series arrangement or one, two or three in parallel arrangement or four in series-parallel arrangement. The rectifier operates directly from the 110-volt circuit, the output being controlled by a lamp resistance in series with the battery or batteries being charged. Intended retail price, $5.





Battery Tray

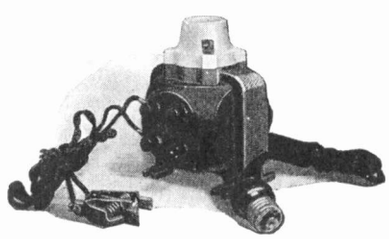
Radio Retailing, April, 1925

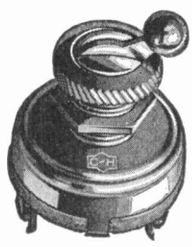
To protect furniture and rugs from battery acids, the May Rubber Company, 125 Church Street, New York City, has brought out a battery tray made of heavy, acid-proof rubber. It is made in two sizes, No. 90, 8 in. x 10½ in., which will hold batteries up to 100 amp. and No. 150, 8½ in. x 12½ in., holding batteries up to 150 amp. Intended retail price No. 90, 60c.; No. 150, 90c.

2-Amp. Battery Charger

Radio Retailing, April, 1925

Operating from the ordinary 60-cycle lighting circuit, the "Acme Jr." charger made by the Acme Electric & Manufacturing Company, Cleveland, Ohio, is designed to charge "A" batteries at a 2½-amp. rate while the "B" battery rate is ¼ to ½ amp. The "B" battery can be charged in parallel or series, depending on the type. Intended retail price of type AB-2, $10.50; type AB-120, which is made to charge a 120-volt "B" battery in series without grouping or paralleling, $12.50. A case for these chargers, with "A" and "B" battery switch, can be obtained for $4 extra.



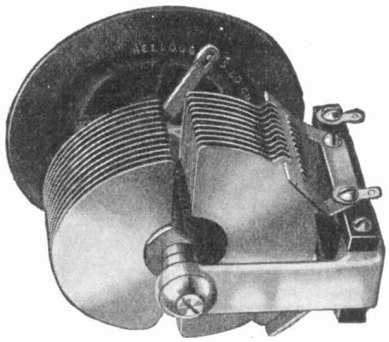


Toggle Battery Switch

Radio Retailing, April, 1925

The Cutler-Hammer Manufacturing Company, Milwaukee, Wis., has recently added to its line of radio products a new toggle battery switch which is distinguished, the company points out, by its large wiping contact, positive make-and-break mechanism, wide-spaced terminals and attractive appearance. It is designed principally for controlling "A" battery circuits, but it can also be used in connection with amplification and panel light circuits. It can be mounted easily on any radio panel in a few minutes and does not require any screws or measurements. Intended retail price, about 60c.

News of Latest Products Gathered by the Editors



Condenser

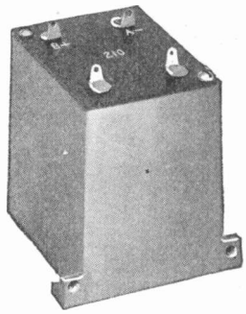
Radio Retailing, April, 1925

That its new 0.0005, 23-plate low-loss condenser is built in a novel manner is pointed out by the Kellogg Switchboard & Supply Company, Adams and Aberdeen Streets, Chicago. The stator plates are firmly held at the bottom by two small hard rubber strips in the center of a light but strong "U" frame. This frame is entirely open at the top, the shaft of the rotor being fitted across the tops of the "U". Reliable contact is assured, it is pointed out, in three separate plates and the tension held by a friction washer. Intended retail price, $5.50.

Long-Wave Transformer

Radio Retailing, April, 1925

Silver-Marshall, Inc., 105 South Wabash Avenue, Chicago, describes its "Two-Ten" transformer as a long-wave inter-stage transformer peaking at 60 kilocycles, and passing a frequency band 11 kilocycles wide. It is of the iron core type, with an extremely small core of silicon steel, which, the manufacturer points out, accounts for its combining the most desirable features of both iron-core and air-core transformers. Turn ratio, 1 to 2.3. Intended retail price, $8.



Electric Cigar Lighter

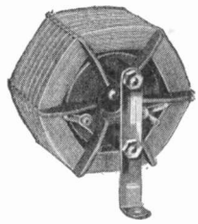
Radio Retailing, April, 1925

Held conveniently in place by a spring clip on the end of the radio cabinet, the radio-model "Smokerlite" is always at hand for instant use, making it unnecessary for the radio worker or listener-in to remove earphones or leave his work. The "Smokerlite" operates from the ordinary 110-volt lighting circuit and does not draw current from the radio battery. Intended retail price, $2.50.

Inductance Coil

Radio Retailing, April, 1925

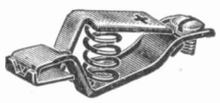
The Andrews "Paddlewheel" inductance coil announced by Radio Units, Inc., Maywood, Ill., can be used in any hook-up where a first-class radio frequency transformer-inductance is required, the manufacturer points out, having a range of 200 to 600 meters when tuned by a condenser of .00025 mfd. capacity. A shorter length of wire is used in this coil for a given inductance, it is explained, which means less resistance and a higher ratio of inductance to resistance. Intended retail price, $3.



Battery Clip

Radio Retailing, April, 1925

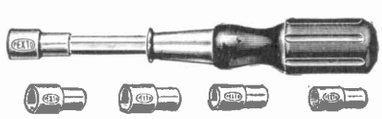
The small lead-coated battery clip for "B" storage batteries, brought out by the Mueller Electric Company, 1583 East Thirty-first Street, Cleveland, Ohio, is a new device which has been developed for standard equipment on storage "B" batteries such as Exide, Willard and Prest-O-Lite. It is made of steel, lead-plated and has teeth on one jaw and notch on the other. Its jaw spread is $\frac{3}{8}$ in. Intended retail price, about 15c. each.

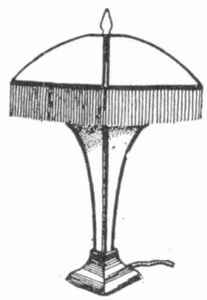


Radio Wrench Set

Radio Retailing, April, 1925

The No. 1 radio socket wrench set, made by the Peck, Stow & Wilcox Company, Southington, Conn., consists of handle and five interchangeable sockets, four for hex nuts sizes $\frac{1}{4}$, $\frac{5}{16}$, $\frac{11}{32}$ and $\frac{3}{8}$ in., and one spinner socket for knurled nuts. The length of the shank is $2\frac{1}{4}$ in. Intended retail price, per set, 90c.





Combination Lamp and Loudspeaker

Radio Retailing, April, 1925

The "Aladdin" lamp loudspeaker made by the Moe Manufacturing Company, Inc., Fall River, Mass., is 27 in. high and is equipped with patented tone distributor or loudspeaker unit, and two adjustable electric lights. Its design can be seen from the accompanying illustration. Intended retail price, $50.

Hydrometer

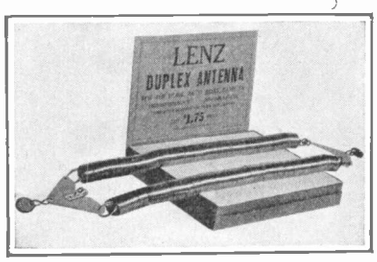
Radio Retailing, April, 1925

"Smash Pruf" is the name of a hydrometer made by the Acid Supply Utilities, 316 West Twenty-fourth Street, Chicago, for, it is claimed, a drop of 10 to 15 ft. to a cement sidewalk does not injure the instrument. A rubber snubber absorbs the shock. The hydrometer is described by the manufacturer as a scientific design of glass and rubber parts, so made that glass never touches glass. Intended retail price, $1.50.

Antenna

Radio Retailing, April, 1925

The Lenz Duplex antenna, illustrated with its display carton, is manufactured by the Perfection Manufacturing Company, 1114 De Kalb Avenue, Brooklyn, N. Y. It is made in twin coil of 150 ft. of brass wire, and is completely equipped with fibre insulators, lead-in clip and wall hooks, ready for use. Intended retail price, $1.75.



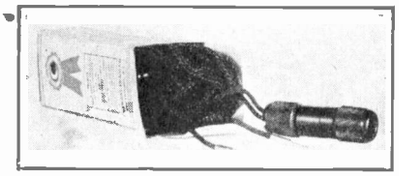
Low Loss R. F. Transformer

Radio Retailing, April, 1925

The form or cylinder upon which the wire of the new low loss radio frequency transformer of the General Instrument Corporation, 423 Broome Street, New York City, is wound is of Isolantite, a material specially recommended for high frequency apparatus. When used as a radio frequency transformer, the device will be found to have a periodic primary and a periodic secondary, an ideal condition, the manufacturer points out.

This company has also brought out a 4-in. bakelite knob with an inserted brass bushing. The scale is from 0 to 100.

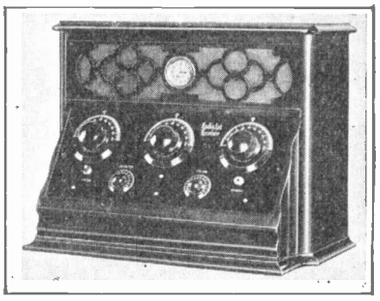
What's New in Radio and Where to Buy It



Radio Extension Cord

Radio Retailing, April, 1925

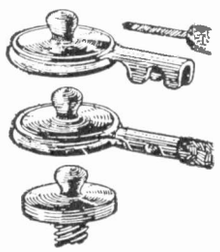
To make radio reception possible in various rooms of the house, without the necessity of moving the receiver itself, the Crescent Braid Company, Providence, R. I., has brought out an extension cord with universal plug which may be obtained in 20 ft. length or longer. By means of this cord, the loudspeaker may be placed anywhere in the house or on the porch, if desired. Intended retail price, 20-ft. length, $1.75.



Five-Tube Receiver

Radio Retailing, April, 1925

An added feature of the "Radio-Art" 210 receiver, marketed by the Musical Products Distributing Company, 22 West Nineteenth Street, New York City, is the built-in clock to enable radio users to tune in on favorite programs right on the dot. This tuned radio frequency receiver employs five tubes and is enclosed in a mahogany cabinet with built-in loudspeaker. It measures 18 in. high, 21½ in. wide and 13 in. deep. Intended retail price, $95.



Snap Terminals

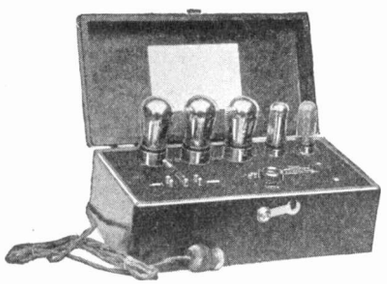
Radio Retailing, April, 1925

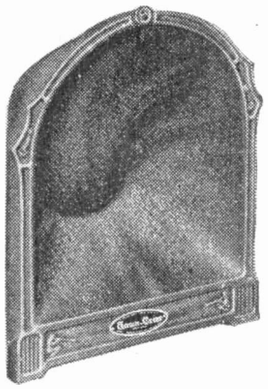
The "Nu-Way: snap terminals of the Hatheway Manufacturing Company, Bridgeport, Conn., are designed to snap into place, after the manner of the ordinary garment snap fastener, eliminating the use of nuts and screws. The terminals come in various styles, for use as battery connectors, phone connectors, etc., and are intended to simplify experiments with various hook-ups. When used with terminal lugs they can be quickly snapped on or off sockets, rheostats, variometers, condensers, etc. Both stud and connector are marked, making wire tracing unnecessary. The marked guard underneath the stud makes it impossible for the snaps to turn and cause a short-circuit, the manufacturer explains.

Radio Tube Reactivator

Radio Retailing, April, 1925

The revive old or weak tubes and bring them back in volume, the Remo Corporation, Meriden, Conn., has designed its radio tube reactivator which is made for use with standard amplifying tubes of the UV-201-A or UV-199 types. Detector tubes of the UV-200 or WD-12 types, it is pointed out, cannot be revived. The reactivator will accommodate three UV-201-A tubes or two UV-199 tubes. It is intended for operation on the regular 110-volt, 60-cycle a.c. circuit and is furnished with cord and plug. Enclosed in mahogany cabinet. Intended price, $25.





Loudspeaker

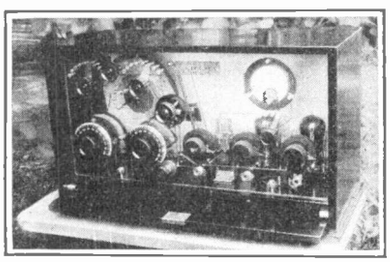
Radio Retailing, April, 1925

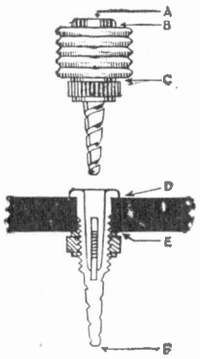
"Town Crier" is the name of a new type of loudspeaker announced by the Gale Radio Laboratories, 2512 Irving Park Boulevard, Chicago. The speaker is cast of a composition containing cement and several other ingredients and it is heavy enough, the manufacturer points out, to resist vibration and will not ring. One of its features is the distance from the unit to the outlet—approximately 21 in. The "Town Crier" is finished in crystal brown, crystal mahogany or polychrome. Intended retail price, $17.50.

Receiver with Glass Panel

Radio Retailing, April, 1925

A modification of the Reinartz circuit is employed in the R2 receiver of the S. A. Twitchell Company, 1925 Western Avenue, Minneapolis, Minn. The wave length range of the receiver, the manufacturer explains, is from 170 to 800 meters, although sets may be obtained tuned down as low as 50 meters for special and amateur work. The cabinet can be had in black walnut, mahogany or quarter-sawed white oak in any finish desired and is equipped with a disappearing front which slides up into place and locks the instrument. A Weston voltmeter and selector switch are provided. About $90.





Contact or Terminal Device

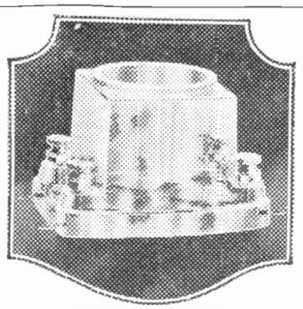
Radio Retailing, April, 1925

That it has 159 uses is claimed for "Clix" an ingenious little device recently brought out in England and distributed here by Barber & Baldwin, 30 East Forty-second Street, New York City. It is fully patented and is designed to meet the demand for a simple and efficient all-service contact or terminal which can be connected and disconnected instantaneously. Briefly, the device is described as consisting of a flanged, slotted and externally threaded shank, terminated with a grooved taper plug. The shank is taper bored to provide a socket corresponding to the plug. Intended retail price of "Clix" with locknut, 10c.; adapter 7½c.; insulator, in various colors to indicate circuits, 2½c.

All-Glass Socket

Radio Retailing, April, 1925

"Viralon," from which the all-glass socket of the Duray Radio Corporation, Newark, N. J., is made, is a special glass, processed for insulation value. The socket has one-piece contact springs, furnished with handy soldering terminals, and "Ezyklean" contacts. By simply rotating the tube several times, it is pointed out, any corrosion on the end of the tube prongs is automatically wiped away by the knurled contact tips. Intended retail price, $1.25.



What the Trade Is Talking About

Electric Light Companies Studying Radio to Help Solve Industry's Problems

THE many points of contact of the electric-lighting industry with radio, were emphasized by Chairman E. W. Lloyd of the new Radio Committee of the National Electric Light Association at a meeting of the committee at New York, March 17.

These aspects of lighting-company interest include "interference" by power lines and electrical devices; current supply to radio sets; increased lighting load due to radio users; "wired wireless" over electric-light wires, broadcasting by public utilities; and the merchandising and servicing of radio sets by lighting-companies retail stores. The various subjects are now handled by different technical and commercial committees, and it was the sense of Mr. Lloyd's committee that all matters bearing upon radio be correlated and brought through some central committee or body in the N. E. L. A.

Radio Current Supply from Electric-Light Lines

During the discussions of the committee the point was brought out that it is confidently predicted that sooner or later a satisfactory alternating-current vacuum tube will be developed which will largely obviate the necessity for either storage or dry batteries —taking the energy required for the operation of the receiving set direct from the line. Many engineers and manufacturers are also hard at work on the development of a device which will take the place of A, B and C batteries, of both storage and dry types. It is probable that devices of this kind will be fully commercially available at an earlier date than will the alternating-current vacuum tube, referred to above. In fact, there already are a number of B battery substitutes on the market.

Central Station Lines Sources of Radio Interference

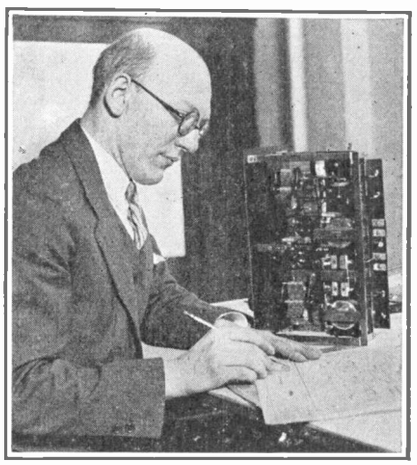
Radio manufacturers claim that a large portion of the disturbances which render radio reception impracticable emanate from some portion of the lines fed and maintained by central-station electric companies. They state that generally they have met with very generous co-operation on the part of operators of such stations in attempting to ameliorate or to correct entirely any deficiencies in the systems, causing such difficulties. At the same time, there has been displayed a lack of understanding on the part of central-station employees of how to locate the trouble, or how to remedy it when located. Following is a group of what are claimed to be central-station disturbances:

1. Disturbances from Lines and Feeders.
   a. Insulator leakage.
   b. Transformer leakage.
   c. Disturbances at source radiated from the lines.
2. Disturbances at Consuming End.
   a. Street lamps.
   b. Commercial consumers.
      1. Precipitators, etc.
      2. Motors.
      3. Battery chargers as in garages.
      4. Sign flashers.
   c. Home Consumers.
      1. Sockets, buttons, etc.
      2. Thermostats, circuit breakers, etc.
      3. Elevators.
      4. Special appliances.
         a. Heating pads, cooking appliances, etc.
      5. Small motors.

Electrical disturbances originating from sources not always obtaining power from central station may be listed as follows:

1. Farm-lighting-plant equipment.
2. Gas-engine systems.
3. Telegraph offices.
4. Telephone bell ringers.
5. Street railways.

Location of such interfering disturbances cannot be carried on successfully by other than experienced radio men. Ability to locate and remedy these troubles is dependent on a very thorough working knowledge of radio frequency currents. Any man employed in this sort of work should have a well-defined knowledge of the subject; he should be under the supervision of an official high enough up in the service of the utility company to understand the importance of the subject, and to be able to see to it that the man in direct charge has proper backing to carry on the work efficiently and intelligently.



"With all due regard to the women," declares William H. Priess, president of the Priess Radio Corporation, "I would advise that, in the purchase of radio sets, they should defer judgment to the men. One cannot blame the ladies for wanting a set that will harmonize with the rest of the furnishings, but they are apt to pay more attention to the outside of the cabinet than the inside."

Since the advent of supersensitive radio receivers, interference from high-voltage lines has been reported from a number of points throughout the country. The areas most seriously affected are those where potentials exceeding 50,000 volts are in use. It has been pointed out that in one case on a 66,000-volt line, 26 miles long, there were fifty-three sources of disturbance, due mostly to insulator breakdown. On sections of lines where no leakage of transformers or insulators occurred, a sensitive receiving set could be placed within 25 ft. of the line without interference. On lower voltages, as the result of the operation of key sockets, push buttons, thermostat controls, circuit breakers, sparking commutators, etc., the disturbances are noted within a radius of one hundred feet. All of these can be eliminated by the attachment of inexpensive devices, or the correction of the device causing the trouble.

Congress Holds Up Study of Broadcasting

The failure of the conference of the two branches of Congress in the closing days of the recent session to retain in the deficiency appropriation bill the Senate amendment to give the Department of Commerce $125,000 additional for work in connection with radio broadcasting will further complicate a situation which is growing more acute almost daily, in the opinion of Secretary Hoover.

No New Legislation Enacted

No new legislation regarding radio matters was enacted by the Sixty-eighth Congress, the White bill to define more clearly the authority of the Department of Commerce over broadcasting stations having been allowed to die at the suggestion of Secretary Hoover.

So many applications for the establishment of new broadcasting stations are pouring into the Department, however, that Secretary Hoover asked $125,000 as an additional appropriation in order to employ more personnel for an intensive inspection of interference and a study of distribution of broadcasting looking toward a reallocation of wave lengths. Due to a misunderstanding that the purpose was an inspection of receiving sets, a matter which the Department has never touched and which Secretary Hoover has no intention of touching, the House failed to include this appropriation in the bill. The Senate added it as an amendment, but it was one of the several items eliminated in conference.

No Funds Available for Research Work

One of the studies which Secretary Hoover feels is a pressing necessity in view of the rapid increase in broad-

casting stations, is the distribution of broadcasting to determine the area covered by each station. A recent study of station WEAF, New York, for instance, showed that its wave carried only 60 miles northward, but 300 miles southward. Thus, a station at Boston might broadcast on the same wavelength without interference. The Secretary feels that a similar study should be made of all broadcasting stations. It cannot be done with the funds available in the regular appropriation for the Department.

As more stations are added, the result is increasing division of time for broadcasting between existing and new stations. Secretary Hoover believes that this is an acute problem, for radio listeners are protesting to the Department against popular stations giving up more and more time to stations which present inferior programs. If there were any way to sound the body of opinion among radio listeners and to make this majority opinion effective, the problem could be solved, but how to bring this into being is a question regarding which Secretary Hoover and other officials are at a loss.

Beyond the fact that he is convinced monopoly of broadcasting is not the solution of the problem, Secretary Hoover admits he has no fixed ideas on the question of municipality of stations. Lacking funds for the study he desired, the Secretary necessarily will have to use the restricted facilities of the Department for the next year, at least, and await developments.

Hearing in Washington to Consider Radio Freight Rates

With the hearing in Washington, D. C., April 7, before the Interstate Commerce Commission, the confusion concerning the proposed increase in freight rates for radio products is expected to be cleared up.

Hitherto, radio has been classed with "electrical instruments," taking the first-class rate when shipped in less than carload quantities and third class when moving in carloads. The classification is calculated for dense loading and low value, such as is possible in freighting generators and motors, with a value of thirty to forty cents a pound, whereas, the value of radio sets ranges from $1 to $2 per pound.

Now it is proposed by the railroads to put radio sets in higher classifications. Under the new rates tube sets would take double first-class rates when sent in less than carloads, and first class when shipped in carloads. Sets with loud speakers are scheduled to take a classification of one and one-half first-class in less than carloads and second class in carload movements.

This placing of radio sets in a higher classification, the railroads declare, will insure better service and more careful handling. It is their contention that radio sets are more delicate instruments than motors, generators, etc., and require a greater amount of care in shipment than it is possible to give them under their present classification.

The Saint Louis Radio Trades Association will sponsor a radio exposition in the Coliseum, Saint Louis, Mo., the week of October 12, next. The committee in charge is composed of Harry Sachs, chairman, Thomas P. Convey, manager, Colin B. Kennedy, Robert W. Bennett and W. A. Ward.

Harold C. Bodman, formerly secretary and service director of *Popular Radio*, has established his own business as New York representative of a number of manufacturers of radio kits and parts. Mr. Bodman's new address is 216 West Thirty-fourth Street, New York City.

Some of the Crowds That Attended the Kansas City Show

Kansas City's first annual radio exhibition, held March 2 to 7, proved extremely popular, as the photo indicates. The Kansas City Electric Club, under whose auspices the show was held, estimates that 100,000 visitors attended. There were fifty exhibitors. Sam Furst and C. F. Farley made the arrangements.

New Broadcasting Stations

Several new broadcasting stations, of interest to the radio and electrical trades, have recently been licensed by the Government.

The Hickson Electric Company, Rochester, N. Y., has been assigned the call letters of WHEC and will use 100 watts on a wavelength of 258 meters. A 500 watt license has been granted the Browning Brothers Company, of Ogden, Utah, which will be known as KFWA, wavelength, 214.2 meters.

Less powerful stations will be: WGBY, Progress Sales Company, New Lebanon, Ohio, 30 watts, 218.8 meters. WHBE, operated jointly by Sewickly Auto Electric Company and Trudel Taxicab Company, Sewickley, Pa., 50 watts, 205.4 meters. WHBI, Chesaming Electric Company, Chesaming, Mich., 50 watts, 227 meters. WKBE, K. and B. Electric Company, Webster, Mass., 10 watts, 231 meters. WRAK, Economy Light Company, Escanaba, Mich., 100 watts, 256 meters.

KJR, the Northwest Radio Service, Seattle, Wash., has been transferred from Class "A" to Class "B."

More "Big Business" Enters Radio World

A combination of manufacturing as well as distributive interests in the automotive and radio worlds has been finally consummated after many months of planning, and the Splitdorf-Bethlehem Electrical Company is the name of the new organization that will carry on and expand the businesses of the old Splitdorf Electrical Company of Newark, N. J., and the Bethlehem Spark Plug Company, Inc., of Bethlehem, Pa.

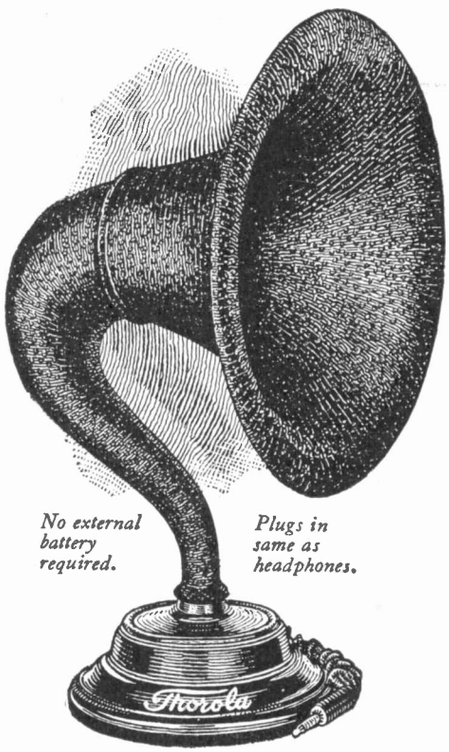
M. W. Bartlett, president of the old Splitdorf Company becomes president of the Spitdorf-Bethlehem combination, while E. H. Schwab, former president of the Bethlehem Spark Plug Company, will serve as chairman of the board.

The board of directors will include Charles M. Schwab, chairman of the Bethlehem Steel Corporation, G. B. Alvord, brother of the late president of the Splitdorf Electrical Company, C. E. Roraback, vice-president of the Torrington Company, Torrington, Conn.; H. P. Ingels of Theodore Schulze and Company, New York bankers; Joseph Remick of Pillsbury Remick Company, Boston, Mass., and Charles F. Splitdorf.

The plant and executive offices of the Splitdorf-Bethlehem Electrical Company are at 392 High Street, Newark, N. J.

The Bureau of Standards, of the Department of Commerce, has issued a publication dealing with the theory and performance of small rectifiers, which have come into great use in recent years for the charging of radio storage batteries. The publication is "Technologic Paper No. 265 of the Bureau of Standards" and copies may be obtained from the superintendent of documents, Government Printing Office, Washington, D. C. The price is 20c.

"Pipe Organ of Loud Speakers"



THOROLA 4 . . . . . $25

THOROPHONE . . . $45
Powerplus Speaker (Storage Battery)

THOROLA 6 . . . . . $15
Phonograph Attachment

THOROLA 9 . . . . . $40
Cabinet Loud Speaker

The Thorola 10-day Refund Warranty is a guarantee to every user that Thorola will fulfill every claim.

MEMBER RMA

Without pure musical tone, how hollow is all else in radio! Distance and volume, yes. But only TONE can make them worth while.

Thorola owners command *MUSIC*. They know the modern radio entertainment which needs no excuse before the most critical audience. Thorola elevated radio to the sphere of art, with betterments only Thorola brings.

The Thorola Controlled Mica Diaphragm, for tonal purity and volume, is to radio what the pipe organ is to instrumental music.

The exclusive Thorola Separix literally assorts sounds, preserving the shades and overtones which determine the timbre of song or instrument; the naturalness of voice.

The Thorola Synchronizer balances each Thorola with each individual circuit, as must be done for finest radio.

The whole Thorola reproducing unit, by its very size, suggests not only extreme volume, but utmost accuracy of reproduction due to precision design, which skimping does not permit.

Projecting the sound is the Thorola horn of Thorite, a *neutral* laboratory compound acoustically faithful beyond natural horn materials.

Thorola improvements are bound to better any radio receiver. Thorola volume permits tuning down for local stations, and brings in distant signals clear and strong. Thorola tone makes radio an *ART*. Thorola betterments give Thorola dealers every selling advantage.

REICHMANN COMPANY
1725-39 West 74th Street · CHICAGO

Thorola

THE SPEAKING LIKENESS

Radio Stock Market Averages Decline of Five Points

Radio stocks offered on the New York Curb Market have continued the steady decline started a month or more ago, even the higher priced securities on the "Big Board" sharing in the slump.

The average for all radio stocks for last month showed a slight gain, but between the last issue of *Radio Retailing* and this one, these curb stocks have averaged a decline of nearly five points per stock. This is only the average, which means that some of them dropped off considerably more.

Two significant events have however happened in radio business circles since the last issue of this magazine. These are the entry of Stewart-Warner and Charles M. Schwab into the manufacture of radio sets. Stewart-Warner is bringing out a five-tube radio frequency set with sloping panel, known as the "Aeroking." Mr. Schwab, through the Splitdorf-Bethlehem Spark Plug merger is backing also a five-tube set known as the "Splitdorf." The popularity of five-tube outfits, at popular prices, is considered a factor in affecting the market values of other types of sets.

Another interesting combination took place early in March in the formation of the Federated Radio Corporation, with an original offering of 110,000 shares. The Federated is credited with owning controlling interests in Rova, Equitable, Volumna company, the Radcab Company, and the Eureka Battery Company.

The Radio Manufacturers' Outlet Company, formerly 123 Liberty Street, New York City, has occupied new quarters at 108 Greenwich Street, New York.

The Radio Industries Corporation, 131 Duane Street, New York City, was reorganized, March 18, with a capitalization of $1,250,000. The concern manufactures the "Rico" products.

The F. A. D. Andrea Company, Inc., announces that Lewis M. Clement has been appointed development engineer of the Fada Company. For the past nine years Mr. Clement has been in charge of special development work for the Western Electric Company, and has also been associated with the Marconi Wireless Telegraph Company in Hawaii and California. With the Western Electric Company, Mr. Clement's work included the design of radio receivers, signaling systems, secrecy systems, etc.

Re-Broadcasting from London Successful

The Radio Corporation of America, with the co-operation of the British Broadcasting Company, recently succeeded in picking up and re-transmitting several programs from London.

The broadcasting was done from the Hotel Savoy, London, by 2LO and sent by land wires to 5XX at Chelmsford, where it was sent out by 20,000 watts power on a 1,600 meter wavelength. The signals were picked up at Belfast, Maine, on an antenna three miles long, and sent out on 112 meters to a Radio Corporation receiving station in Van Cortlandt Park, New York City, whence it was relayed by land wires to WJZ, New York, and WRC, Washington, who sent it out again through their usual channels.

Station WGY, at Schenectady, N. Y., also succeeded in picking up the short-wave signals sent out from Maine, and re-broadcast them to its audience.

Canadian Trend is to Complete Sets

According to reports, radio enthusiasm in all sections of Northern Ontario is at its highest at present and the demand for radio sets and accessories is increasing rapidly, say Consular advices to the Department of Commerce. Although a government license is necessary for every set in operation, it is understood that many have failed to comply with the required formality and are still operating their sets without a license.

Dealers throughout the district claim that a marked change in their radio business has taken place during the past year. Last year there was a fair demand for one and three tube sets for headphone and loud speaker use respectively. This demand has fallen off to a large extent and at the present time the tendency seems to be in favor of five tube sets for loud speaker and permanent use and two-tube sets for headphone use.

Another feature noted by dealers is that evidently fewer home sets are being made than in previous years; people are now buying sets complete. According to the Canadian tariff, radio sets are dutiable at 27½ per cent; they are also subject to a sales tax of five per cent when imported by retail dealers and consumers. The sales tax is estimated on the duty-paid value (value plus duty) and is payable at the time of entry.

To be permitted to operate a radio receiving set, the owner must obtain a license from the Dominion Government, the fee for which is one dollar per annum. While some of the sets in use are of American manufacture, the majority are products of Canadian factories controlled by American capital.

The Atlas-Colonial Corporation is the new name of the recent merger of the Colonial Radio Corporation of Long Island City, N. Y., and the Multiple Electric Products Company, Inc. of Newark, New Jersey, which have merged their factories and sales organizations. The radio receiver manufactured by the Colonial Company will now be known as the Colonial-Atlas radio set. The officers of the Atlas-Colonial Corporation are: A. C. Swenson, president; Dr. Fulton Cutting, vice-president; William C. Schmidt, treasurer; Justin L. Miner, secretary. W. H. Shotwell is the general sales manager.

The Kodel Radio Corporation is the name of the new amalgamation of the Automatic Electric Devices Company and the Kodel Manufacturing Company, both of Cincinnatti, Ohio. Gold Seal Homcharger and the Kodel receiving sets will be made by the new concern, of which Clarence E. Ogden is president; J. F. Bichl, vice-president; and E. J. Taylor, A. H. Ewald, W. L. Buddie and Otto Dieckman, directors.

The Zenith Radio Corporation, Chicago, has appointed Thomas E. Carnahan, formerly of H. W. Kastor and the Arnold Joerns Advertising Agencies, advertising manager.

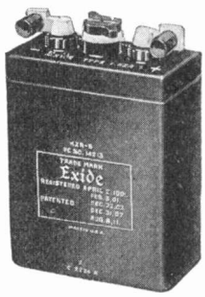
Radio Stock Quotations

Stock	Div.	Authorized Cap. Stock	Current Market March 20		1924	
			Bid	Asked	High	Low
Amer. Tel. & Tel.	2¼Q	900,000,000	132½	132⅝	134¾	121⅛
Apco, A pfd.	50cQ	1,250,000	25	26		
Apco, Com.		*65,000				
Boissonnault		*250,000	1¼	1⅜		
DeForest		*250,000	22½	23	28¾	5
Dubilier		*500,000	16	17	68	10½
Duplex Cond.		*62,500	3	5	12⅜	11
Freed Eisemann		*300,000	8	9	33¼	27⅛
Chas. Freshman	50cQ	*225,000	12	13		
Garod Corp.		*100,000	4	5		
Gen. Elect. Com.	1Q	185,000,000	258	259	322	193½
Gen. Elect. Special	15cQ	35,000,000	11	11½	11½	10¾
Grimes Radio		*300,000	11½	12½		
Hazeltine Corp.	1¼Q	*200,000	17½	18	48¼	13
Inter-Ocean		*100,000	3	4	16⅜	8¼
Jones Radio		*250,000	2½	3¼	10⅜	7
Liberty Radio		*150,000	8½	8¾	8	5⅜
Magnavox	5cQ	750,000	3	5	4	1½
Marconi of Amer.		10,000,000	15	20	15	6
Marconi of Can.		7,500,000	1	2	2	1
Mar. of Eng., com.	15%	18,000,000	9½	11	12	7
Mar. of Eng., pfd.	10%	1,250,000	8	11	12	7
Mar. of Spain		1,750,000	1	2	2	1
Mar. Int. Mar.	5%	7,500,000	6	8	8	5
Music Master		*500,000	12	13		
Radio Corp., A com.		*1,500,000	52	52¼	66⅞	25⅞
Radio Corp., A pfd.	87½cQ	25,000,000	51	52	50	45⅝
Rova Radio		*150,000	7	8	18	9⅛
Sleeper Radio		*110,000	7	8	17	15
Thermiodyne		*300,000	12	12¼	19½	12
Thompson		*140,000	8½	9	21	7
Ware Radio		*60,000	12	13	39½	13¾
Western Elect., pfd.	1½Q	50,000,000	115½	116½	117	111⅝
Westinghouse	1Q	121,000,000	67¼	67⅝	71⅜	55¼

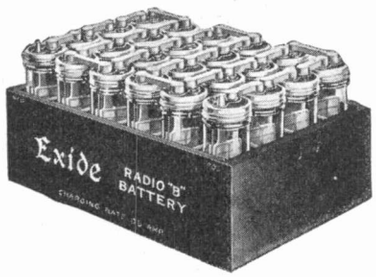
* Shares—all others are in dollars.

Exide
RADIO BATTERIES

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 48-volt "B" Battery in glass jars. 6000 milliampere hour capacity. Made also in 24-volt size.

For every type of home receiving set there are capable Exide Batteries. For the fan who must have clearest reception and uniform current through a long period of discharge, there is sure satisfaction with Exide Batteries. For the merchant who seeks to reduce service hazards, who looks to the future of his business, there is prestige and profit in the Exide line.

Exide rectifier for economical recharging of "B" battery from house current.

To the merchant who is looking ahead

Much of your new business this year will come from new users of radio sets. Most of these people know little about radio batteries. But when you recommend an Exide, even the novice is quick to recognize your good judgment.

LONG before the days of radio, Exide Batteries were widely used and known. For years millions of car owners have relied on them. For years people have been reminded by Exide advertising that the name Exide is the standard for judging storage batteries for every use.

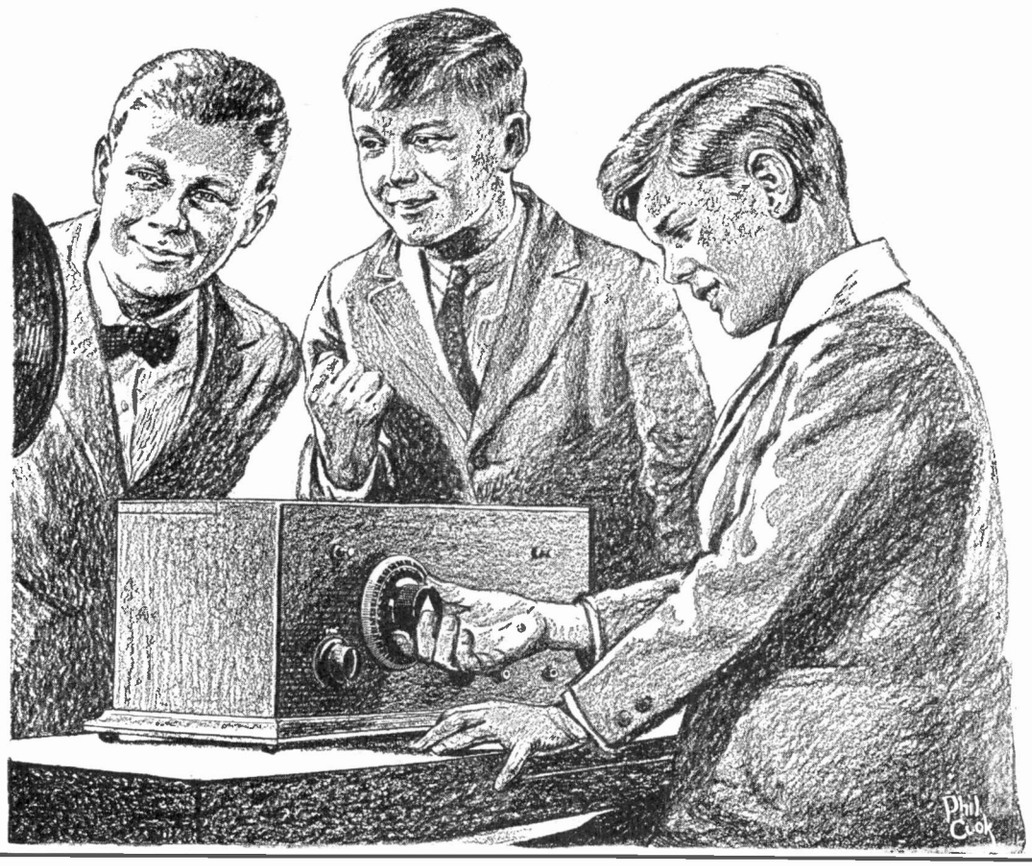
W G Y, the General Electric Company's broadcasting station, and many other great radio plants on land and sea, depend for current on Exide Batteries.

Is it any wonder that even the inexperienced radio fan knows and trusts the Exide, and respects the judgment of the merchant who recommends them?

THE ELECTRIC STORAGE BATTERY COMPANY, Philadelphia

In Canada, Exide Batteries of Canada, Limited, 153 Dufferin Street, Toronto

AN ALL-YEAR MARKET



Look for the Red Triangle

THERE are indications that this year the so-called "summer slump" in radio will be less conspicuous. Better and more interesting broadcasting, better and more easily owned radio receivers, these are contributing their share to the improvement. But it's up to the manufacturer and the dealer to build up this valley in the year's selling curve.

In the new line of Paragon Receivers *saleability* has been developed to the last degree. High radio quality—the quality that has made Paragon an envied name in the industry. A complete range of popular priced models. And the backing of popular national advertising.

The dealer who persists—who displays, talks and *thinks* Paragon Receivers—without regard to the so-called seasons or "slumps"—is going to profit. And the entire Paragon organization stands ready to help him profit—help him with co-operation of the strongest kind. Write for practical suggestions that will help make radio sets all year sellers in your store.

ADAMS MORGAN COMPANY, INC., 14 Alvin Avenue, Upper Montclair, N. J.

PARAGON
RADIO RECEIVERS

NEW PARAGON FOUR $65.00

A four-tube, long distance receiver of almost unlimited speaker range. New Paradyne Circuit, non-radiating. Quick sharp tuning—single dial. Mahogany, 21 in. long.

NEW PARAGON THREE $48.50

Three tubes that do the work of four on stations within wide range. Excellent speaker volume. Clear tone. Single dial control. Mahogany cabinet, 17 in. long.

NEW PARAGON TWO $27.50

Two tubes. Single dial tuning. Clear, strong speaker tone on stations within moderate range. Phone range practically unlimited. Mahogany finish, 11 in. long.

Music Master
Resonant Wood Insures Natural Tone Quality

Connect Music Master in place of headphones. No batteries. No adjustments.

(Prices of all models slightly higher in Canada)

Model VI, 14" Wood Bell $30

Model VII, 21" Wood Bell $35

Music Master *Sells Best*

because Music Master Makes any good set BETTER

THERE'S rapid turn-over, with handsome profits, in handling Music Master, because you sell artistic radio re-creation and *not* mere radio reception—Why? For these reasons:

The piano's sound board, the violin and 'cello, and Music Master's amplifying bell are all of wood—because wood produces *natural* tones.

Heavy cast aluminum eliminates over-vibration, develops sound without distortion and imparts a *unique* tonal brilliance.

This balance of resonant wood and non-resonant metal preserves, reproduces and re-creates the natural qualities of instrument and voice—and makes

Music Master the Supreme *Musical Instrument of Radio*, for which there IS no substitute.

Music Master is the fastest-selling item in radio today—widely advertised and the universal favorite of the New Era radio public that demands quality entertainment instead of stunt hook-up and mere DX thrills.

Model VIII, Mahogany Cabinet with "full-floating" Wood Bell $35

Model V, Metal Cabinet, Mahogany Finish, Wood Bell $18

Music Master Corporation

Makers and Distributors of High-Grade Radio Apparatus

Tenth and Cherry Streets

Chicago **PHILADELPHIA** *Pittsburgh*

Canadian Factory—Kitchener, Ontario

Music RADIO Master REPRODUCER

There's Profit in Parts— if you stock the right parts!

There is always an active demand for well-known parts.

There is profit too in stocking well-known parts.

The prosperous dealers stock those parts which sell all through the year—summer as well as winter—they find that they help pay expenses in the dull seasons and increase the profits in the active months.

Don't overlook the profit and sales building possibilities of Dubilier products—they are found in over 90% of all radio sets in use today.

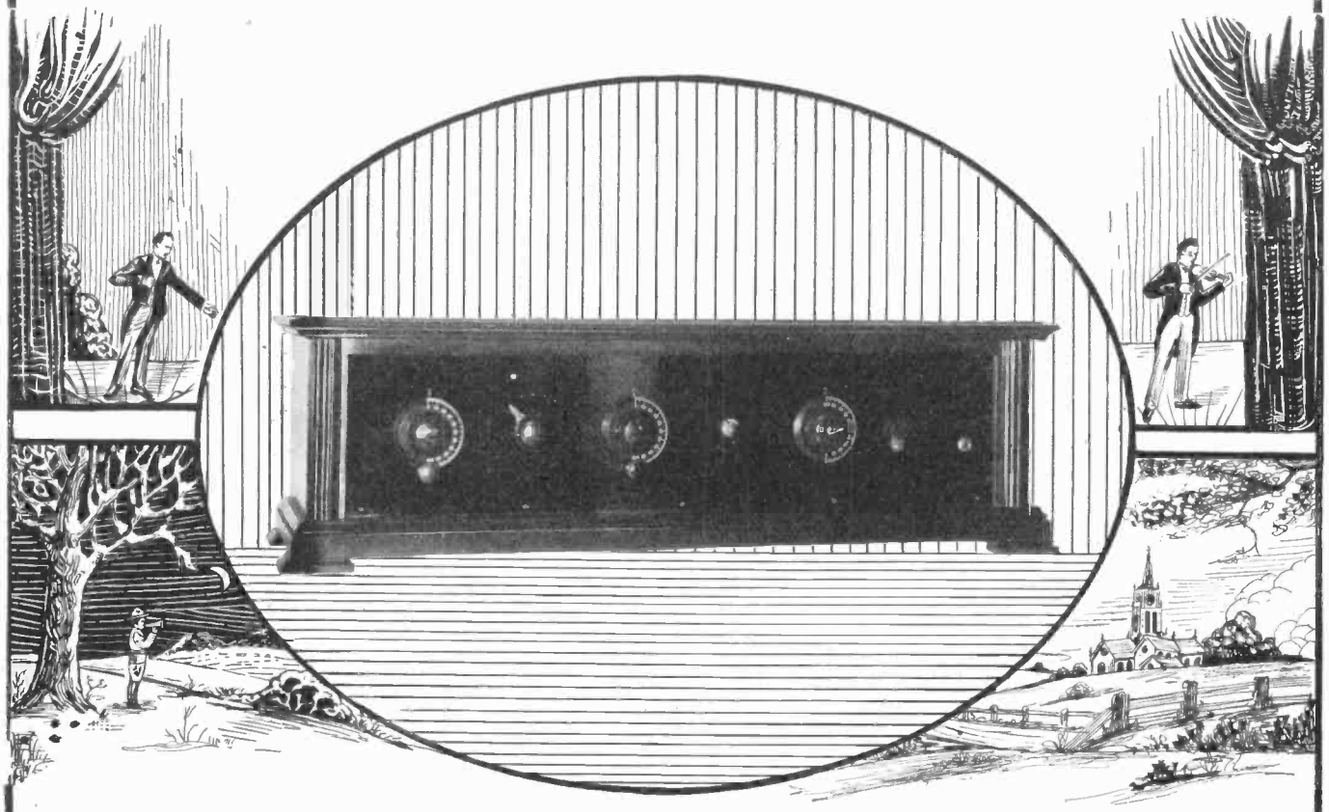
Stock Dubilier Parts

For address of nearest distributor, write to 39-43 West 4th St., New York.

Dubilier

CONDENSER AND RADIO CORPORATION

What is the Clearest, Purest Tone You Ever Heard?



On a clear, cool spring morning have you ever heard chimes ringing out from a church on a nearby hill? You know how clear it is, the sound of bells on the soft air.

Or on a cold, still, moonlit winter night have you ever heard the notes of a bugle across the snow? Have you? And is it your idea of the purest tone you ever heard?

Or again, have you listened to the human voice at its best? The wonderful, full-throated voices of the opera stars? Have you heard them?

Fix in your mind the mellowest tone you have heard. Then listen to the Premier.

The pure, clear tone of the Premier was no accident. It was our primary aim. Volume, distance, selectivity—it has plenty of all those, but above everything else—perfect tone.

The Premier uses a crystal detector—rugged, long wearing, yet extremely sensitive. It has a five-tube reflex circuit, giving four stages of radio and three stages of audio amplification.

There is no off-season for the Premier, for it operates with wonderful results on a loop and is a distance getter in the summer time. It can also be used, of course, with outside or inside aerial.

The cabinet is classically simple in design, and of genuine mahogany.

A demonstration will sell the Premier against any kind of competition. We want responsible dealers who are desirous of handling an exceptionally high grade Receiving Set, and are offering an unusually generous proposition. Write to us.

The Premier is also made in console model with built-in loud speaker and space for batteries. The circuit is the same as the table model.

The Premier Radio Corporation

Defiance, Ohio

B-LIMINATOR
Price $35
with Special Tube

Patented May 15, 1923

The endorsements below are taken from our new folder, "Let These Letters Tell You."

Here is a Radio Product that will Sell Throughout the Summer

Last summer, if you remember, the sale of B batteries and tubes continued at almost the same rate as during the so-called radio months. Here you have proof that radios are used during the summer.

This year, people will purchase B-Liminators in place of B batteries. This is because of the wonderful success of the B-Liminator, which takes the place of B batteries and operates from any 110 volt A.C. 60 cycle house current.

On this page, we are giving you some letters written without solicitation from B-Liminator users. Most of these were written before we developed our own special rectifying tube which makes the B-Liminator a still more wonderful instrument. This tube is manufactured to the most rigid specifications to insure long life. Every one is tested before shipped. When you sell the B-Liminator now, it is complete—the tube is included yet the price is still $35. And there's no danger of your customer getting poor results because he used an inferior tube. If he follows the complete directions which come packed with every B-Liminator, he will have just as great success as others are having. And he will be just as enthusiastic.

So display B-Liminators. Mention them to your customers. If you want display materials, or a supply of the "Let These Letters Tell You" folders, we'll send them promptly. We'll also send literature on Timmons Adjustable Type Talker, which lists at $35, and Timmons Non-Adjustable Talker (Type N), which sells at $18.

TIMMONS RADIO PRODUCTS CORP.
GERMANTOWN, PHILADELPHIA

Here is enthusiastic endorsement of the B-Liminator from users:

On a three-tube regenerative set:

"It was a pleasure to try a B-Liminator the other night on a 3-tube regenerative set. In three hours, I was able to tune in 27 stations on the loud speaker. This has not been possible heretofore, using B batteries."

F. W. Groves, Supervisor,
Philadelphia Fire Underwriters' Asso.,
Philadelphia, Pa.

On a Freed-Eisemann:

"I am personally using a B-Liminator on a Freed-Eisemann five tube set with very best results."

Dr. Gordon W. Welch,
166 W. Main Street,
Jackson, Michigan

Aided in tuning in Los Angeles:

"On the morning of January 24th, I tuned in Los Angeles, Station KFI, on my six-tube Atwater-Kent set and listened to the concert for over one-half hour. The B-Liminator was of great assistance in clarifying reception. Your loud speaker unit, which I used on the Victrola, reproduced the music as perfectly as one could possibly want."

Thomas H. Latta,
Armstrong & Latta, 1929 Sansom Street,
Philadelphia, Pa.

Tunes in Newcastle, England:

"I have a B-Lim which I value very much and upon which I put the credit for getting "DX," i.e. Newcastle, England, etc.

Everett E. Abrahams,
66 Fort Washington Ave.,
New York, N. Y.

On a five-tube Appleby set:

"The B-Lim operates perfectly on my five-tube Appleby set."

Thomas Appleby, Philadelphia, Pa.
Pres. of the Radio Council,
3rd U. S. Radio District.

On an Atwater-Kent:

"I am using a B-Liminator in connection with a new Atwater-Kent radio, and I am getting all stations from coast to coast."

Willard Rapp,
503 Walnut Street, Elmwood Place,
Norwood, Ohio.

TIMMONS *Radio Products*

STICKS OUT!

Merchandise displayed in the SHERER Radio Display Case sticks out. It arrests the eye, prods the desire for possession, and clinches the sale.

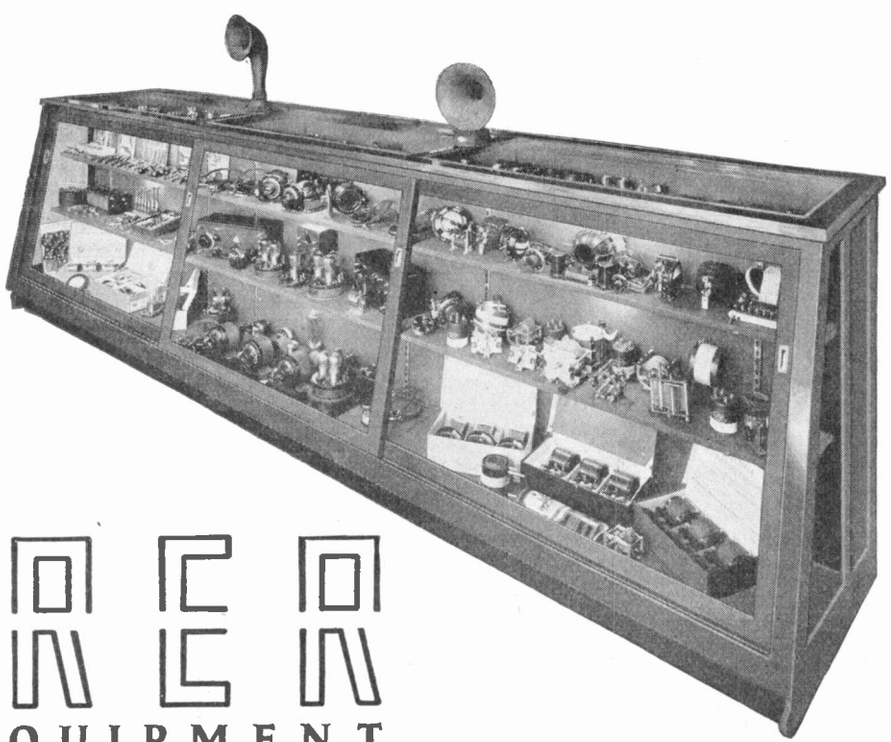
SHERER equipment furnishes ample display space plus generous storage room for surplus stock. It multiplies turnover, makes service faster, keeps stock fresh and clean, and gives the store a snappy appearance.

SHERER Cases are paying investments and installed only where they *will* prove profitable.

The SHERER Retail Advisory Bureau studies your problem thoroughly. A staff man consults with you and renders worthwhile service with a view of increasing your business and decreasing your costs. *After* this has been done the advisability of installing SHERER equipment is determined.

Write for literature, or state when you can consult with a Retail Display Advisor.

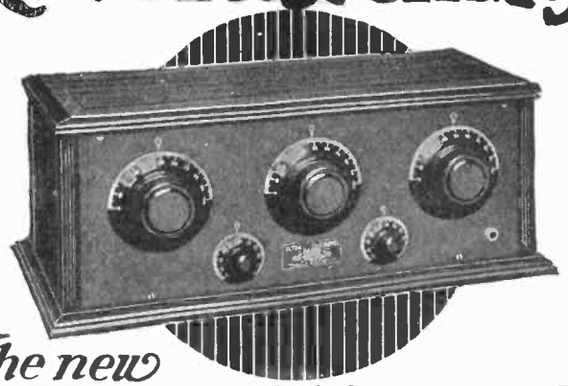
SHERER-GILLETT COMPANY, *17th and S. Clark Sts., CHICAGO*



SHERER

DISPLAY EQUIPMENT

Revolutionary



The new Ultra Marvel

An Entirely New Principle of Tuned Radio Frequency

for
Better Reception—

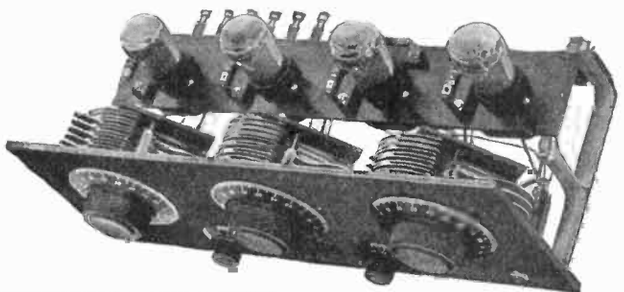
Revolutionary Tuning elements, eliminating the use of condensers.
Providing a selectivity heretofore impossible without sacrifice of ease of tuning.
Permitting a much closer control of incoming signals than by any other principle of tuning—enabling a complete elimination of local and other interfering stations on close wave lengths.
Designed to meet new broadcasting conditions with equal efficiency on entire wave band from 200 to 575 meters.
Dial control to compensate for all conditions of installation, assuring maximum efficiency regardless of type of antenna employed.
Volume control to regulate volume as desired.
Five tube efficiency with four tubes.
Incomparable clarity and volume on long distance and nearby stations.
A greater degree of sensitivity to weak signals. Can be operated without antenna or ground under favorable conditions.

The new ULTRA-MARVEL RECEIVER will completely revise your opinions regarding perfect broadcast reception. It establishes a new standard of efficiency on all wave lengths from 200 to 575 meters, with such close control of signals as to permit absolute elimination of interference.

The new ULTRA-MARVEL Tuning Elements are the most important of the many revolutionary achievements of this organization and meets the need for radical changes in receiver design and construction in order to obtain perfect reception under existing broadcasting conditions.

Once you hear the new ULTRA-MARVEL you will quickly recognize the importance of the many new features introduced for the first time in this receiver. A demonstration results in a sale — every time.

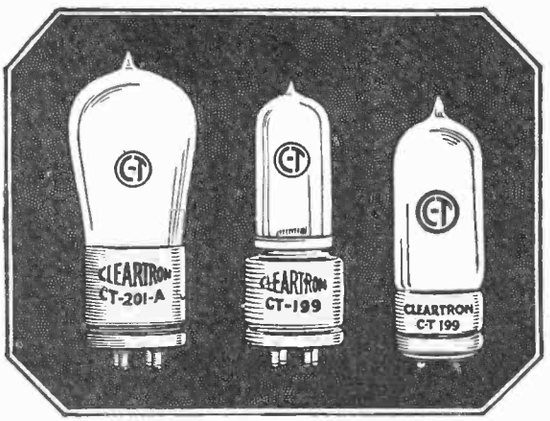
Note its simplicity and compactness. The three Refractoformers are shown just back of the large dials. One of the aluminum brackets is clearly visible on the right and the method of suspending the tube base can readily be seen. Six binding posts are shown on the rear left. When the unit is placed in the cabinet, the binding posts protrude OUTSIDE of the cabinet so as to be readily accessible.



Exclusive Territory Assigned to Representative Dealers
Write for Full Particulars

INDUSTRIAL RADIO SERVICE
NEWTON AND RUST AVES.
SAGINAW, MICHIGAN

MORE PROFIT FOR YOU ON CLEARTRON



Repeat Sales Assured by *Guaranteed* Tube Performance

WHY are discerning dealers turning to Cleartron Tubes? Why do they consider them more dependable—more consistent in quality—a better buy for the customer?

Cleartrons Are Truly Guaranteed!

The rigid guarantee that goes with every Cleartron Tube, based on the strictest laboratory test, makes Cleartron Tubes sell, render the fullest performance and sell again. Cleartron Tubes will make pleased, loyal customers.

Cleartron Quality Means Repeat Business!

You can back Cleartron Guaranteed Tubes to the limit. They last longer. They are more economical in current consumption. They oscillate, detect or amplify. Cleartrons come in three regulation sizes shown above. C-T 199 Standard Base is designed to fit 201A sockets without adapters. All retail at $3 apiece.

Tie Up with Cleartrons!

Dealers, make your tube business more profitable. Order thru your distributor or jobber or write us for information.

CLEARTRON VACUUM TUBE CO.
24 West 44th Street, New York City

CLEARTRON
GUARANTEED RADIO TUBES

Let the dealers themselves they need to turn those

How many of the inquiries that dealers get for your product, are in reality selling other products instead?

Time and again this happens when dealers cannot put their fingers on such details as sizes, construction, characteristics, prices or nearest distributor.

Even where they are fairly familiar with the device asked for, it is vital that you keep such information where they will have it always on tap.

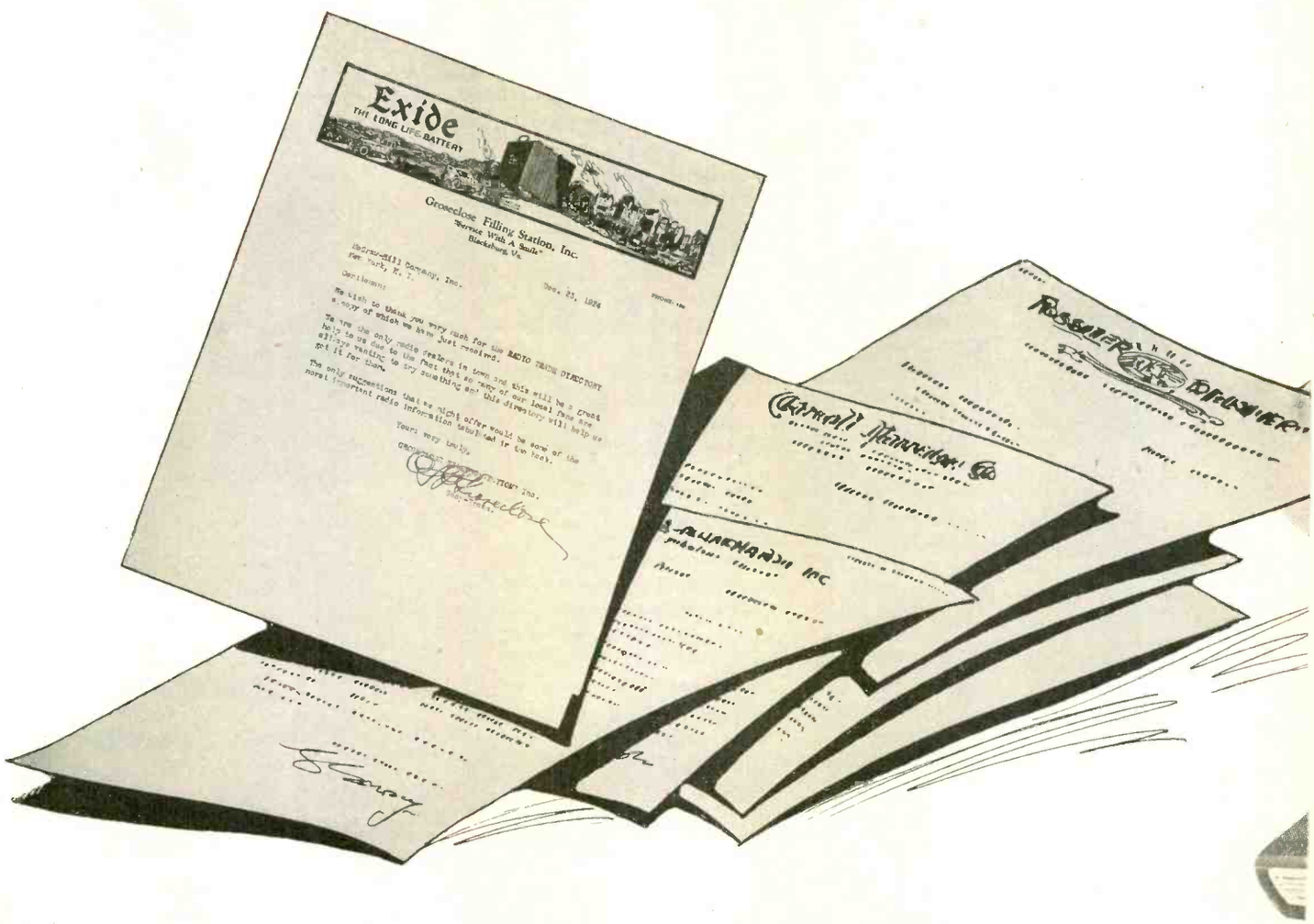
You can't hope to get every dealer to *stock* your product, but you can make it possible for them to intelligently answer every inquiry and fill every order for it.

This applies to responsible *jobbers* as well as dealers.

These letters from dealers show you how the Radio Trade Directory fills this need. Hundreds of just such letters have poured in, thanking us for this valuable service to the industry and telling us how they use it constantly in buying.

The Directory will give *you* an excellent opportunity to keep the full details of *your* product where dealers and jobbers can always find it quickly!

Let us tell you how it can be done.



tell you the help inquiries into sales

The Radio Trade Directory goes quarterly to all responsible parts dealers, and all jobbers and manufacturers. It classifies and lists every known radio set, part and accessory.

Only an institution with such unlimited facilities as the McGraw-Hill Company could carry through such a tremendous undertaking of gathering together all this information, *compiling it.* and *keeping it always right up to date.*

THE RADIO TRADE DIRECTORY
A McGraw-Hill Publication
Tenth Avenue at 36th St., New York, N. Y.

Information You Need!

HERE is a truly remarkable book. "The best book on how to sell fans I've ever seen," is the way you will describe it.

"Trade Winds" is not merely a catalog of Dayton Fans. It is brim full of merchandising ideas for every retailer of electric fans. It is worth while. Send for it.

Don't get the idea that a fan is just a fan. Dayton Fans have very definite advantages. Two splendid new models have just been added to the line; a 10" oscillating fan retailing for only $15, and an 8" non-oscillating model for the wonderfully low price of $7.50.

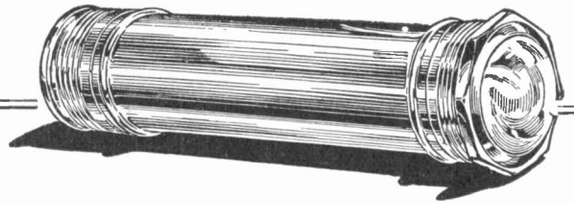
Use the coupon below requesting "Trade Winds". It will be 2c well spent.

The Dayton Fan and Motor Company
DAYTON, OHIO
For 36 years manufacturers of high-grade electrical equipment.

Day-Fan
RADIO · MOTORS · FANS

DAYTON FAN & MOTOR CO., Dayton, Ohio.
Send me a copy of "Trade Winds".

Name.....
St. No.....
City..... State.....



YALE *offers*

A Remarkable NEW TYPE *of* FLASHLIGHT Retails for $1.00 *Complete with Batteries*

Dealers!

THIS is the world's most simple flashlight. Composed of only 7parts—all interchangeable. It is made up with heavy nickel case. Genuine YALE QUALITY throughout. A REAL FLASHLIGHT!

YALE MONO-CELLS
Fit All Standard Flashlights

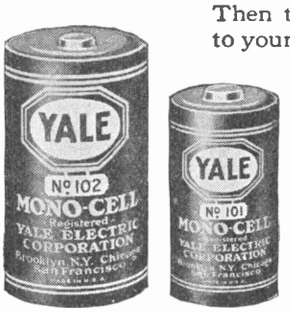
The patented construction of the Yale Mono-Cells make a short circuit impossible in a flashlight. They are "chock" full of *dark-dispelling* energy.

Here are some of its
STARTLING FEATURES

1. No Contact Switch to go wrong.
2. No Contact Strip to corrode or break.
3. Bulb Assembly fits either end.
4. Batteries can be inserted in either end.

Do you want to know how it works?

Then tear out this page—attach to your letterhead and mail to us.



YALE ELECTRIC CORPORATION
BROOKLYN, N. Y.
Chicago San Francisco

W666
15 in. Bell
"After Dinner Speaker"

H&H

TRADE MARK

Radio Material

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.

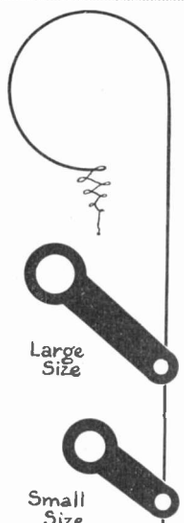
They all need these

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.



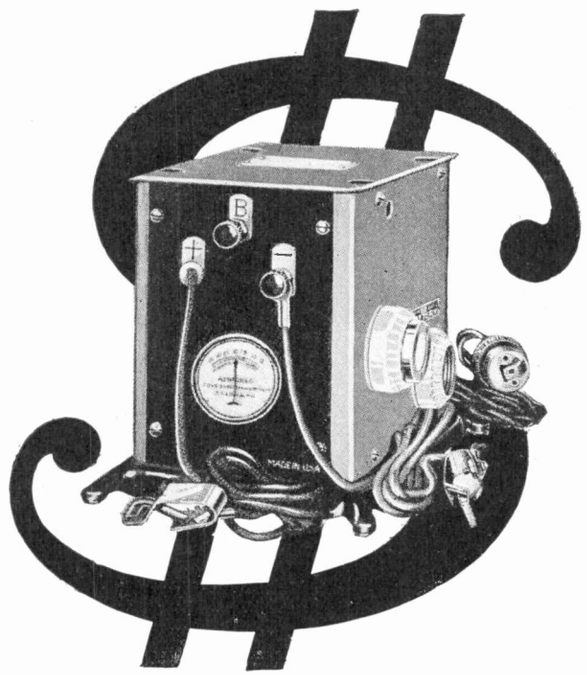
Economy Screw Corporation

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.

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.....

Dealers who make the Harry Alter Company their source of supply have, at all times, access to complete stocks of the products of America's leading manufacturers...and prompt deliveries from these stocks.

The HARRY ALTER CO.

OGDEN *at* CARROLL AVENUE · CHICAGO

Wholesale Distributors for

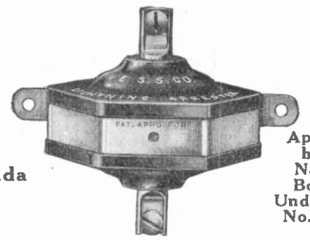
Freed-Eisemann Sets
Radion Panels
Freshman Receivers
Premier Parts
Signal Apparatus
Balkite Chargers
Brandes Headsets
Dubilier Condensers
Carter Apparatus
Pacent Parts
Erla Kitsets
Allen-Bradley Parts
Benjamin Products
Hold-Heet Appliances
American Beauty Irons
Appleton Fittings
Duraduct Products
Save Lamps
Wadsworth Switches
Inland Glass
Liberty Stoves
Dim-A-Lite Sockets
Burgess Batteries
Master Motors

And many others nationally advertised and nationally known

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

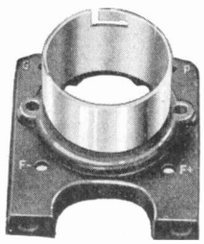
Big sales for the Nationally advertised Keystone Radio Arrester are just ahead. Place your order now for your stock of this famous Arrester—made of genuine Bakelite and brass parts. You can sell nearly every customer a KEYSTONE RADIO LIGHTNING ARRESTER. Try it today.

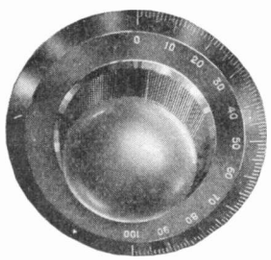
Order from your Jobber or write for complete information.

Electric Service Supplies Co.
17th and Cambria Sts., Philadelphia, Pa.

LOW LOSS ARRESTERS

Molded Bakelite for *Radio*





Bakelite and Condensite knobs, dials, socket bases, rheostat bases, condenser end plates, and other parts, produced by our large and experienced Molding Organization.

American Insulator Corp.
52 Vanderbilt Avenue, New York City

100% Tone

Magic Radio Clearness

with this new principle horn— the Kellogg Symphony Reproducer

Brings in the marvels of the air exactly as broadcast.

Embodies a new principle—the result of years of experiment by our experts.

Made by the 28-year old Kellogg Switchboard & Supply Company—specialists in the transmission of sound.

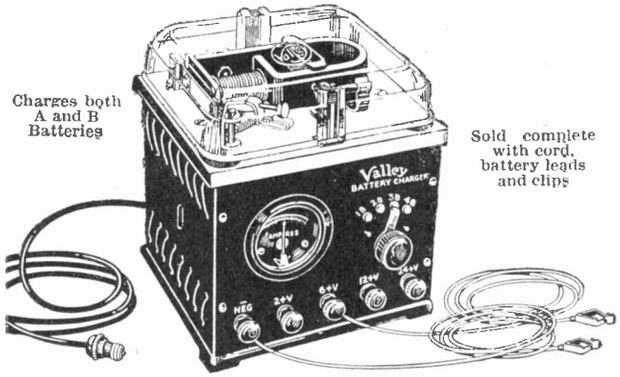
Improves any set it's used on.

Here is a big new sales-maker . . . a profitable item to handle.

Ask your wholesaler's salesman for proposition, or write direct to:

Kellogg Switchboard & Supply Co.
CHICAGO, ILLINOIS

KELLOGG *Symphony* Reproducer



Sell a Winner

It's just a small margin — that difference between profit and no profit. In radio chargers, sell a winner and be sure of that margin.

The Valley is the radio battery charger with ten points of superiority — ten selling points which move it for you. That's why it's a winner.

If you are not handling Valley Chargers you are missing sales, that's all. But that's enough for the progressive radio retailer. Order from your jobber or write us for information.

VALLEY ELECTRIC COMPANY
3157 S. Kingshighway—Saint Louis, Mo.

Valley Battery Chargers

YAXLEY

APPROVED RADIO PRODUCTS

Are Selling *for* Dealers Everywhere

There's a Reason

Convenient packages, on-time deliveries, National Advertising backed by original and correct design and superior construction.

That explains the popularity of Yaxley Approved 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. Desplaines St., Chicago

Proof of the Pudding

Here's a letter which speaks for itself:

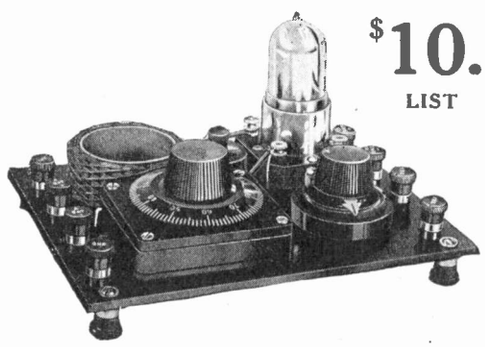
H. K. PENDLEBURY & CO.
Authorized Customs Brokers by License of
Minister of Customs, Canada
Saskatoon, Sask.

January 22nd, 1925.

Kenmar Radio Corp.,
Danvers, Mass.
Dear Sirs,

Just a line to let you know that the Babydyne receiver I bought from you is giving great satisfaction. I have had stations up to 1600 miles and get great volume on the loud speaker from local stations.

Yours truly,
(Signed) R. G. PENDLEBURY.



$10. LIST

Kenmar Radio Corp., DanVers, Mass.

A REASONABLY priced five tube receiver that sells and satisfies.

Wrtie for details.

THE A-C ELECTRICAL MFG. CO.
Dayton, Ohio

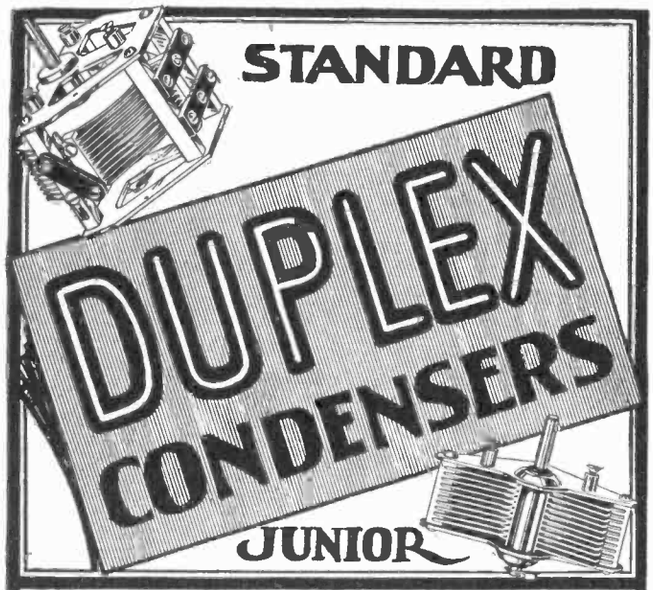
Telephone Cords

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.



The MATCHED *Set Feature of* DUPLEX CONDENSERS

Makes Bigger Profits ! Through Easier Sales !

No Condensers excel DUPLEX in low-loss or self-shielding qualities. They are made to conform to Bureau of Standards specifications. However, you are now spending much valuable time trying to prove why one type of condenser construction is worth more than another. We eliminate that time waste by giving you ——————

A Brand New Condenser Sales Point

No matter how fine they are, condensers differ in maximum and minimum capacity. To give duplicate dial readings on tuned Radio Frequency, they must be matched by meter tests. Price considerations and construction features fade away when you put a set of DUPLEX MATCHED CONDENSERS on the counter, and state why they are matched.

A Consumer's Guarantee That Guarantees You Full List Price!!

The Duplex Condenser & Radio Corp. guarantees to co-operate with set builders in securing matched dial readings, even to the extent of replacing condensers—provided full list price was paid for the condensers.

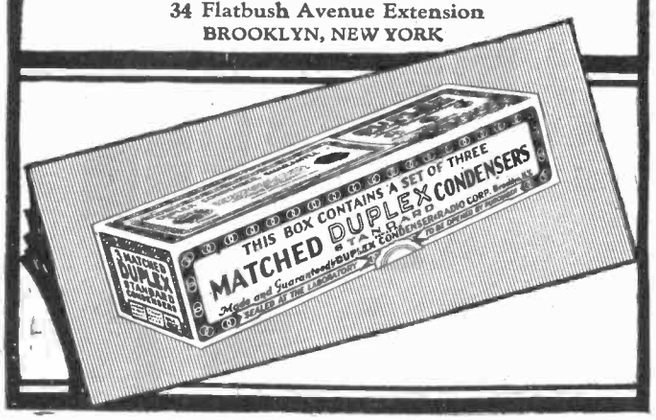
DUPLEX NATIONAL ADVERTISING

is educating your customers to all the facts about DUPLEX MATCHED CONDENSERS and why condensers should be matched. It is being told in all the leading Radio Magazines.

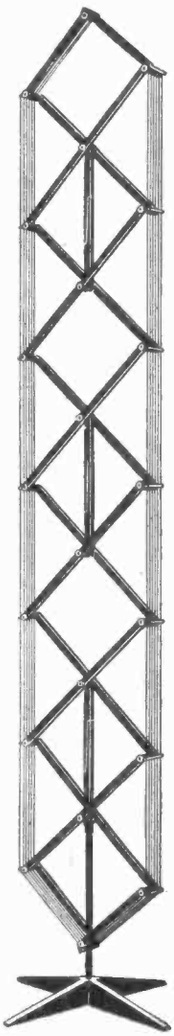
Mail a Sample Order to your Jobber

Put one or two sets of DUPLEX MATCHED CONDENSERS in your stock. You will re-order! Because—you will find the DUPLEX way an easier, quicker, more profitable way to sell condensers than your present way.

DUPLEX CONDENSER & RADIO CORP.
34 Flatbush Avenue Extension
BROOKLYN, NEW YORK



Seven Feet, Nine Inches High— And It's Collapsible



YOU can't realize until you actually demonstrate the Volumax how much greater volume and distance and selectivity you get for that extra height. You have 7-ft. 6-in. to gather added energy from the broadcast wave. And that makes a lot of difference.

In action the Volumax almost reaches the ceiling of an ordinary room. Yet, in ten seconds it can be collapsed on its base and folded away in a small box 20-in. long, 7½ in. wide and only 3-in. deep.

Radio fans everywhere are literally astounded at the improved reception that this remarkable new loop makes possible. Write or wire for complete information on dealer arrangement. The Volumax retails for $17.50.

THE SCOTT AND FETZER CO.
Radio Division
Cleveland, Ohio

VOLUMAX LOOP

THE SCOTT AND FETZER CO.,
Cleveland, Ohio.

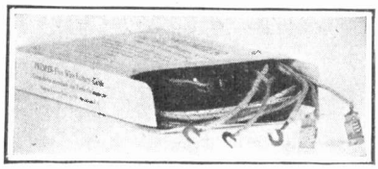
Please send me complete information on the Volumax Loop as well as on your dealer arrangement.

Name .....

Business Address .....

City and State .....

Fast selling specialties!



5-wire Battery Cable

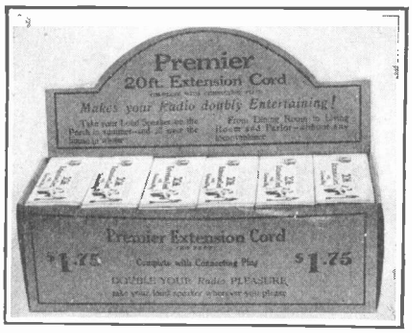
A radio specialty in big demand. It does away with the usual unsightly mess of battery wires. Five colors, equipped with clips for "A" battery connections, and lugs for "B" battery connections, also lugs for set connections. Perfectly insulated. Packed in individual cartons, complete for immediate use.

20-foot Extension Cord

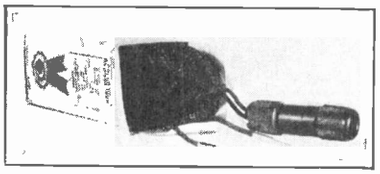
Sell one with every speaker!

Enables the user to place the loudspeaker in other parts of the house.

The Premier cord cover complete with connector plug and is closely braided for maximum wear.



Boxed individually, twelve packed in display carton as shown here. Attractive show card in silver and black is enclosed with each shipment of one dozen. List $1.75 each.



Mail a sample order to your jobber, or write us direct!

CRESCENT BRAID CO., INC., Providence, R. I.

One Good Reason Why Radio Dealers Should Stock NATIONAL Velvet Vernier Dials and Condensers.

C
C&P&C
&
C

Central Peat Corporation
CAPAC, MICHIGAN

March 19, 1925.

National Company, Inc.,
Cambridge, Mass.

Gentlemen:-

When a company turns out an honest article of great merit that company deserves the thousands of compliments it is sure to receive.

You don't know me from Adam. But everytime I sit down to the old music box and turn those Velvet dials you have my blessing. I built three Roberts Knockouts and installed all 4" Velvet dials. Perfection is the word that describes them. The reduction ratio is exactly right and the smooth-running mechanism makes the dial a joy to handle. If you asked $10.00 each instead of $2.50 I would still be a "Velvet" user.

I crack up the "Velvet" to every radio fan I know, and so you have been getting a lot of advertising you didn't know about.

Youre very truly,
A. B. Curtiss

ABC/L

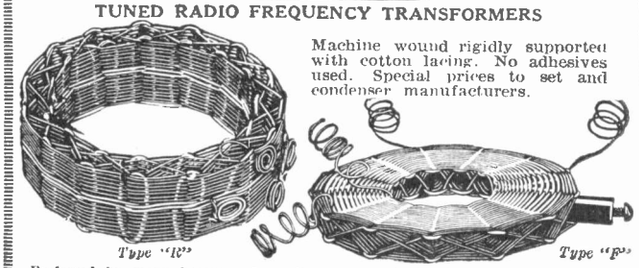
"—if you asked $10 each instead of $2.50, I would still be a Velvet user," writes Mr. Curtiss

The reputation of your store increases in direct proportion to the degree of service rendered by the products you sell.

Why not handle a product that is as satisfactory to the user as the NATIONAL Velvet Vernier Dial?

NATIONAL COMPANY, Inc.
Cambridge, Mass.
Sole Licensees for the Manufacture of the National Regenaformer under the Browning-Drake patents.

SELF-SUSTAINED Lo-Loss COILS
TUNED RADIO FREQUENCY TRANSFORMERS



Machine wound rigidly supported with cotton lacing. No adhesives used. Special prices to set and condenser manufacturers.

Type "R" *Type "F"*

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.
Dept. "A"

Have You

sent in your subscription to *Radio Retailing?* Special coupon, saving you $1.00, is on page 412.

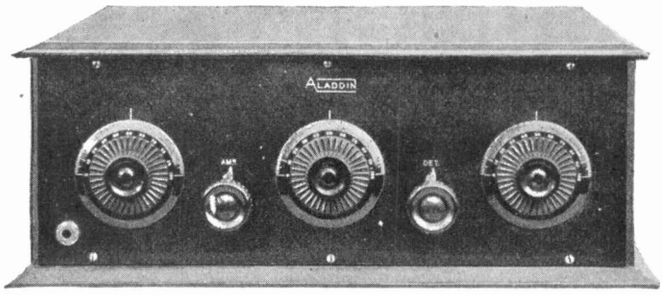
RADIO RETAILING
Tenth Ave. at 36th St., New York, N. Y.

ALADDIN *5-Tube* Wonder Set

Special Introductory Dealer's Summer Price

$32.50

F. O. B. Fall River



A tuned Radio Frequency set beyond comparison

Will not oscillate.

Extreme selectivity and distance.

Eight tube volume.

The Story of the Aladdin 5-Tube tuned radio frequency set.

The Aladdin five-tube tuned radio frequency set is the result of much patient experimenting to produce a real set of utmost selectivity, real quality and with plenty of volume on distance stations.

It is furnished in a beautifully polished solid mahogany cabinet. It is not only a wonderful radio receiving set, but also a beautiful piece of furniture.

All parts used in Aladdin receiving sets are of highest quality. Tuning condensers are of low loss type, Radio frequency transformers are self-supporting, no insulating material being used. Instruments are wired in bus wire and are of highest type of workmanship.

Each set is factory tested and sealed and carries our broad guarantee. Special Quantity Price. **Ask Us.**

We Also manufacture De Luxe and Console Sets.

Manufactured by

MOE MANUFACTURING CO.

Fall River, Mass.

The manufacturers of Aladdin Radio Products guarantee each set to be electrically and mechanically perfect.

The Aladdin is the equal, if not the superior of any set on the market at any price. Compare results, workmanship and material used in its construction. Then take into consideration its price (only $65) and you will agree that it is worth much more than the price asked for it.

Moe Mfg. Co., 209 Bedford St., Fall River, Mass.

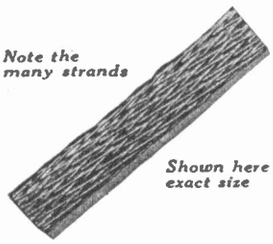
Here's my check or money order for $32.50 for one Aladdin 5 Tube Set **fully guaranteed by you.**

Name .....

Address .....

Tell your trade how they can eliminate most of the static this summer by putting up an inside aerial. Best results are assured with this special antenna.

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 surface, 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!

RACO RADIO ANTENNA

ROSS WIRE COMPANY

69 Bath Street, PROVIDENCE, R. I.

A 5 tube Neutrodyne you can sell for $100

Also Model No. 101 without Loud Speaker. Sells at **$92.50**

And Model No. 110 with Loud Speaker having an adjustable Loud Speaker Unit. Sells at **$110**

A five tube Neutrodyne—
With built-in speaker!
In a fine mahogany cabinet!
Including compartment for "B" battery!
Not a kit.
Sales of this popular instrument have climbed steadily.
Remember, it is backed by a soundly established organization.
To dealers looking for a leader to feature, one that will attract attention to your store, we offer a real proposition!

Write for details and distributors' names.

Licensed by NEUTRODYNE

MURDOCK

WM. J. MURDOCK CO., *Chelsea, Mass.*

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

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.

Department Store Radio Space For Rent

in oldest store, city of 60,000 population. Radio business established in the store enjoying good trade. Excellent opportunity for two young men who thoroly understand radio and are good salesmen. We will make a good proposition to the right parties. Write or call

GEO. A. DUCKER CO.
Joliet, Ill.

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 a ta 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.

AUCTION

Sale of Navy Surplus and Surveyed Material By PUBLIC AUCTION

AUCTION

at the

NAVY YARD, BOSTON, MASS.

at 10 A. M., (Eastern Standard Time), 15 April, 1925

The following material will be offered:

37 Radio transmitters.
42 Microphone receiving sets.
20,600 lbs. Bakelite, delectro sheets.
51 Searchlights, 12 in. to 36 in.
146 Coffee Urns, aluminum (20 gal. capacity).
110,000 lbs. (approx.) Non-Ferrous metals.
730,000 lbs. (approx.) Ferrous metals.
2,700,000 lbs. (approx.) Empty projectiles.

Large quantities of electrical material.
Boat and Ship fittings.
Machinery and machine tools.
Office and mess furniture.
Mess and galley gear.
One building, corrugated sheet iron covered, approx. 30x40 ft.
Two whaleboats, three motor launch hulls and one steamer hull, 40 ft. Many other items.

Particular attention is invited to the sale of Navy surplus to be held at the Navy Yard, Norfolk, Virginia, on April 30, 1925.

Catalog 582-A contains all available details of description, Terms of Sale, etc., and may be obtained about two weeks prior to the date of sale from the Supply Officer, Navy Yard, Boston, Mass., or the

Central Sales Office, Navy Yard, Washington, D. C.

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Bring 'em in BIG

over the counter and over the radio

Gross profits are real profits when most of that profit is yours

Buying a product for 60c and selling it for $1.00 does not necessarily mean that your profit will be 40c. First the carrying cost, your overhead and turnover must get their share of the difference between the buying and selling prices!

It may be difficult for you to control the size of profits by attempting to control the size of wholesale and retail prices—but you *can* choose the *size* of your overhead, the *amount* of your carrying cost and the *speed* of your turnover—and in this way keep the difference between the buying and selling prices [your profits] as *big* as possible.

The method is simple. All successfull dealers follow it. They stock only well-advertised, popular, big sellers—products that move fast and so bring in several profits before slow sellers turn over once.

This popularity is not brought about as much by advertising as it is by the real merit of a product. Benjamin Cle-Ra-Tone Sockets had to embody new features, which practically revolutionized the radio socket market before the public accepted them and assured the dealer of such an exceptional turnover.

It is big sellers like this that slash carrying costs and overhead to the minimum! They make $1.00 —60c=40c. Only with stock where big sellers predominate can the dealer be sure of good profits at inventory time.

There is a strong, established demand for the Benjamin Cle-Ra-Tone Sockets in your community now. Turn this profitable business your way, if you haven't it already. Salesmaking advertising is increasing the demand every day and sending customers into stores where many sales of other products are made.

Cle-Ra-Tone Sockets are standard parts of leading receiving sets and kits. Well known radio authorities and radio engineers have recommended them for the latest, most selective and sensitive hook-ups—for Cle-Ra-Tone Sockets add to radio's finest qualities by eliminating tone destroying noises caused by floor vibrations and other outside shocks. Four delicately adjusted springs at the base of the socket absorb the jars and shocks caused by traffic, slamming doors, footsteps, scraping chairs. There are no rubber parts to deteriorate—Bakelite is used wherever possible to insure sturdiness, high insulation and long life. Contact points to tube terminals are perfect and permanent. Equipped with lugs for soldering.

BENJAMIN

Benjamin Electric Mfg. Co.

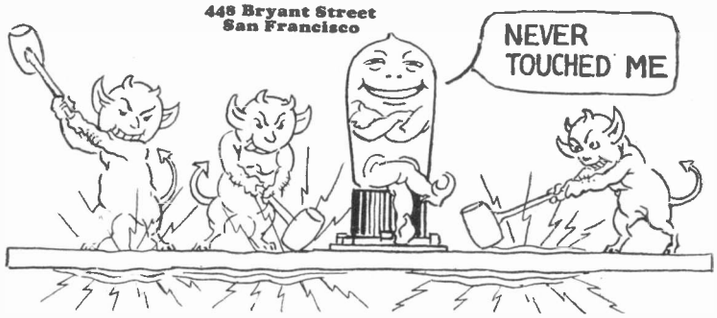
120-128 So. Sangamon St., Chicago

247 W. 17th Street
New York

448 Bryant Street
San Francisco

Keeping Up The Demand

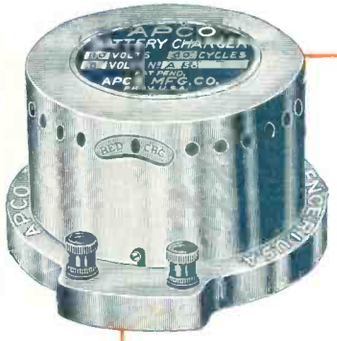
Bold, persistent advertising in Popular Radio, Radio, Radio News, Radio Engineering, Citizens Radio Call Book, is telling the story of Cle-Ra-Tone Sockets to radio users every month. Hook-ups designed by leading radio engineers, recommending the use of Cle-Ra-Tone Sockets, are constantly increasing prestige and acceptance. When you offer the Cle-Ra-Tone your good judgment is backed by the highest authority.



APCO

BATTERY CHARGERS

for "A" and "B" Batteries



HERE'S everything you've wished for in a Radio Battery Charger.

Neat and compact in appearance.

High charging rate. Consume but little current. Cannot overcharge.

QUIET—No annoying hum or buzz. As simple as hooking up an electric iron.

APCO Chargers pay dealers a good margin. Make friends. Build good will.

Write for full details.

"A" Battery Charger

7½ ampere capacity. Self-polarizing. Tapers the charge.

List..... $18.50
Dealer..... 12.50

APCO Manufacturing Co.

Providence, R. I.

Convenient Branches for Quick Service

Apco Mfg. Co., Electrical & Export Office, 154 Nassau St., New York

Apco Mfg. Co., 1438 S. Michigan Ave., Chicago

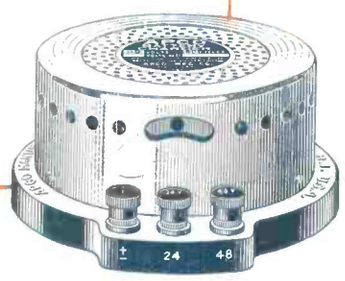
Apco Mfg. Co., 2005 E. 15th St., Kansas City, Mo.

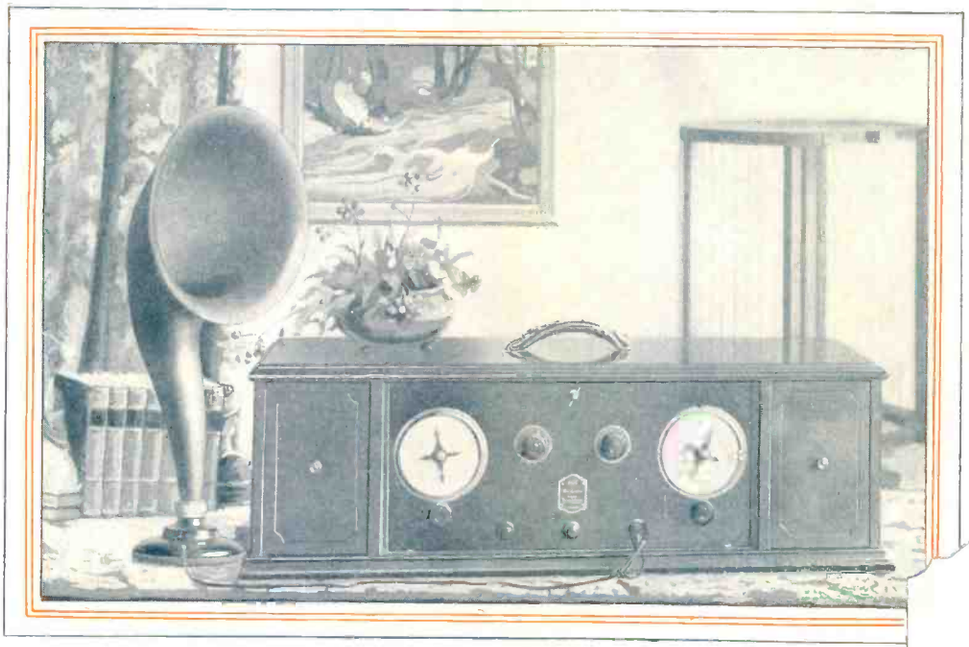
Canadian Factory, Apco Canadian Co., Ltd., 3150 Jeanne Mance St., Montreal.
Southwestern Office: M. L. Martin, 2006½ Commerce St., Dallas, Texas

"B" Battery Charger

For 24 or 48 volt "B" storage batteries, or 90 volts in multiple.

List..... $10.50
Dealer..... 6.75





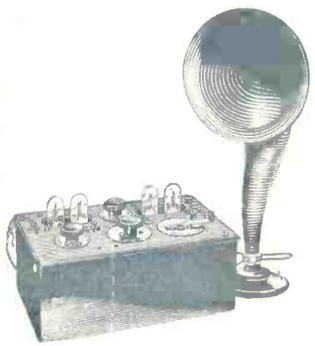
Radiola Super-Heterodyne

Known from coast to coast—the "Super-Het" that needs no antenna, and no ground connections—gets the station you want always at the same marked spots on the dials. Famous for *rare tone quality!* With six Radiotrons UV-199 and Radiola Loudspeaker (UZ-1325) . . List $256

The external loop is extra and means further distance records, with battery economy. Model AG-814.
List $12

Quality of *performance* and quality of *tone* mean sales!

"There's a Radiola *for every purse"*



Radiola III-a

A four-tube Radiola, noted for distance, simplicity, clearness—at very moderate cost. With four Radiotrons WD-11 and Radiola Loudspeaker (UZ-1325) . . . List $83.

Radiola III

A two-tube Radiola that costs less than you could build it for yourself. Gets distance on the headphones and near stations on a loudspeaker. With two Radiotrons WD-11 and headphones. List $35.

You can always add a Radiola Balanced Amplifier, later, to get distance on a loudspeaker.

Radiola Loudspeaker

Model UZ-1325

List
$18

Known for its wide tone range—its faithfulness—its mellowness. It has contributed to the fame of the best known Radiolas—and *gets the best out of any set.*

Radiola
LOUDSPEAKER

Radio Corporation of America
Sales Offices: Suite No. 534
233 Broadway, New York — 10 So. La Salle St., Chicago, Ill. — 28 Geary St., San Francisco, Cal.

Radiola

REG. U.S. PAT. OFF.

This symbol of quality RCA *is your protection*