

# RADIO

## Merchandising

THE MAGAZINE OF THE RADIO TRADE

November, 1922

\$1.00 a Year



PUBLISHED FOR

**Central Electric Company**

THE HOUSE OF SERVICE

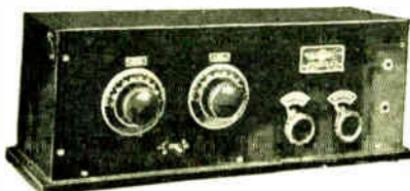
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World Radio History



## RADIO FREQUENCY AMPLIFICATION

MU-RAD Receiving Sets are the original product of independent experiments and experience of leading radio engineers. Five years' intensive development of Radio Frequency Amplification have given Mu-Rad Sets exclusive points of difference—points that are well worth your consideration. First, unequalled *sensitivity*. Distances in excess of 1000 miles have been covered by Mu-Rad Sets using a 3 inch diameter, inside loop aerial. Second, the *selectivity* of Mu-Rad Sets which permits differentiation of stations 1% off tune and third, the *simplicity* of operation. All tuning can be done with one hand. The high selectivity is retained by the use of patent circuits and Mu-Rad R. F. Amplifier Transformers.



THE M.A.-12—Three stages of radio frequency amplification and detector. With 2 telephone plugs.....\$128.00  
 THE M.A.-13 Three stages of radio frequency amplification, detector and two stages of audio frequency amplification. With 2 telephone plugs.....\$160.00

### 1000 Mile Range Guaranteed

Each MU-RAD set is sold with an attached guarantee of 1000 mile reception under average conditions using a small loop aerial.



MU-RAD Apparatus brings Good Will and Better Profit

Write for Proposition

**MU-RAD**  
**LABORATORIES**

INCORPORATED

802 FIFTH AVE. ASBURY PARK, N. J.

The New  
 Star in  
 the Radio  
 World



*Distributors for*



**Radio Corporation of America**



***FREE to Dealers***

We want every reliable retailer of Radio to have our new and complete Radio Catalog.

It is the last word in radio sets and parts. It mirrors our large and complete stock. You can order from it and be sure of quick shipment. Prices right—as always. You need this catalog as a part of your business.

Write to us *now* for your copy.

**Central Electric Company**

FOUNDED 1887



*The House of Service*

316-326 South Wells Street

CHICAGO



## The Two Best Sellers in Radio Today



**AERIOLA SR.**  
*Retails at \$65*



**AERIOLA AMPLIFIER**  
*Retails at \$68*

**T**HE Aeriola Senior is one of the R.C.A. line of vacuum tube Radiolas designed to fill the popular demand for an inexpensive portable set for Broadcasting reception with a greater range than that of Aeriola Junior.

Aeriola Senior makes use of the famous regenerative circuit. This circuit in conjunction with the vacuum tube detector amplifies radio many times beyond the strength obtainable with any other circuit. The outstanding feature of the Aeriola Senior is the fact that the filament of the vacuum tube may be operated from a single dry cell, and telephones being energized by what is termed "B" or plate battery of 24 volts or more.

Aeriola Sr. two stage Amplifier operating from dry cells in the same manner as the Aeriola Sr. is a means for amplifying received signals to such an extent that loud speaking results may be obtained over considerable distances. Every present owner of the Aeriola Sr. will want its mate, the Amplifier, as soon as he sees one in your window.

Aeriola Senior includes the receiver or tuner, and Radiotron WD-11 Detector Tube and a pair of head telephone receivers. The Aeriola Amplifier likewise includes two Radiotron WD-11.

**Central Electric Company**  
FOUNDED 1887  
**CHICAGO**

**DISTRIBUTORS FOR****Radio Corporation of America**

We are not only distributors for R. C. A. but we carry in Chicago, ready for immediate shipment, one of the largest stocks of receiving sets and parts in the entire country.

We want your business on the basis of the prompt service we can render you. We want you to call on us when you need something in Radio and need it quickly, and we shall be glad to demonstrate to you that we are not only able to care for your immediate needs in an absolutely satisfactory manner, but that our experience as merchandisers for 35 years enables us to help you in the "long haul."

*We specialize in Radio Corporation of America products.*

Write us your needs, you can be sure our prices and discounts are **right**.

**Central Electric Company**  
FOUNDED 1887



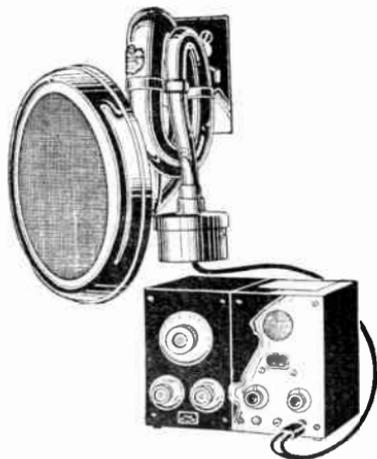
*The House of Service*

**316-326 South Wells Street**

**CHICAGO**



## “Vocarola”—The Loud Speaker



**W**HERE broadcasted music and speech is being received and it is desired to have volume enough to fill a room so that many persons may hear, the Vocarola may be employed to advantage. It is but necessary to remove the plug of the telephones from the jack in the amplifier unit, placing the loud speaker plug in its place.

Vocarola is equipped with a supersensitive sound producing device which changes the incoming electrical impulses into sound waves. This sounding element is attached to an attractively finished tone chamber in the form of a horn from which the sound emerges.

The Vocarola, when used with suitable amplifying equipment, furnishes music and speech with a tone clarity identical to that of the transmitted music or speech.

### **RADIO RECEIVER, MODEL AR-1300 DETECTOR-AMPLIFIER, MODEL AA-1400**

A rugged, compact and efficient unit for crystal or vacuum tube reception.

Receiver AR-1300, when used in combination with amplifier AA-1400 and the Vocarola loud speaker, furnishes all the average home requires for Broadcast reception at medium cost of installation and operation. Moreover, the entire family may "listen in."

**Central Electric Company**  
(FOUNDED 1887)  
**CHICAGO**

THE LEADERS WILL BE THERE

# AMERICAN RADIO EXPOSITION

*The Official Exposition for American Manufacturers*

The first really comprehensive Radio Exhibition staged in a manner worthy of this Great Industry

*will be held in*

## GRAND CENTRAL PALACE

New York

### DECEMBER 21st to 30th

*(Sunday excepted but Christmas Day included)*

Representative manufacturers will be invited to display and demonstrate their goods to thousands of visitors and potential buyers. More than 40,000 square feet of floor space will be available for a great educational and trade exhibition covering the entire field of radio.

Coming at the holiday season, schools and colleges will be closed, making it convenient for students, parents, teachers and holiday-seekers to attend.

A list of exhibition attractions is planned that should assure a capacity attendance at the Grand Central Palace.

*For further particulars, write or wire*

**AMERICAN RADIO EXPOSITION CO.**  
120 BROADWAY NEW YORK

*Telephone John 0009*

## Said Confucius:—

**"Make Conscientiousness and Sincerity  
your First Principles"**

*With Grebe they have always been First Principles.*

THIS is going to be a "Radio Christmas"—folks are looking around now deciding which Receiver to buy. They are asking all sorts of questions of their friends who own sets, in order that their choice may be a wise one.

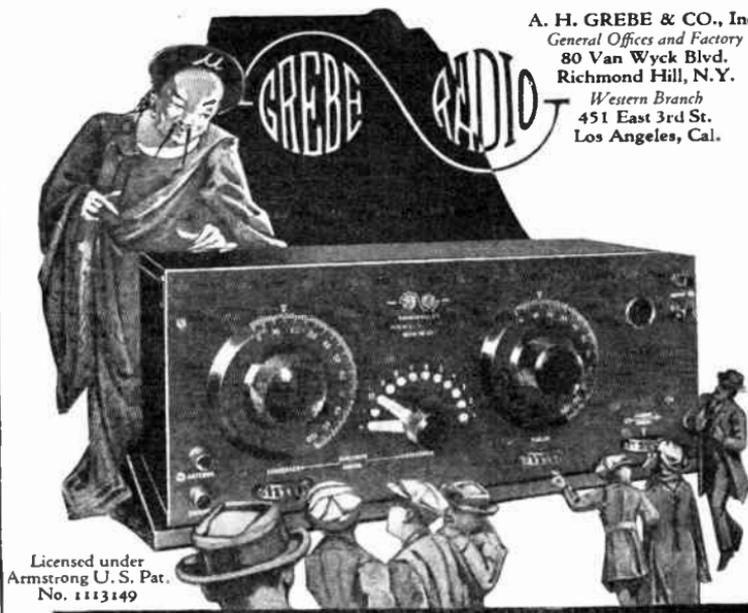
Thousands of boys are asking for radio receivers for presents. These boys are radio-wise; they've been dreaming about that radio set for months. They know what they want and you must be prepared to supply them.

*Grebe*

Our big national advertising campaign reaching 5,445,280 readers—(virtually every radio prospect in your territory) will mean big sales for you—if you are supplied. Now is the time to put in your stock.

The Grebe policy is one of utmost service and fairness to our distributors and dealers.

**A. H. GREBE & CO., Inc.**  
General Offices and Factory  
80 Van Wyck Blvd.  
Richmond Hill, N. Y.  
Western Branch  
451 East 3rd St.  
Los Angeles, Cal.



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# RADIO

## Merchandising

THE MAGAZINE OF THE RADIO TRADE

G. DOUGLAS WARDROP  
ROY F. SOULE,  
EDITORS

VOL. 2

NOVEMBER, 1922

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## *Are you overlooking your Quality Market!*

In practically every line, merchandise finds its own level—its class. There is the Pierce Arrow and the Ford—the Steinway and the Smith-jones.

Many a dealer is stocking his shelves with radio apparatus made to sell at a price. He is neglecting his CLASS market.

Besides, he is staking his reputation by selling his trade questionable apparatus. He is losing the confidence of his customers.

## *Victor Products are High Grade.*

We have made transmitting and receiving apparatus for the United States Government for years. Every piece of material and part has passed strictest inspection—materials are the best obtainable. We guarantee them to be so. Each set is tested under actual operating conditions before leaving our plant.

Our new catalog covering our complete line of receiving sets and parts is now off the press. Write for a copy and get acquainted with Victor Products.

**Victor Radio Corporation**  
799 East 135<sup>th</sup> Street New York City



# The Radio Merchant and His Show Window

By John Walker Harrington

**M**ANY a static dollar can be tuned into the cash register by an adequate and convincingly dressed show window. Display is too often slighted by the radio merchant, especially if he has not had merchandising experience in other lines, because his calling is dominated by its scientific side. Now that conditions in the business are becoming more settled, progressive dealers everywhere are devoting more time than they have been able to give hitherto to the very important factor of intriguing the attention of the passerby.

Radio merchandising, brief as its history is to this present date, has none the less passed quickly through the three phases of advertising which marked the development of the oldest divisions of retail commerce. Centuries ago, merchants were standing in

front of their shops calling "Buy, Buy" to the passing throng. The radio merchant who puts a loud speaker with its horn sticking out from a fanlight, so that the current broadcast concert can be heard by the crowd in the street is at the Crier Stage. Ages ago, the vendors of goods in the bazaars of Babylon began making attractive displays of their rugs and metal wares in front of their booths, and thus we had the show window. Last of all came the announcements in the public press, which thousands and millions may see. The advertisement on the printed page is the path in the woods which is beaten to the door of the man who has the best radio sets for sale.

The show window, however, although secondary in importance to the advertisement, has a great pulling power. Many of



*©Kael & Herbert.*

A Radio Window Display which has, on account of its human interest, continued to attract crowds at a store on Forty-second Street, New York

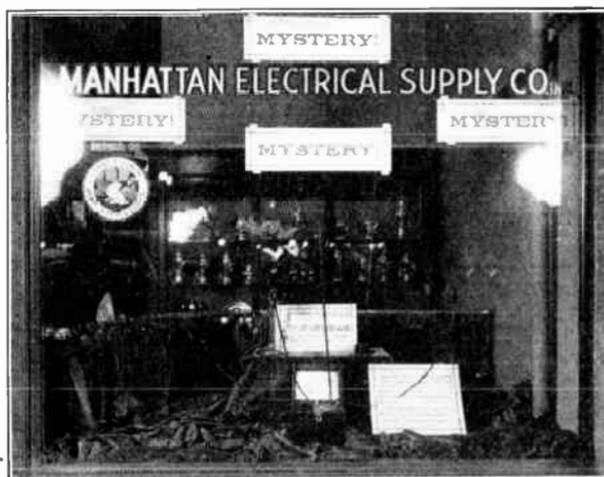
the large department stores make public announcements of what their window displays consist and thus execute a two-phase system of telling the public about their bargains. The radio merchant is just beginning to develop his front displays, and although he is not likely to carry this form of advertisement to the extent which is justified by the department stores which have a much more varied stock of merchandise, he will do well to watch the methods of these large establishments. All of the big dry-goods stores, for instance, have highly trained window dressers in chief, who have studied out their effects with the utmost care. Many of these adepts have the initiative and the imagination which marks them as not only skilled salesmen, but as thorough going artists. The writer herewith recalls to the radio merchants some of the principles of window dressing, and also makes some suggestions which have sprung from his own experience in the installation of exhibitions and in mercantile decoration.

**D**OWN in Cortlandt street, New York City, a radio merchant had dressed his window so that it was in itself a well composed, silent salesman. The arrangement was so simple that the first impulse of the layman would be to say that he himself could have done just as well. The man who had disposed the goods in the window may, indeed, not have given the theory of his very successful practice any thought at all. The vital fact remained, however, that he had reached a result and was selling the goods. What better test of an art, after all, than that it does what it sets out to do, and does it with that consummate art which conceals the ma-

chinery by which the result has been reached?

This display consisted merely of three portable radio sets, and a neat card with the legend that they were suitable for taking on one's vacation. The message was signalled simply and directly to many thousands of persons going to and from the ferries near the store. It was given just at the time that their thoughts were intent on the joys of mountain and of shore. The inveterate fan and the man who was already slightly inoculated with radio virus were alike caught by the suggestion this exhibit brought home. The value of the window was due, of course, primarily to the all important fact that the three pieces of merchandise were in every way saleable and seasonable.

Technically, their arrangement was perfect. Good effect had been simply and inexpensively obtained. The fault with many show windows is that they contain too many objects. They do not take into consideration the law of perspective, through which the vision of the observer is limited, even when the best illumination is employed. The "prospect" standing in the street, unconsciously finds himself looking into the centre of the window display, and his lines of observation go off fan-like, to left and right, and are somewhat shortened. The eye seeks the centre of interest, and if there is nothing interesting in the centre, the window dresser has utterly failed. In this case, one of the receiving sets had been placed in the middle of the window space, flanked with one on each side. The possible customer, looking into the window, first got the view of the central piece of apparatus, and then his eyes moved easily and naturally in and out of the picture. At every



A Window Display in New York City which was found to be very satisfactory.

point, he got the impression that the portable set was a desirable bit of apparatus. He could not escape it, and in fact was held in thrall by an idea. The merchandise was placed at just about on a level with the eyes, and not too close to the glass, and yet there was enough space in the foreground to produce a pleasing and restful effect.

**E**VERY man and woman who dresses a window should have a working knowledge of the laws of composition, for he or she is doing the same task as the artist in composing a picture or the skilful photographer undertakes in producing either a good portrait or the striking representation of a landscape. It sounds well to say that artists, poets and window dressers are born, not made, but geniuses in all these lines cannot work until they have learned the how of the game. The radio merchant who has not given any special thought to composition may get effects which are attractive in his window trimming, but if he does he is merely following unconscious-

ly certain laws, which it would be well for him to adopt with conscious effort. By so doing, he is likely to improve his work of attracting the public by sight.

Many show windows are too deep, and the trimmer is likely to get further and further away from his purpose if he does not consider that in relation to the law of perspective.

One of the most skilful examples of handling a display may be seen in those bird groups in the American Museum of Natural History, which have a semi-circular background on which is painted a landscape suitable to the habitat of the avine life there represented. This curved background concentrates the vision on the one bird, or the pair of birds, or the small group and makes each display a perfect picture.

A well-known silversmith concern (The Gorham Company), which is noted for its effective show windows, often puts in hangings and curtains, arranged in curves, when it seeks to focus the attention of passers-by in Fifth avenue upon small objects

or a group of them. How even a very shallow window without any special lighting effects or fixtures can be made of great value, is demonstrated in another store where "Business is Going on as Usual." The whole front was taken out and temporary show windows were put in the false outer wall. They were not much more than indented cases, and yet the window dresser had been able to do something really good for his employers (Franklin Simon & Co.), because he had a grasp of composition and effective arrangement.

**R**ADIO dealers are tempted to display a great variety of small parts in a window—to stick condensers and coils, and binding posts and lightning arresters in the corners of the window space. The effect is scattering and confusing, because they have neglected to follow the simple rules of perspective. There is nothing about a jumbled assemblage like this to arrest the attention of the public. Watch the windows of the department stores, and you will see that the expert window dressers never stuff and crowd their space. There is one leading firm (Lord & Taylor) which prides itself upon often showing only a hat or two or a gown in a window, but always with consummate skill.

Where a variety of articles are shown in a window, it is absolutely necessary to have a strong centre—some more or less bulky object which will give the eye an arresting hold. This central object may be an arch, a figure, a column, a large receiving set, or an indoor loop antenna, or perhaps a period cabinet, which may be placed well toward the back. A store which has a large line of general merchandise as well as radio, is more likely to excel and please by the compo-

sition of its window displays, than are establishments which are devoted to the sale of wireless wares exclusively. One of the best known department stores of New York (Gimbel Brothers) recently had an unusual example of window salesmanship in radio, in which the whole scheme of arrangement was built around a loop antenna, mounted on a well-turned stand of polished mahogany. In the background were several period cabinets, while in the centre, and so arranged that the observer could not escape them, were some exceptionally desirable receiving sets at attractive prices. The chance observer was impressed by the dignity and the uses of radio, and there was a definite appeal everywhere to amateurs of both large and small means.

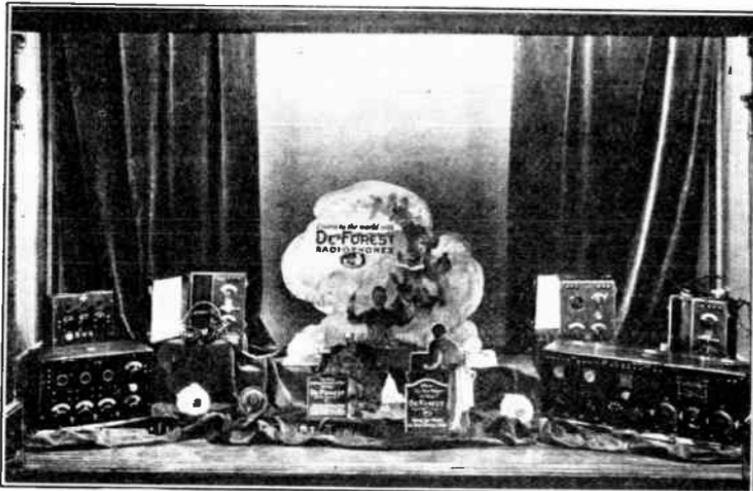
One of the most difficult feats in display window art is the showing of a wide variety of other merchandise, with radio apparatus featured. The problem is worked out very well, however, by a large firm of hardware dealers (Sharlow, New York), in a single, large window. The display is held together and gets unity and strength, despite the large assortment shown, by the placing of a slender wire gate in the middle of it. The centre of interest is assigned to radio and posted on the gate, in the most advantageous place although rather deep in the picture, is a placard advertising a lightning arrester, on which one of the devices is wired.

**O**N general principles it is not good practice to show very cheap and inexpensive goods in the same window with costly ones. If a special drive is being made on inexpensive merchandise, the trimmer will assemble large quantities of it for the window and give the air of plenty and of reasonable prices. It is

largely a matter of sales judgment as to how long the window with the cheap articles will be kept, but it is well occasionally to show what resources a store has in providing radio merchandise to suit every purse. The high-priced experts of Wanamakers, of Marshall Field & Co., or of R. H. Macy & Co., who are held responsible for results in window dressing, never put merchandise of various qualities in one exhibit. By the way, the habit of some radio merchants have of ticketing small parts with the prices when used in window display, is not desirable, unless the prices are so low as to be worthy of a feature sale. For the window, only two classes of merchandise should be shown, and those separately—that which is exceptionally up-to-date and desirable and novel—and old merchandise which is being disposed of at such a sacrifice that even persons not especially familiar with its valuation will stand by and take notice. If there is a good reason for making an extensive showing of small parts in the window, the best practice re-

quires that they be placed rather near to the pane, and as much on a level with the eye as possible. The skilled window dresser handles this problem by erecting special fixtures and draping them. With the help of a few boards and boxes and a set of simple tools and whatever cloth may be required, a man with taste and judgment can do wonders in making a showing of small and inexpensive merchandise effective.

A truly ingenious exhibit of small galena crystals was made on these lines the other day by a large electrical supply house (Manhattan) by showing huge lumps of the mineral composed in the centre of the space, and smaller pieces in the foreground where they could be seen easily by all who might be interested in the price. The tendency was in the younger days of this still infant industry of radio merchandising, for the dealer to pile his window full of all kinds of odds and ends, merely to give notice that he had them. As parts of all kinds were more or less scarce then, the shot-gun



An attractive window display arranged for dealers by the DeForest Company

method of carrying one's trade message came into vogue. Now that the selling of radio supplies is becoming more and more of a merchandising enterprise, following the general lines of big business, the window display is developing into an adjunct to be studied and utilized.

FORMERLY a gilded representation of a jagged lightning was enough to adorn a window, and a few odds and ends were bestowed to show what might be seen within the store. In a crowded street in a city not far from the Atlantic Ocean, there is a radio store with show windows streaked with gold leaf lightning enough to make one yearn for the latest arresters of the thunderbolt. The display in the window is indifferently arranged, because the dealer has evidently pinned all his faith on his gilt picture. As a general thing, anything like a permanent display in a show window detracts from the air of enterprise which every radio store should have.

Many prominent radio merchants are doing much in the way of making their display windows effective in every way. The talent necessary to arrange a customer drawing exhibit for the French plate may be developed to a large extent. Often the store has a salesman who has a natural born perception of the values of composition, of harmony, of color schemes which would enable him to qualify for a job that ought to be a most important one. If he is well directed by the employer, who has a keen sense for merchandising, the window dresser will soon be an indispensable unit of the organization.

Where the volume of business is large, the merchant may easily avail himself of high class professional decorating advice. In

fact, many well-known interior decorators and scenic studios have made a specialty of this important phase of commercial advertising—window dressing.

As the day is yet so young for radio, it will only be a question of time before there will be window displays which will call for unusual skill and even for lavish expense. Although the setting was not intended for the exploitation of the radio telephony industry, the elaborately modeled figures of the farmer and his wife at their evening lamp enjoying a broadcast symphony, which appeared in a New York City window lately, give a significant earnest of what can be accomplished along these lines. A well-conceived picture indeed was this group designed originally for a heating device (American Kadiator Company) which was cleverly adapted to the new art of the invisible choir.

Eventually, fixtures for displaying radio merchandise will be worked out, and attention given to color schemes, and to suitable hangings. There is so much which fires the imagination connected with the art that an artist of the Robert Chanler type could evolve some very picturesque lightning motives for window backgrounds. Representations of miniature broadcasting stations, of tiny ships on painted oceans sending forth their message to a waiting world and countless other methods of holding the interest and stimulating the enthusiasm of radio amateurs will be adopted as the business of selling wireless apparatus develops.

Meanwhile, the radio merchant of today, alert in his calling, and realizing that he must compete with many other activities for popular favor, is giving due attention to adequate and consistent plans for window salesmanship.

# Pre-Approach

Getting the Drop On People

By Roy F. Soule

**T**HERE are several kinds of Pre-approach. Billy Sunday's song service is one well known and mighty successful. Through a song leader of the mightiest sort, backed by an immense chorus this great evangelist gets his congregations to sing themselves into the atmosphere of the thing he wants most to sell them. Without his carefully planned pre-approach Billy would find it a much tougher proposition to sell salvation and travel mark his sawdust trail. The route would not be so direct—detours would multiply — and Billy, "Master's," salesman that he is, knows this and goes the limit.

## COUPLING UP TO CURIOSITY

The Pre-approach of the duck hunter who carefully builds a nature imitating blind in which to secrete himself and then places his decoy ducks within shot gun range, sets the stage for the wary birds whom he hopes to sell the idea of coming within gun shot. And another example from the sportsman—the antelope—coaxed right up to the rifle by curiosity in a handkerchief fluttering on a slender staff. Again Pre-approach. Game for the man who does his thinking in advance.

We see examples of Pre-approach daily. In a way it is instinct. Your kiddie putting his best foot foremost when he really wants something badly. You know how he shows you the wood he has cut, the lawn he has mown or the good marks he got in school. All used at the right time to win your approval plus a ticket to the Saturday "Movie."

## A NATURAL INSTINCT

Yes, Pre-approach is surely an instinct. My dog dug a hole in our newly planted lawn last week and when I arrived home he came up to me wagging his tail and bouncing with joy. He reared up and placed both muddy feet against my shoulders and tried to lick my face—for all the world like a kid. He knew that the evidence of his guilt lay between us and the front door and he was putting up the sales talk that saved him trouble.

When I mention a few of these every-day examples of pre-approach you could mention a dozen. They are all about us. Every day instances of the fine art of direction — of leading minds from where we find them to where we want them.

## PUTTING PRESSURE BACK OF NATURE

The trouble with us as salesmen is that there are so many examples and they are so common, so simple, that we frequently forget their power. We are looking for the great explosive—the big works that will at one foul fell swoop clean up the problems that confront us. We've been told that the dripping of water will wear away stone. Every time I hear that time worn triteness I think of the drip pools in the stone bar in the old Absynth House down New Orleans. Corking example, but I hate to take my medicine that way. I don't want to die a slow death or live a slow life. I'd rather see stone worn away by a waterfall or by hydraulic pressure. But even by those more desired processes the pre-approach must be made in

the construction of dams and in the building and installation of water-forcing equipment.

### PERSONALLY CONDUCTED

Now, how do we create the machinery that will productively prepare a man's mind for the thing we plan to sell him?

Frequently the advertising department of the house that employs us does a lot of just that sort of thing for us—magazine advertising, personal appeal literature, letters. All desire creating, attention grabbers but miserably ineffective unless coupled up directly to the main train by the salesman. Seed thrown on fertile soil and allowed to weed choke unless we get on the job. The greatest salesmen I know couple their efforts to every advertising campaign their house launches and then add to such campaigns a personally conducted Pre-approach. Some of the kinds of Pre-approach have even succeeded admirably without the assistance of a line of advertising by their employers. Men who can overcome such a handicap in

this day and age are well worth our undivided attention.

### SUBJECT TO CHANGE

Now it is generally admitted that favorable attention is the first essential to a sale. Sometimes the goods are sufficiently powerful to overcome a lot of the unfavorable impressions of a salesman but ninety-nine times out of a hundred the man behind the merchandise goes faster and farther if he succeeds in selling himself first and his goods afterward. And favorable man-impressions are as likely to change as is a coquette who likes to show her wares to a lot of fellows before she really places an exclusive heart agency. You may stand ace high with a customer to-day and be "just one of the men from whom he buys goods" to-morrow. It's tough sledding to have a customer ask you your name in order to introduce you to someone else.

### MAKING THE GRADE

I know a traveling salesman who starts every customer. He can tell you off-hand whether

### BROADCASTING—BEFORE THE DAYS OF RADIO.



**THERE IS A DIFFERENCE BETWEEN NOISE AND MUSIC—  
YOU CAN "TUNE OUT" NOISE IF YOU HAVE ONE OF OUR SETS.**

—Radio Cartoon Service.

they are going ahead, going backward or occupying that more perilous position of standing still. He can tell you who is in the saddle to-day and who are those silent powers who most influence his decisions. He also knows the comers—the men who are making the grade, the buyers of to-morrow and he spades the ground that helps them grow.

### THE SERIOUS FUNNY MAN

One man who stands high in the selling world tells us how he built a business on "Puck" and "Judge" and "Life." He bought six copies of every "Funny Illustrated" he could lay his hands on. He carried a pair of shears and on the day his laugh producers appeared he was a clipping artist for fair.

To the man who loved dogs he mailed a funny dog picture with just a note thanking him for the courtesies he had received and briefly saying that he had struck something funny he wanted to share, signed his name plainly and said in a "P.S." that he was looking forward to being in that customer's town soon.

To the golf enthusiast a golf picture with a similar note. To the fisherman a picture that dealt with his hobby and so on. He studied his customers—remembered their conversations—even jotted down the dates and then coupled up with a funny picture as a reasonable excuse to write a letter. He wrote all letters of this kind in long-hand and they knew and remembered his name. He built a corking business with this simple Pre-approach.

### BY MAIL AND WIRE

I know another man who is called a postal card crank. Every place he visits he picks up postal cards for his customers. He

never travels off his territory without a mailing list. When this begins to get stale he takes pictures with a small camera and mails them at intervals with a brief note. Pre-approach—simple, direct and resultful.

I know another man worth watching who uses the wires. He telegraphs. This is the system: Whenever there is an advance on any merchandise and he has any time leeway, he wires a number of his customers. Here's a sample: "Seth Reynolds Co., Saginaw, Mich.—Advance of ten per cent on copper wire to-morrow. Am covering you for five hundred pounds assorted sizes for forty-eight hours. Please confirm any portion by wire at my expense.—Salesman."

One hundred such telegrams cost this salesman fifty dollars. He landed forty-eight orders and one hundred firmer friends. He had immediate profit in business from forty-eight merchants and put over some fine Pre-approach stuff with the other fifty-two. Other salesmen who had that same "advance" failed to use it.

### PUTS HIS CUSTOMERS TO WORK

I know another salesman who believes that the average good man enjoys doing small local favors for men from out of town. In calling on a prospective customer he writes in advance telling the merchant that he has never had the pleasure of visiting his town and that he will be there next Thursday. Then he goes on to state that he is going to take the liberty of relying on the merchant's reputation for fine courtesy and asks him to reserve him a good room in the hotel he can best recommend. On arrival he makes the merchant's acquaintance by going in immediately on his arrival to thank him for the favor. It may

not work for you but it certainly has broken the ice successfully for this man. It's just another example of the fine art of thinking ahead. Pre-approach.

### THEIR FIRST RADIO MESSAGE

There's another salesman—A Radio Bug in New England who has sprung a new one. One trip he put in his spare time evenings hunting up men with Radio sending outfits. The towns are very close together. He worked up a system and next trip by the amateur route sent wireless messages of his approach to twenty-six dealers in one week. Most of them had never received a Radio message. It was delivered on his own form. It made a hit. More Pre-approach.

### A DANGEROUS TOOL

After all Pre-approach is a stepping stone to service. A salesman may pull all the tricks in the pack—but if he fails to deliver SERVICE, fails one little bit in the opportunities that open for him he might as well advertise himself as a smart aleck and be done with it. Pre-approach work frequently develops flippancy. It must be taken

seriously and worked from a heart and head impulse that radiates a manly desire to be "personally known" that service may be the better rendered. Pre-approach is frequently a dangerous tool. I know. I once wrote a man that I had just landed a pair of tickets for the Dempsey-Carpentier fight. He was backing his pastor in a vigorous appeal to the Governor of New Jersey to stop the fight.

### COURAGE AND INITIATIVE

Use judgment but don't be inactive. Better make mistakes than to muff an opportunity. I like the lad who wrote a girl he admired immensely saying that he regretted more than he could tell her that his work prevented him from calling on her Thursday evening, but that he would surely call Friday evening at 8 P.M., and that he most sincerely hoped that nothing would deny him the privilege and pleasure of seeing her.

She had no previous inkling of his intention of calling but he made the grade. It's a great thing to put a little Pre-approach even into the delivery of Bon Bons.

## A Rainbow Display

THE old idea of a pot of gold at the end of the rainbow was recently made use of by a radio dealer, but in his case the pot of gold became a pot of happiness. He rigged up an imitation rainbow out of cardboard mounted on a wooden frame and covered with crepe paper of various colors. This rainbow was put diagonally into the window with one end at the front top corner and the other end at the rear back corner. In that way it was easily seen by all who came near the store.

The floor of the window was

covered with the same varicolored crepe paper that was used to make the rainbow, and the display of radio receivers put in about the same way as in the usual case.

A large sign was suspended in the center of the window with the following message: "Find Your Pot of Happiness at the End of the Rainbow." And then at the end of the rainbow stood one of the choicest instruments that this dealer carried. The riot of color that was used in trimming this window made it one of the most attractive that this dealer ever used.

# Cornering the Extra Sales and Making Them Pay a Profit

**T**HE radio retailer whose territory is in part through rural sections cannot secure all the sales by action at the store. Some buyers may know where his store is, they may hear he gives good value and is honest in his dealings; yet they may not go to the store to see for themselves. This sounds strange, but if we think it over we will find that we very often do similar things ourselves and never know just why we do them. It is this group of buyers who keep the dealer from realizing the full profits of his field, for their money is paid to mail-order dealers or to dealers in other cities.

The problem of cornering these sales and making them add profit is no easy one, but can be accomplished by the use of unique sales schemes and much hard work.

The methods to be used should be regulated by the occupations of the people you are trying to attract. If your field of undeveloped customers is largely rural, it is well to know the problems they have to content with; then go about showing them how they will benefit by making their purchases at your store, or by any kind of service you can offer them. And you will find many types of rural customers. For example, there are those of foreign birth or descent; they very probably have different tastes than the ones descended from generations of American-born citizens.

Unless you have ample time and a capable sales force in the store you cannot go out and study them personally for the length of time needed to get an accurate line on their likes and dislikes. But you can secure much of this

necessary information from those direct sellers, such as insurance agents, who have come into contact with them. A talk with an agent friend will do you both good, and each will receive ideas as to human nature, which is vitally important in bringing over a customer who has been purchasing elsewhere. Then do not try remembering the little points indefinitely; cards are cheap and a few notes on a card, stored away in a file, will prove a bonanza when you have time and opportunity to go out and see that prospect personally.

If the customer you are starting out to win over is worth that effort, then a continued effort should be made to keep him satisfied. Appointments are worth making—and keeping—and the prospect will be easier to approach if he knows when you are coming. A successful dealer recently advised us that he always made appointments with prospects, and didn't try to win over too many a day. Rather, he said, one prospect secured permanently is worth more than three who made only a purchase or two and then go back to their old habit of buying elsewhere. This dealer, by the way, has a card index for clippings and notes about his field, and he can thus keep a hand on the pulse of progress and knows how conditions are, the crops, the labor situation, building operations, money and any other items he thinks he can use.

You probably advertise more or less through newspapers, and if so, the local editor can probably give you some tips about conditions where his canvassers have been. But don't forget the average editor is a busy man, and an appointment at his con-

venience, if possible, will bring you some good ideas. Then, if you are planning on some advance circularizing for prospects, he can probably advise you of any changes in addresses. The real estate man is another good idea-vendor, if you will try and give him some sales hints, too, for he knows who is moving and apt to need a radio receiver in the home.

The whole problem of bringing in the extra sales depends on your knowledge of what is happening in your field. The better you know the prospects the finer chance you have of landing them. And the only way to know them is to know their problems, their

difficulties and the things they are interested in. When you go out and meet them directly, even if you have a good file of notes, don't act too superior. It kills sales, as any experienced salesman will tell you. Don't start off telling of the money savings alone. The prospect might be interested in getting the most out of life and a few hints of how much better life would be with improved furnishings in the way of a handsome radio receiver and its value in a cultural way might be far more efficient as a sales promoter.

The prospect is only human. Those extra sales can be cornered by going after that human in a human way.



REMEMBER OL' WHIT'S HIS NAME?—HOW HE USED TO GET RID OF ANY OLD SWATE HE'D DIG UP?—THE WORSE THEY WERE, THE QUICKER HE'D SWAP—HE COULD GET RID OF ANYTHING—



HE SWAPPED AN OIL STOVE AND A SNOW SHOVEL LAST SUMMER FOR A LAWN MOWER AND AN ICE CREAM FREEZER—FOLKS SAID HE COULD SELL FUR COATES IN HADES—



HE EVEN GOT SHED OF THAT OL' PUDDLE JUMPER THAT WAS BUILT FOR THE WORLDS FAIR—HE NEVER LOST—EVERYTHING HE TOUCHED TURNED TO MONEY.— BUT ONE DAY HE



HE JUDGED HIS DISTANCE—HE TRIED TO SWAP A BUNGALOW AND AN EIGHT CYLINDER CAR FOR ONE OF OUR RADIO SETS—HA! HA!!—HE SURE DID GET THE RAZZ-BERRY.

—Radio Cartoon Service.

# For Profit

## A Straight from the Shoulder Talk on the Reasons for Being in Business

**O**NCE in a while we meet a fellow who says that he is in business for his health, but intimate acquaintance with one or two of this class of philanthropists makes us realize that such an idea is a delusion and, while he may deceive himself into believing that the "joy of work" is his only salvation, it is the chase of the elusive almighty dollar that keeps him milling and the rest of the world is not deceived.

### CHARGING THINGS UP TO EXPERIENCE

It is easier, by the way, to fool yourself than to put the muzzle of deception on anyone else. We can and do argue ourselves into propositions that no other fellow would dare tackle. We bait our own hooks and grab and hang on to them like crabs after a hunk of raw beef. We land ourselves high and dry and then try side-stepping until we butt our heads against the hulk of our limitations. We plan and puncture our own future, and when engine troubles follow other calamities, we even bunco our old fool selves into charging the mess up to poor old experience.

### ADMITTING THAT WE ARE OUT FOR THE CASH

We are in business for money, pure, cold, clammy cash, and whenever we succeed in convincing ourselves that the store is running on a charity basis, well—we need a vacation, a long one, a vacation that will take us out into the country far from the maddening crowd, where tainted nature witnesses watered milk, stove-piped potatoes, doped weights and other simple amusements of these primitive disciples of parcel post and other

projects. If we are out for the cash—and most of us are—it is a mighty sure thing that we want to do some thinking along that line. It is barely possible that some high-salaried employee in our store is spending a lot of time selling goods that require no great impetus to set them rolling, while an apprentice may be going blind among the most profitable items in stock.

### PROFIT SHARING AN INCENTIVE TO SALESMEN

You and I know that jobber's representatives receive liberal commissions in addition to regular salaries on many particularly desirable money-makers illustrated in their big catalogues. This isn't the result of some fine impulse of liberality. That commission isn't being handed over merely because the goods are pretty, or because the sales manager has fallen in love with his traveling representative. It is just a plain cold-blooded money-making proposition. It's a case of "you make me a bunch and I'll give you a slice of it." That slice tastes so good when it comes in a bunch to the salesman that he never forgets to investigate thoroughly the condition of such stock in the stores where he makes his presence felt.

### BEATING LAST YEAR'S RECORD

There are other incentives besides the commission proposition. Some salesmen will buckle into certain lines just a little harder if they know the boss is keeping cases on results. I know a store where this method of checking sales was followed out closely for three years in one small department. The first season showed a total of \$800. The next season

put it up to \$1,200, and the total of the last year's business on the same line was \$1,500 in the same store. A mere proposition of running against time, and the new record established was a mighty good thing for that department. It put every man on his mettle, and in many cases made a lukewarm salesman over into a red-hot article, burning with an all-consuming desire to make the figures of the previous year look like six nickels.

### RED STICKERS MAKE HEALTHY STOCK

A central western store is following the red-sticker system to move slow sellers. Old or slow-moving goods on the shelves are labeled with these hurry-up signs. When a salesman waits on a customer who asks for screwdrivers, he knows in a second which box to reach for and just which drivers he should show first and talk strongest.



—Radio Cartoon Service.

It may be a passing pattern; it may be the tail end of a certain discontinued line; it may be one thing or it may be another; the clerk may never know the true reason for the red-sticker sign, but he knows the meaning of that sign and with his selling power back of it, the sales go through and the germs that threaten a healthy stock are sent out. A salesman, in describing this sticker to me, said that the red stood for danger and the sticker for just what the word implied.

### MAKING THE MOST OF A WARM-UP DISPOSITION

There are many plans to move slow-selling goods. Some of the old-timers that have gathered dust for months or even years have completely baffled the ingenuity of all kinds, shapes and colors and sizes of salesmen. It is the chap who works his head hard enough to sell these goods who jumps into the limelight and that sort of chap can always get

the boss's ear. This same sort of clerk soon cleans up the relics in an institution and then turns the bright rays of his warm-up disposition onto goods bearing the most profit.

Does he or can he do it in your store? Does he know the cost of your merchandise? I'm not saying that he should, but I do want to go on record as having advocated that you put him wise to the most profitable lines, so he can work where his efforts will show the best returns.

### SOMETHING WORTH TRYING

Too many good salesmen spend their time selling nails or sugar. As the policeman of your own destiny call a halt. Meet with the boys after the store closes and go over the sales slips for the day. Talk over the items sold by every man. It may be a new thing in your store, but the object is to put cash in the same old till. Don't fool yourself. That's why you're in business.

## Window Ad Hookup

A RADIO retailer who always made it a point to display in his windows the same goods that he advertised in the newspapers recently worked out a little idea that enabled him to tie up the newspaper advertisements to his window and make each more valuable.

He noticed that many people would pay his window a visit to see what a certain radio receiver looked like which he had advertised that day, but with other instruments in the window it was

not always easy to tell which one was advertised. In order to overcome this he would paste a copy of the advertisement on his window just as soon as it appeared, and then from the back of the advertisement he would run a red baby ribbon to the machine mentioned in the advertisement. In that way it became an easy matter to locate the machine that was mentioned in his publicity. He found that it also tied up the two forms of advertising and made each much more productive.

# Linger Longer Letties

A Road Map That Will Help Keep Your Stock Clear of Detours That Lead to the Bone Yard

**D**EAD stock has been the nightmare of more merchants than any of the varied blood-curdling dreams from which we all occasionally awake in cold perspiration.

Every time a business man saunters through his stock rooms some "buying error" rises up to soak him with unpleasant reminders. Every time "inventory"

rolls around the array of these red figure items casts a gloom over that strenuous period. Dead stock is a family skeleton from which we would escape always, if it were possible, but as long as we are human we will make mistakes and as long as we are in the business of buying and selling, certain of those mistakes will linger to hang the Indian sign where we can see and suffer.



—MR. COMMUTER WHO HAS TROUBLE KEEPING A COOK MIGHT TRY THIS!

—Radio Cartoon Service.

## EVEN YOUTH REMINISCES

Radio is on the eve of the greatest invention. The advancement of this science has been meteoric this past year. Even amateurs with fuzzles chins look wise and refer to "the apparatus we used to use."

Bulk and expense of equipment seems eternally giving way to compactness and economy with increased efficiency. The wisest of our manufacturers are going to school and from their great experimental stations right down to the kid who operates in an attic, things pleasingly progressive and powerfully efficient are being born and nursed to something nearer perfection.

Just make a list of the improved items that have come into your store this year. It makes a man feel "that nothing is permanent but change."

A MERCHANDISING  
MENACE

And in all this manufacturing mastery is a merchandising menace. It simply means that the merchant must sleep with one eye open—that he must buy with great care and that his selling system must be equipped with an excellent acceleration that will move goods rapidly and certainly when the occasion demands.

There is no business in America today that demands keener buyers or better sellers than the Radio shops. Men who read—who study—who keep so abreast of the times that they anticipate changes and clear their decks for them.

A new invention put on the market today may absolutely ruin the sale of a certain portion of the Radio dealers' stock in six months' time and the wise dealer knows this and hustles.

DETOUR FROM THE BONE  
YARD

But there are a large number of dealers who, although still young to this business, have already accumulated a goodly number of those merchandising antiquities commonly used for decorative purposes in the bone yard. They are learning that some Radio equipment becomes "dead stock" while the paint is still bright and the metal shining and to this unfortunate man RADIO MERCHANDISING has a message. Don't go through your stock and blame the man who sold it to you. Most of our misery in this old world can be traced right to the chap who wears our own hat. The biggest men in this world are those willing to accept both responsibility and blame. And most dead stock is dead stock because we bought it when the demand was good and then went to sleep on the selling end while the fellow on the inventive or manufacturing end burned midnight oil.

In hardware the man who buys a good hammer or a good wrench may go fairly easy and sacrifice no serious loss if these items are not sold for many months. He may even inventory them a year later for what he paid for them, but in Radio equipment the danger signal is on about everything we buy. We can't lay back in the traces a minute. We've elected to ride a merchandising express and freight methods won't do.

PLAY YOUR OWN JUDG-  
MENT PROMPTLY

What is this all about?

I'll tell you.

Keep both eyes peeled for improvements.

Never see one that you do not review then and there its possible effect on other goods in your stock or on your want book.

Then play your own judgment promptly.

I believe in a profit. A good stiff one on dangerous goods.

But—get this—I believe in the axe—quick and deep when the shadow of coming events threatens to make dead stock of any good item.

### EVERLASTING ALERTNESS

I believe this trade will see more cut price sales this year than any other trade in America. Not because it is demoralized or hard up, but because every stock will feel the impelling im-

petus of new goods crowding their way to the front.

The key to success in the Radio field is everlasting alertness.

It is better to get out whole on changing products than to have a stock spotted with "Linger Longer Letties," just because you couldn't "cut and clean" when the occasion demanded.

But don't let alertness run into fear. Take advantage of situations, but don't let "masterly retreats" predominate.

After all selling is a short journey. It's just taking minds from where you find them to where you want them and we create most of our own detours.

## The Super Mailing List

A MAILING list is considered an asset to any business, but a radio retailer recently proved that a super mailing list is worth even more.

He had a mailing list to begin with, but felt that if he had more information than this list gave him he could make better use of it. So he secured a small pad for himself and for each of his clerks, and as they learned anything about any of their customers they would jot it down on this pad. Later this information would be transferred to the proper card in the mailing list.

After a time this retailer had what he called a super mailing list that told the likes and dislikes of his customers, what sort of apparatus they had, what kind they would like to have, and lots of other valuable information.

His direct-by-mail advertising was then done with much more system and much less waste. He would circularize with special mail matter only those people who were interested in certain specialties, and thus eliminate practically all waste. It took a little more work to get this super mailing list in shape, but it more than paid for the extra trouble.

### Why Barber Shops Need Sets

"Does Radio-broadcasting promote the growth of hair?"

A spectator, evidently impressed by the fine "crops" adorning the heads of members, put this question to the chairman at a meeting of Radio fans in

Toronto a few days ago. It was quite possible, he was informed, that electric waves were responsible for promoting the growth and not a single member at the meeting could recall a bald-headed operator.

Whereupon the meeting broke up as a result of all of the more aged persons rushing home to clap on their head-sets.

# Radio Chautauqua

A Solution Looking Towards Continuous and Constructive Broadcasting—A New Radio Service to Civilization

WHEN Theodore Roosevelt described the Chautauqua idea as "the most American thing in America"—he stated exactly the fact. Little did he dream of the possibilities of the idea when linked up with radio.

Last year hundreds of thousands of Americans attended Chautauquas to increase their storehouse of information—when the Chautauqua idea goes over in radio who can answer how many millions will become Chautauquans?

It is a great big idea for the radio broadcaster, for it has the substantial foundation of real service to the community—nay, more than that, service to civilization.

Every one realizes that broadcasting is the foundation of popular interest in radio, and in carefully searching the field for some constructive suggestion to offer the industry, RADIO MERCHANDISING has decided that out of the many ideas that came up in review, the Radio Chautauqua was one of the soundest that has come up, and in order that everyone concerned may go to it for all there is in it, we will publish a series of articles giving practical information and suggestions as to just how it can be put over.

A carefully performed inventory of the broadcasting situa-

tion shows, first, that the smaller broadcasters, in many cases the pioneers, are being crowded out of the air by the bigger fellows, and secondly that there is not sufficient continuity, and purpose, of program to maintain the interest of the listeners.

The secret of America's success is the inherent desire on the part of every American to learn, to add to his store of knowledge. We have the most complete and comprehensive educational system in the world. It is therefore only fitting that we should be the first nation to literally make every home a college, for broadly speaking, and in effect, that is what every home may become with the advent of the Radio Chautauqua. Picture a classroom with its two score students and contrast in your mind the class of a thousand homes, each with its four or five earnest students. May this not become one of the greatest factors in the education of this nation tomorrow?

RADIO MERCHANDISING is now in communication with the management of every broadcasting station in the United States, and in the December issue will be published the first of a comprehensive series of articles showing clearly how this plan can be worked out.

This plan when worked out should prove a great stimulous to radio business, and we are confident that we shall have the co-operation of every radio merchant in the entire country.

# RADIOLAFS

"Farmer up our way," writes J. D. Hawes, Ogdensburg, New York, "has named his pet cow 'Battery B.' Why? Discovered when milking her that her tail is full of switches."

Logan Hemstreet, Muncie, Indiana, sends this society note: "Mr. Reo Statt was host at a party in honor of his fiancée, Miss Milly Henry."

Suppose a large number of guests were invited to meter.

## Nor Do They Store Storage Batteries

Green Clerk: "Naw! You can't have a battery charged here. We do a strictly cash business."

## A-Year-or-So-Hence

Scene opens.

Sweet Voice from Station BOOH: "Say, you big lummix, wadayamean by trying to pam off that tinfoil jitney?. Put in a regular coin and I'll give you your wave length!"

Curtain.

Someone said the radio craze would dwindle with the years, That all the broadcasting and stunts would go—but it appears

As though this prophet bold were wrong—the craze is far from gone.

Radio is a "through train," folks, and everybody's on.

## Not if You Watch the Actress

"One of our worthy readers," states the New York World, "asks us the following questions: 'At what frequency does an actress shimmy on the stage, and will I be able to hear Newark on the Hudson Tube?'"

## Do Ground Wires Promote Angle Worms?

A news item says that the government experts have found that vegetation growing near broadcasting stations takes on a larger growth and reaches maturity sooner than under ordinary conditions. How about those cabbage heads in the back yard garden? Everything's great! Now we can cut the H. C. of L. next spring.

## Radio All Over the Globe

The radio craze continues to spread. Soon it will be around the world. Then look out.

For when China, Poland and Zululand start to broadcast someone is going to need an interpreter with about ninety-three languages, dialects and jargons ready for action.

Imagine sitting in with a parlor Radio outfit.

"Bo-la, glub, blup, bub." Gasps as the grand opera selection is interrupted. Follows the interpreter.

"It's only a kaffir making love to his dusky sweetheart." So much for that and the opera selection is resumed.

"Chee klick il se," comes over the Radio and once again the interpreter comes to the rescue.

"It's only the missing link somewhere in darkest Africa calling to his mate." That's that.

On with the concert, only to be interrupted again. This time it's different.

"Dearie, can I have \$37.48 for a new hat—I should say not, whaddye think I am, a millionaire?"

Just a husband and wife accidentally broadcasting a little family opera.

—Transcript, Peoria, Ill.

# Points To Be Considered in Selecting a Storage Battery

By Walter S. Lemmon, E.E.

Malone-Lemmon Laboratories, New York City.

**H**OW many radio dealers today fully appreciate the important relation of the storage battery to the radio set they are so anxious to sell? And yet the degree of satisfaction which the customer obtains from the complete set often depends upon the wise selection and operation of the storage battery.

As we all know, the storage battery acts as the power plant for the radio set, supplying the current needed for lighting the tube filaments and often operating the loud speaker as well. The electrician installing a group of lights or motors does not neglect to learn some facts about the power station supplying the current—so we in the business of merchandising radio sets must know some pertinent facts about the storage battery we supply or recommend. We must know whether the battery is of the proper size, to give adequate service, whether its construction will give long life and whether its physical design will satisfy the customer's requirements.

## CONSTRUCTION

Perhaps it will be well to review for a moment, a few fundamentals of storage battery construction so we can start on a common basis to judge the merits of a particular battery. The simplest storage battery consists essentially of two dissimilar plates immersed in a solution called an electrolyte. The "lead" or "acid" batteries have proven most popular for radio to date so we will confine our discussion

to this general type. The Edison battery employs different materials but the general operation is somewhat similar.

In the simplest "lead" battery we have two lead plates. One plate is coated with lead peroxide and is called the positive plate. The negative plate is plain lead in the plastic or spongy condition. The exact method of forming these plates may vary with different makes. The electrolyte used is a diluted solution of sulphuric acid.

Now the capacity of the battery to store energy depends largely upon the total area of these plates. To obtain a large plate area several positive and several negative plates are generally used in parallel.

These parallel groups of plates are contained in a cell. The approximate voltage of each cell is 2 volts. Therefore to obtain six volts, three cells are grouped in series and sealed within the battery case. Such a group of cells constitutes the storage battery.

## OPERATION

When we connect the battery to the set and a current flows, a chemical change takes place within the battery and it begins to become discharged. As the discharge process continues the voltage begins to fall off. Just the point at which the battery should be considered discharged is often debated. However, it is generally at the point at which the battery voltage begins to decline very rapidly. The specific point for each battery is generally covered by the manufacturer's in-

structions. The battery may be recharged by being connected to a source of direct current of the proper voltage.

From the foregoing brief description it will be seen that the storage battery has many separate elements of construction and it is essential to select the right battery for the particular radio set. We will now investigate a few points which should influence the choice or recommendation of the radio salesman.

### CHOICE OF BATTERY

First of all, vacuum tubes are designed and built to operate at a certain voltage. The operating voltage is marked on the tube or box and we must have a battery with sufficient voltage to supply the tube. Secondly, because as mentioned above, the battery voltage at discharge is slightly lower than in the charged condition we must be able to secure the operating voltage at all times. Hence a battery is chosen having a fully charged voltage slightly higher than the operating voltage of the tube. The difference in voltage is taken up by the filament rheostat. For most vacuum tubes a six volt battery will be satisfactory. Some tubes operate at four volts and recently the "peanut" tube appeared requiring one and one-half volts. In the simplest receiver only one tube is used as a detector. In this case almost any storage battery of proper voltage will suffice. Where, however, amplifier tubes are also used we must carefully consider the battery capacity as well. The recent advent of radio frequency sets using four or five tubes makes this caution exceedingly important.

### BATTERY RATING

Storage batteries are usually

rated in ampere hour capacity which in some cases is misleading. For instance a so-called sixty A. H. (ampere hour) battery may give one ampere for sixty hours. However, it probably will not give three amperes for twenty hours and certainly would not give six amperes for ten hours. The ability of the battery to give out current depends upon how fast we try to extract the current. Usually the rating is made on the number of hours the battery will give one ampere.

This is all very well on a single tube set but on a three or five tube set where we require three or five amperes it is not possible to apply the ordinary battery rating. Therefore ask the battery manufacturer to give you the discharge rate at the particular current your set will draw. For rough calculations figure one ampere per tube.

A third factor affecting battery choice is physical construction and appearance. The battery must be strong enough to withstand transportation. The vent caps must be accessible and yet should be designed to prevent the acid within the battery from spraying when charging or discharging. The battery should be leak proof. Remember that the acid electrolyte employed ravenously eats up rugs, clothing and discolors floors so that a leaky battery becomes a source of continual annoyance and trouble.

The radio fan is proud of his radio set and generally installs it in his parlor. An unsightly battery is an eyesore and a frequent cause of adverse criticism of the installation. Before you again endeavor to sell that expensive outfit, give a thought to the storage battery—it will pay as a direct dividend.

# This is a Radio Christmas

National Radio Week Being Organized to Stimulate Radio Trade

“THIS is a Radio Christmas” is the slogan of the radio industry. It’s a big idea and every retailer of radio should immediately, if he has not already done so, get behind the idea and put it over in signal fashion.

A movement has just been launched in New York to make the week December 23 to 30th, National Radio Week, and a committee has been formed, comprising the editors of the following radio papers to arrange the practical plans for putting over the finest thing in radio that has so far been attempted: Mr. Hennessey, Radio World; Mr. Mackay, Radio World; Mr. Gernsback, Radio News; Mr. Nixon, Radio Dealer; Mr. Casey, American Radio Journal; Mr. Gillette, Electrical Merchandising; Mr. Lescarsboursa, Scientific American; Mr. Crosby, Modulator; Mr. MacAttammany, Radio Retailer and Jobber; Mr. Wardrop, Radio Merchandising; Mr. Lynch, Radio Broadcast; Mr. Payne, Popular Science Monthly; Mr. White, Wireless Age; Mr. Warner, Q. S. T.; Mr. Henderson, Talking Machine Journal; Mr. Robertson, Talking Machine World; Mr. Miller, Radio Digest; Mr. Callahan, Radio Topics.

An endeavor will be made to have President Harding officially open the week by broadcasting a speech, and telephone wires will be leased from Washington

to reach half a dozen broadcasting stations so that the entire nation may hear what he has to say.

Another unique suggestion before the committee is the broadcasting of a session of Congress. Such a plan would focus the attention of the entire nation in radio, and it is more than a likelihood that the plan will be carried through to successful completion.

Each evening during the National Radio Week will be given over to a special feature program. Some of the greatest musicians, orators and educators will participate.

With such an event on the horizon radio merchants will have a hundred opportunities of stimulating business, for the radio week synchronizes with the Christmas buying period.

National Radio Week is the finest Christmas gift that the industry has ever had.

Mr. Dealer, the newspapers will keep you informed of the details of the great plan, but meantime it would be well to get your window pasters featuring “This is a Radio Christmas” and “National Radio Week, Dec. 23-30”, so that you will be ahead of the procession.

Conservatively, a half of million sets can be installed this Christmas. It’s up to you to get your share.

# Editorial

**A** CAREFUL survey of prevailing conditions in the radio industry based upon direct contact with the trade in all sections of the United States during recent months reveals a greater necessity than ever before for good, continuous, constructive work.

During the past several months many very poisonous influences, particularly in the nature of reckless abandon on the part of a portion of the trade, have been seriously felt by those constituting the more substantial element, and unless all manufacturers, distributors and dealers combine toward a well-conducted, constructive campaign there is a strong likelihood of public interest in radio suffering a wane in another year.

The fight for business must not overshadow development work. The most wonderful strides made in the last two years must not be offset by the slightest abandonment of the kind of effort which is responsible for the headway made to date.

**O**NLY comparatively a few months ago it was indeed difficult to interest the merchant of recognized big caliber in the handling of radio apparatus. He felt it beneath his dignity. That condition has changed, and today there is a sufficient number of highly reputable retail merchants with heavy investments in radio to guarantee its successful handling—to present a most formidable array against the marauder type—that is, if each can be made to realize the extent of his responsibility.

Unfortunately, the destructive element does not always come within the pale of the law in its operations and cannot be combated by organized resistance, except such resistance as is offered by strictly high-class mer-

chandising and publicity work and a high-class presentation of the line through properly equipped stores, high-class salesmanship, high-class and instructive advertising. These are the things which are going to prove the real solution of the problems at hand, and which **RADIO MERCHANDISING** is helping put over.

**T**HE factory must uphold the quality of its products. It must gauge as accurately as is humanly possible market needs, providing sufficient quantities, yet guarding against reckless overproduction. It must exercise a stabilizing influence over the balance of trade. It must, through its officials, maintain the closest possible contact with outside conditions and with its outlets, constantly guiding and counseling along lines which represent the highest ideals of a business, the real success of which, because of its very nature, is fundamentally based upon such ideals.

The distributor, in order to properly function in the general scheme, should, by all means, maintain a well-balanced working equipment, one that will draw his trade to his place of business with as great frequency as possible in order that the much-needed contact may be complete. There should be a highly capable efficiency man who can gather together and, in turn, impart advanced ideas of business promotion and business getting to visiting dealers, and, by the way, there are no dealers of real worth who are not hungry for worth while ideas.

The outside sales force must be alive and alert, must enjoy the confidence and respect of its trade and, above all, must be big enough to look well into the future, thinking and working be-

yond immediate sales accomplishments.

**A**BOVE all else, the distributor must know his trade, know not only his value as an outlet for merchandise, but, of equal importance, what influence he is exerting locally toward the general uplift of business. A dealer who does not lend something toward the future development of the line is not safe to entrust with the responsibility of representation.

The dealer must, first of all, satisfy himself as to the commercial value of the line; he must determine to what extent he is going to depend upon his business or branch of his business for his future livelihood. Should his findings and decisions be favorable, his first procedure is to put his organization and store in such order as will insure maximum returns offered in his working district.

**N**EVER before has real salesmanship been such a potent factor in the radio business. Therefore, every possible care should be taken in the training of the dealer's sales force. Store conditions and setting should be so arranged as to create an atmosphere which will draw and hold the prospective buyer. No mechanic can do proper work without correct tools. A sales organization, no matter how capable, is just as much at a loss as the mechanic without the necessary tools with which to work. Store equipment of right order is absolutely necessary to success. His local publicity work should be high-class and, as far as possible, on a par with national campaigns.

**T**HE dealer should constantly bear in mind the one salient fact that any line of merchandise is just as good as he makes it.

If the promotion work is right, and the presentation of the line what it should be, its acceptance by the public will be full and complete — if the merchandise possesses the merits claimed.

To maintain the strength of this magnificent industry every one involved must be a contributor, else in time its entire structure will give way.

If you believe in your business, defend it and protect it with every means at your command. The radio business is a delightful business, a gentleman's business, and is worthy of all you can put into it.

**I**T is going to be a Radio Christmas, Mr. Dealer. Are you getting your house in order for it? Receivers are going to be sold over the counter this year in holly-leaf boxes. About the end of November get the "Radio Christmas" idea in your local advertising; get the idea in your window displays; get the idea in your circularizing campaigns. It is the first real opportunity you have had to make it a Radio Christmas. A hundred thousand sets will be sold—get your share of this business by getting behind the movement immediately.

**T**HE National Radio Chamber of Commerce is to be congratulated on the effective cooperation which it rendered the management of the Chicago Radio Show. The N. R. C. C. issued a Daily Bulletin which kept the exhibitors thoroughly aware of all that was going on, and Mrs. Louise H. Prichard, the editor of the Bulletin, did one of the most constructive pieces of work that has yet been done at any Radio Show. It is to be hoped that this is a permanent part of the work of the N. R. C. C. and that the execution of this work will remain in the capable hands of Mrs. Prichard.

# What Is a Live Prospect and How Much Is He Really Worth To the Dealer

**W**HAT is a prospect and how much is he worth to the dealer? That was the question which was recently brought up at a meeting of radio dealers and proved a greater problem than appeared on the surface.

One dealer, for instance, declared that he had practically 1,500 live prospects on his cards and stated that they had only cost him between \$75 and \$100, or a little over 5 cents apiece. Another said he had about 1,200 prospects and they had cost him something over 10 cents apiece. Finally an old veteran in the game declared that he had about 150 prospects and that they had cost him over \$1 apiece, and were worth the money.

The difference between the various figures offered by the dealers naturally brought forth some quick questioning. It resolved itself into the query, "What is a prospect?" The old-timer, who has been selling radio apparatus for ten years, practically settled the matter when he gave as his definition of a prospect a person who, to the best of the dealer's knowledge and belief, is go-

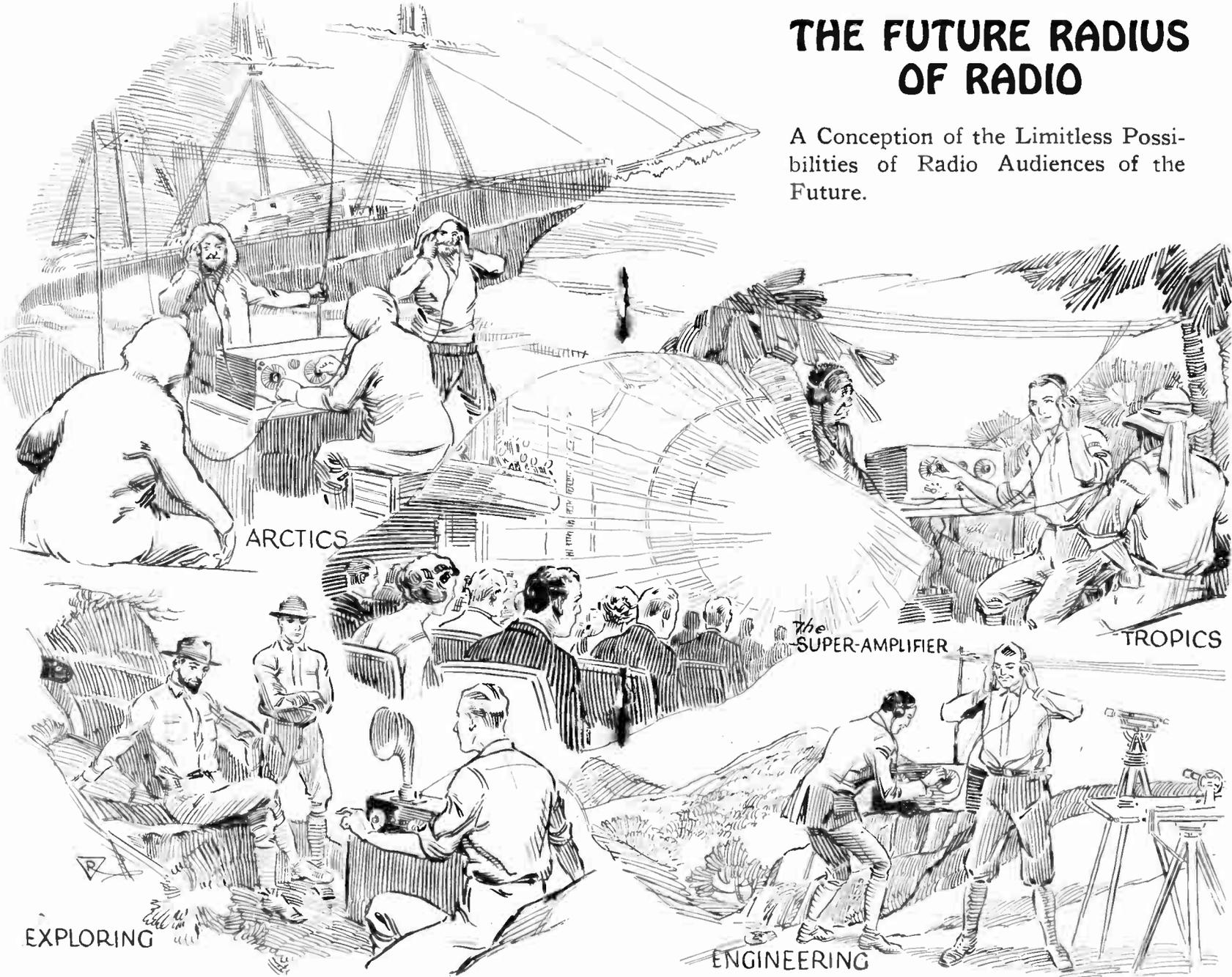
ing to buy radio apparatus. When it comes down to lists, he declared, "I have lists of probably 3,000 names and out of these 3,000 names I have one thousand that may be considered in the selected class, and of that thousand there are at least 500 who are worth following up right now, but when it comes down to prospects I have only about 150, but these people are going to buy from me within the next few months. I know in most cases what they desire, what they want to pay and how. I know their financial standing to be satisfactory and I am all ready to deliver the goods when the opportune moment arrives. Some are waiting for birthdays—some are going to move into new homes—some are waiting for this event or that, but they know what they want and I know what they want, and it is simply a question of getting together. Those are what I call prospects.

"A good list of several thousand names is not to be sneezed at, because it gives the dealer some basis upon which to work, but that list is simply a directory of possible customers. A care-



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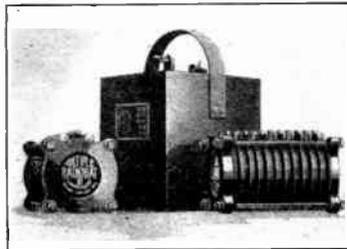
ENGINEERING

## NEW APPARATUS AND SUPPLIES

### Non-Liquid Storage "A" and "B" Batteries

The illustration shows a group of "A" and "B" Storage Radiobats which incorporate a number of revolutionary new features of considerable interest to every radio fan. Both "A" and "B" types of these new principle batteries contain a solid electrolyte which makes them absolutely non-spill. This feature will be appreciated by every radioist who has ever spilled acid from his battery on his mother's or wife's best carpet.

Another interesting feature is the total absence of separators which reduces internal resistance to a minimum. The Radiobat grid (the metal mesh into which is pressed the "active material," forming the "plate") has a double reinforced construction. This construction adds 25 to 30 per cent more actual metal per square inch. The plate is, consequently, just that much more rugged and does not buckle.



The Radiobat

This reinforced strength plus the solid electrolyte makes the use of separators unnecessary. Due to the fact, however, that the secondary reinforcing mesh in the grid does not come to the surface of the plate, there is actually more active surface per square inch of plate area. In

the case of Radiobat "A," this results in a battery 25 to 30 per cent smaller and, consequently, easier to handle than any other "A" battery of equal rating.

The Radiobat Storage "B" is even more unusual and interesting. It is compact—only four inches square by seven inches long—scarcely larger than a large size dry cell "B." It has no glass jars to break, no liquid to leak. The most notable feature is its utter noiselessness of operation.

It substitutes the steady, sustained voltage characteristic of a storage battery in place of the irregular constantly dropping voltage of a dry cell, thus eliminating all hissing and crackling noises with which all radio operators are familiar. Changing voltage in the plate circuit is the direct cause of most tube noises and most of what is blamed on static. Sustained voltage does away with this and results in a marvelously clear true-tone reproduction of each word and note.

The Radiobat Storage "B" is economical as well. It is easily rechargeable at home from either AC or DC and outlasts its value in dry cell "Bs" on each home charge.

The combination of "A" and "B" Radiobats forms a new day principle in radio power supply which every fan will want to know more about.

### De Forest Announces New Radio Set

After many weeks of silence regarding their much-rumored new receiving set, the De Forest Radio Tel. & Tel. Company has at last released details regarding this new apparatus.

ful weeding out will bring the list down to a few hundred or a thousand names of those who probably will buy radio machines some day, and then the process of elimination is carried out until we have the final list of those who have committed themselves definitely as to price, terms and style, have agreed that we have what they want and are simply waiting. It may be a few days or several months.

"When I was a younger man I worked for a piano dealer, and finally one day ran across a woman who said she had no piano, but hoped to buy one some day in the future. I came in very cheerfully and reported to the dealer that I had discovered a prospect. 'When will she be in to buy?' he said. 'Oh, some time

when she has the money,' was my answer. 'In other words, son, what you got is a name,' and I have never mixed names and prospects since that time.

"I can best describe my idea this way: When a man puts an advertisement in a newspaper the entire circulation of that newspaper represents his list. The answers to the advertisement represent his selected list and those who eventually get down to the closing point, or to the point that promises a definite closing within a reasonable time, are his prospects. Perhaps my idea may appeal more to the pessimist than to the optimist, but at the same time it does not raise false hopes and gives the dealer a better and more certain working basis."

### Ode to a Bulb

It's far from a thing of beauty,  
I know,  
But for wonder, it hasn't a  
mate—  
I'm speaking now of that little  
glass tube  
With filament, grid and plate!

They cost like the devil, but still  
we buy;  
We'll have them what'er the  
rate,  
For you can't do much sans the  
little glass tube  
With filament, grid and plate!

It puzzles us all as to just how  
it works,  
But knowledge will come if we  
wait,  
And some day, perhaps, we'll  
know all about  
The filament, grid and plate!

You'll put your galena in a box,  
And for money your folks  
you'll bait  
Till they "come through" with  
sufficient jack  
For a filament, grid and plate!

And when you have a tube in  
your set  
You'll turn down date after  
date,  
For your only love, my lad, will  
be  
A filament, grid and plate!

### EPILOGUE

Of all the things that we don't  
like,  
Our most particular hate  
Is to burn out one of those dog-  
gone tubes  
With filament, grid and plate!  
—Detroit News.

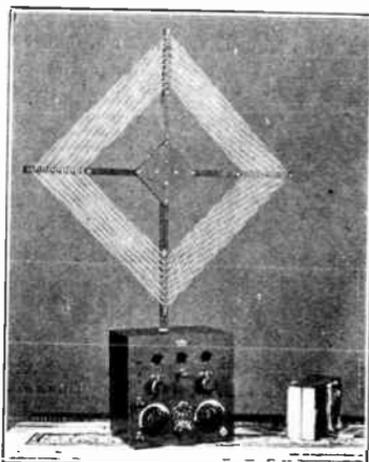
In a cabinet measuring 10x-10x8 inches the De Forest engineers have embodied a two-circuit tuner, three stages of radio frequency amplification, detector and two stages of audio frequency amplification. Due to a recently patented circuit to which De Forest has sole rights for manufacture only three tubes are necessary to give the results usually necessitating six tubes.

Provision is made either for the use of a loop aerial or of an outside aerial and ground. The base of the loop is a phone plug which is inserted through a hole in the cover of the set into a two-circuit jack beneath. When the loop is withdrawn and the outside aerial is in use, the condenser is connected across the secondary of the vario-coupler; when the loop is inserted, the condenser is across the loop and vario-coupler is automatically disconnected.

Another innovation is the long searched-for jarr-proof crystal detector. Tests proved conclusively that, with the circuit in use, a galena detector was vastly superior, but the type in general use up until now was too easily knocked out of adjustment. The detector incorporated in D-7, which is the name of this set, can be dropped and jarred almost without limit, yet it is adjustable.

Connections, with the exception of aerial and ground, are made to binding posts mounted on a shelf about midway of the panel vertically, and inside, the wires to batteries being brought out through eyeletted holes in the rear of the cabinet. The set is extremely simple to operate as there are no ticklers or variometers to adjust. With the loop in use, all tuning is done with the condenser. Filaments are all controlled with but a single rhe-

ostat and once this and the potentiometer are adjusted, the ultimate in tuning is available—a single knob.



New De Forest Set

The results of tests with several sets may be summed up as follows: In the heart of New York City's power lines and steel buildings, using a two-foot loop, nearby stations, such as WBAY, WJZ, WEA, and WOR may be put directly into any type loud speaker; Springfield and Schenectady can also be put on the loud speaker, but not in the tremendous volume of the others; Atlanta, Louisville and Chicago are heard clearly in the head receivers. With outside aerial all results are increased 30 per cent. The D-7 is designed to use six volts on the filaments and sixty-seven volts on the plates. Phones or loud-speaker are, as usual, plugged into a jack. Appearance was not overlooked in designing this set. The panel is of engraved Bakelite-Dilecto and cabinet is of mahogany with hinged cover.

#### Klosner Apparatus

The Klosner Improved Apparatus Company has recently announced to the radio world the

introduction of its two new pieces of apparatus, Klosner vernier rheostat model 200 and the Klosner amplitol.

The new rheostat is far ahead of all other instruments for controlling detector tubes. It has a vernier micrometer adjustment which makes it several times more sensitive than any ordinary rheostat. It permits getting exactly on the correct spot for loudest reception of speech and code.

It is made of genuine condensite with phosphor bronze contacts. It is equipped with a dial on which graduations are shown in white. Both course and fine adjustments are operated by one single knob.

The Klosner amplitol fills that long felt radio want—of controlling the vacuum tube circuit without the use of jacks, plugs or additional switches. With the amplitol in use, it is no longer necessary to plug in from one stage to the next. The phones or loud speaker are simply attached to binding posts and any stage is turned on at will.

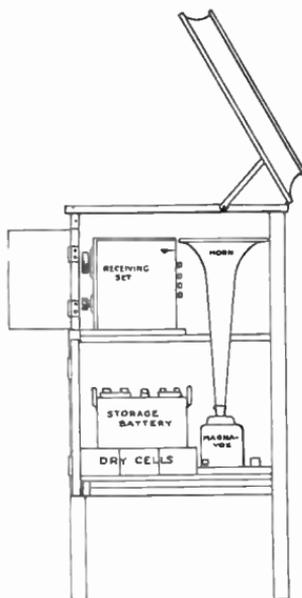
The amplitol not only adjusts the filament to its maximum efficiency, but it also automatically switches on and off the plate circuit. Unlike automatic filament control, the amplitol does not put a sudden strain on the filament. It provides a gradual current increase for the filament, prolonging the life of the tube at least one-third.

It is made of moulded condensite with phosphor bronze contacts. Its exposed metal parts are highly nickel plated. It has a new style knob and dial with graduations in white lettering.

#### Lundstrom Cabinet

The C. J. Lundstrom Mfg. Co. of Little Falls, New York, has designed and constructed a cabinet to completely and conveni-

ently house the two-stage Westinghouse R.C. receiving set and a Maxnavox loud speaker. In size and appearance it resembles an attractive mahogany cabinet



Lundstrom Radio Cabinet

phonograph. It comes completely wired with each terminal tagged. It connects to antennae and ground wires by means of two binding posts located on the back of the cabinet. Anyone can install the entire outfit in a few minutes. It is also equipped with switches and a high grade sound amplifying horn for connecting with the loud speaker.

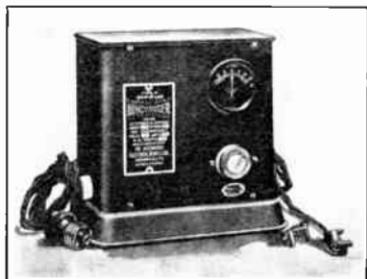
#### The Radio Homcharger De Luxe.

Beauty has been combined with utility in the new Radio Homcharger De Luxe, a battery charging rectifier developed by the Automatic Electrical Devices Company, West Third Street, Cincinnati, Ohio, especially for

the homcharging of Radio A and B batteries.

Finished in a dull mahogany and beautiful old gold, it harmonizes with the finest room furnishings, and permits the Radio enthusiast to re-charge his battery after an evening's entertainment, without even disconnecting it from his set.

The Radio Homcharger De Luxe is constructed upon the same perfect operating principle used in the Type A Homcharger, which has heretofore been the most popular battery charging rectifier in the Radio field. Its



The Homecharger De Luxe

working parts are entirely enclosed, eliminating all danger of shock and fire. It is constructed of the highest grade materials throughout — moulded Bakelite Base — Jewel Ammeter — Oversized Silicon Steel Transformer. There are no frail castings to break, as all parts are made from highest quality stampings.

The Homcharger De Luxe can be operated by anyone. It is self-polarizing, so that the batteries may be connected either way and they will always charge. It gives a tapering charge, as recommended by battery manufacturers, and is guaranteed not to harm or injure the battery in any way.

It will fully charge any A or B storage battery overnight at a

cost of only a few cents. Conforms to the latest Underwriters' requirements and requires no watching.

### Kellogg Bakelite Strain Insulators

The Kellogg Company, of Chicago, are turning out aerial strain insulators of various width and lengths made of Kellogg bakelite, drilled with suitable eyes at ends for the antenna wire and supports. These insulators answer every requirement for the receiving set and are of great strength.

The No. 1 strain insulator, made of sheet bakelite, is 1 inch wide and  $7\frac{7}{8}$  inches in length. The No. 4 strain insulators consist of a bakelite rod 2 inches in length in which are inserted metal end ferrules. The numbers 3, 5 and 6, same as above, are 3, 4 and 6 inches respectively. These insulators stand a direct pull of approximately 350 pounds.

### Mu-Rad Radio Frequency Amplifier Transformers

Maximum efficiency in a Radio Frequency Amplifier Transformer requires that no magnetic material be used in its construction. Wherever iron is used, particularly in a radio frequency circuit, the hysteresis and eddy-current losses are enormous. Thus iron core transformers of the usual type at 300 meters will show an effective resistance of the order of 2,000 ohms. Mu-Rad R. F. Transformers have a resistance of the order of 50 ohms and the great increase of efficiency of these transformers over those of iron core construction is at once obvious.

Another requirement of an efficient radio frequency transformer is that the distributed capacity of the winding must be low. The de-

sign of the Mu-Rad Transformer coils and their construction is such that this is brought down to the lowest possible value.

It is desirable to have the transformer responsive to as wide a range of wave-lengths as possible, otherwise switches must be provided with taps on the transformer windings which increase the capacity thereof, or else, different transformers must be used and plugged in when it is desired to cover different bands of wave-lengths. The Mu-Rad R. F. Transformers cover a range of wavelengths from 175 to 600 meters, which takes in amateur communications, broadcasting and also commercial 600 meter work. The transformers are remarkably uniform in their efficiency over the entire range of wave-length.

Where several stages of Radio Frequency Amplification are desired, Mu-Rad engineers have discovered that maximum efficiency can be obtained only by the use of different transformers in the different stages and three types are therefore available for the first, second and third stage respectively. Type T-11 is used just before the detector, Type T-11A is used in the next amplifier stage, and Type T-11B is used in the third stage nearest the antenna or loop. Each stage when used with Radiotron U. V. No. 201 amplifier tubes gives a voltage amplification of about 80 times.

The combination of three stages of Mu-Rad R. F. Amplification gives such enormous sensitiveness that broadcasting stations 1,500 miles distant are easily received on a 14-inch square loop and distances of 300 miles can be readily covered with a 3-inch diameter coil used as the pick-up. All Mu-Rad Transform-

ers use the very highest grade of wire, condensite and insulating materials. A great deal of time has been spent in studying these materials and it has been found necessary to employ a special type of wire.

For longer wave-lengths other transformers of similar dimensions, so that they can be interchanged with the Type T-11 series, have been developed and will shortly be in production.

Wiring diagrams are supplied with each Mu-Rad Transformer.

### A-P Audio Frequency Amplifying Transformer

The most important point to consider in deciding upon the proper transformer to use is its operating characteristics. Unless the transformer will amplify clearly and deliver an undistorted current of proper potential and volume to the tube, satisfactory results cannot be obtained.

A-P Audio Frequency Amplifying Transformers are designed to meet these requirements. The highest grade of silicon steel laminated punchings are used in the core which is so constructed as to reduce external magnetic effects, with resultant howling, to a minimum. The amplifying coils have 19,000 turns of wire and are filled with compound under a special vacuum process to prevent absorption of moisture.

The transformer is provided with four supporting lugs and can be placed in any position. All metal parts, other than the core, are of brass, nickel plated.

Manufactured by the Atlantic-Pacific Radio Supplies Co., of San Francisco, Cal.

### The C. I. C. Head Set

The C. I. C. headset is being manufactured by the Connecticut Instrument Co. of Stamford, Conn.

The distinguishing features of this Head Set are:

A non-metallic diaphragm of special composition which avoids the distortion and metallic sounds occurring in the ordinary telephone as a result of free vibrations of the diaphragm.

An adjustable air gap for controlling sensivity which adjustment is capable of being positively locked so it will not get out of adjustment.

A large ear cap for distributing the pressure over the ears, thus making it possible to wear the phone for long periods without discomfort.

Die cast aluminum cup and bakelite ear cap.

### Kellogg Bakelite Tube Socket

For the last ten years the Kellogg Switchboard & Supply Co., of Chicago, has been carrying on special research work in the matter of insulating material for telephone service, and were the first manufacturers, in fact, to put on the market bakelite shells for telephone receivers, many thousands of which are now in most successful service.

It is, therefore, of interest to note that this company is now manufacturing and distributing molded lamp sockets to fit all standard four prong based vacuum tubes for radio work. These bases are in an attractive brown color with an extra heavy solid base 7-16 inch in thickness. Four

German silver springs with rounded ends are firmly held in position in deep grooves and cannot touch the mounting surface.

Plus and minus, grid and plate terminals are plainly marked in the mold at each binding post. These are double end nickel plated with hexagon and knurled surface nuts. Connection can be made under the socket as well as from the top of the binding post. These sockets are 2-3-16 inches square with round corners and with a total depth of 1¼ inches.

### The Atwater Kent Coupled Circuit Tuner

The Atwater Kent Manufacturing Company of Philadelphia have developed this tuner with the idea of simplifying operation and still retain maximum performance.

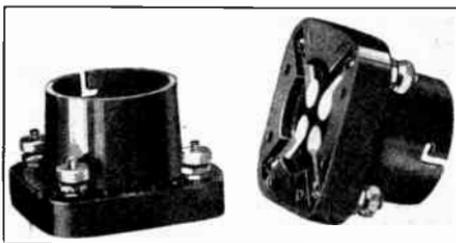
It takes the place of a variometer and variocoupler in a coupled-circuit receiver, accomplishing the results with but one adjustment.

Tuning of antenna circuit is unnecessary. Three binding posts are provided on the back for adjusting the instrument to the particular type of antenna being used. Once this adjustment is determined, no further adjustment is necessary for broadcast reception.

It is absolutely unaffected by body capacity at the dial knob.

All insulating parts are sturdily made of moulded conden-

Kellogg Bakelite  
Tube Socket



site and the workmanship throughout is of the highest quality.

The manufacturers state that at their summer laboratory in Kennebunkport, Maine, using this tuner, in conjunction with a standard circuit and two stages of audio frequency amplification, broadcast concerts have been clearly received from Porto Rico, Davenport, Iowa; Chicago and many other distant points.

The instrument can be used with a crystal detector and the crystal detector later discarded when a more pretentious set is desired.

### Kellogg Radio Head Set

A radio receiving set is as good as the receivers used with it. Therefore, it is of importance that careful thought be given to its selection.

The Kellogg Switchboard & Supply Company, of Chicago, have been manufacturing telephone equipment of the highest grade for the past twenty-five years and the result of this knowledge is built into Kellogg receivers.

Kellogg receivers are unusually sensitive, requiring minimum pressure on the ears, with maximum outside sound exclusion.

Distant points come in clear and distinct.

Listening to a radio concert for an hour or two with large heavy receivers is most disagreeable. Kellogg radio receivers are very light and fit the head comfortably.

The head band is constructed of strong spring steel, covered with flat webbing and fits lightly on the head.

Each receiver is arranged so that it can be instantly removed from the band in case two persons desire to listen with one set.

A 72-inch brown mercerized cord of the finest quality is also furnished.

### Ducon Approved by Underwriters

The Ducon radio antenna plug, manufactured by the Dubilier Condenser and Radio Corp., has been approved by the Board of Underwriters in their report No. 5865, issued July 24, 1922, copies of which may be had from the Dubilier Corporation.

### Oscillations Versus Osculations

"Kiss me by Radio?"

Oh, no! It isn't done  
For the very simple reason  
It would be no fun.



Kellogg Head Set

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## For CORRECT RADIO MAILING LISTS Use THE POCKET LIST

Of Radio Manufacturers, Jobbers and Dealers in the United States and Canada. Issued quarterly—January, April, July and October. October, 1922, issue corrected to September 15th, 1922. Classified under three different headings—manufacturers, jobbers and dealers—and alphabetically arranged by states, cities and towns and names of firms. Containing over 15,000 names and addresses.

We have been exceptionally careful to see to it that every manufacturer, jobber and dealer is listed and under the PROPER CLASSIFICATION. Most mailing list concerns charge more than \$100 for a list of this kind, and, as a rule, those supplied are far from being correct. Compare this list with any other and you will find it to be the very best obtainable anywhere at any price.

October number ready for distribution September 25th. Price \$5.00 per copy or \$10.00 per year (four issues, including monthly supplements which keep the list absolutely correct and up to date at all times). October edition limited; send in your order with remittance today.

### F. D. PICKENS

1021 CARRINGTON STREET  
JANESVILLE, WISCONSIN



35c each, 3 for \$1.00

### Na-ald Genuine CONDENSITE DIAL

The dial that runs true. Numerals engraved on bevel and knob so sharp that fingers do not hide them.

This edge with clear graduation to make accurate reading easy. Concealed set screw in metal insert. Will not warp or chip. Finish and enamel permanent. Low price with this quality possible only through quantity production.

Special dealer and jobber proposition.  
An opportunity.

ALDEN-NAPIER CO.

52 Willow St. Dept O Springfield, Mass.

### Radio Reception Explained

**HOW TO BUILD**

- Double Slide Type Crystal Receiving Set
- Loose Coupler Type Crystal Receiving Set
- Single Circuit Vacuum Tube Receiving Set
- Vacuum Tube Receiver and Two Stage Amplifier
- Loose Coupler Tuner and Vacuum Tube Detector
- Short Wave Long Distance Variometer Regenerative Tuner
- Radio Frequency Amplifier and Variometer Regenerative Tuner
- Combined Radio-Audio Frequency Amplifier Circuit

Great Lakes Publishing Company  
Detroit, Michigan

**BUILD BUSINESS**  
by distributing an inexpensive book which not only explains radio reception but also tells how to build eight types receiving sets out of parts you carry in stock. Complete bills of material given for each type. This will save much of your time. Sells for 50c. Send 25c for sample. Liberal discounts.

**GREAT LAKES PUB.  
COMPANY**  
28 Park Pl. West  
Detroit, Mich.

# RADIO INSULATION

"SPAGHETTI"—VARNISHES—WAXES—COMPOUNDS—PAPERS, ETC.

**ESTABLISHED 1889**

WRITE FOR PRICE BULLETIN AND SAMPLES

MITCHELL-RAND MFG. CO., 25 VESEY STREET, NEW YORK, N. Y.

## GENERAL NEWS OF DEALER INTEREST

### New York Radio Exposition

Scientists and engineers of National repute will speak on radio subjects at the American Radio Exposition to be held in Grand Central Palace, Dec. 21 to 30, under the direction of the American Radio Exposition Co. This company of which Frank Hitchcock, former postmaster-general is president, has the backing of the National Radio Chamber of Commerce and the Associated Manufacturers of Electrical Supplies in the venture, and it will undoubtedly be the first representative exposition of the industry ever staged. In fact present plans call for the show to be the official exhibit of American radio manufacturers.

Coming as it does during the holiday season, when schools and colleges are closed, the exposition will offer an excellent opportunity to students, teachers and parents to learn of the rapid

progress made in wireless in the past few years. The educational features of the show will be many as the entire radio field will be covered, the exhibits comprising radio apparatus and equipment of all kinds as well as material and accessories of every description. Demonstrations for the instruction of radio users will be given and equipment for the broadcasting musical numbers by widely known singers will feature the entertainment side of the show.

### Mueller Electric Expands

The Mueller Electric Company, of Cleveland recently completed and are reoccupying their new buildings at 1583 East 31st Street.

The company manufactures the Mueller rectifier sets and the Universal battery clip.

### H. G. Cisin With Dictograph Products Corporation

The Dictograph Products Corporation has recently acquired the services of H. G. Cisin, author of The Radio Telephone Handbook. Mr. Cisin has been placed in charge of Dictograph Radio sales promotion, advertising and publicity. He was formerly Engineering Editor of "Electrical Record."

Mr. Cisin is a Cornell graduate, holding the degree of mechanical engineer and certificate of electrical engineer. In addition to being the author of The Radio Telephone Handbook he has written a number of other books including Radio Phone Terms Simply Explained and Practical Electrical Engineering. He has taught electrical engi-



©Kadel & Herbert.

Radio golf, the latest indoor sport, is adding enthusiasm to the enthusiastic fans. Dealers are finding radio golf tournaments a great attraction to their customers.

neering at Cornell University, John Hopkins University, U. S. Navy Electrical School and also Stevens Institute of Technology. During the war he served in the U. S. Navy as Ensign and his radio knowledge was gained through practice as well as theory.

Since Mr. Cisin has joined the Dictograph Products Corporation there has been an enormous expansion in its radio department. The Dictograph Company has been manufacturing sound transmission and reception apparatus for many years being makers of the world famous "Acousticon" for the deaf, the Dictograph office intercommunicating system and the well-known Detective Dictograph.

#### Cincinnati Show Success

The Cincinnati Radio Show, which opened on October 9 and lasted one week, was a success from the standpoint of attendance and interest aroused.

The following are among the manufacturers and dealers who had radio supplies and equipment exhibits: Crosley Manufacturing Company, Cino Radio Manufacturing Company, Ohio Cities Radio Company, Precision Equipment Company, Milnor Electric Company, A. C. Electric Manufacturing Company, the Bristol Company, Dayton Fan and Motor Company, Fromisca Insulation Company, Forster-Treuheit Company, Federal Electric Company, Mola Electric Company, the Stroud-Michael Company, Rudolph Wurlitzer Company, Mutual Electric and Machine Company, Champion Carbon Manufacturing Company, Automatic Electrical Device Company, Huber Material Company, Midwest Radio Company, Archiable Electric Company, Renulife Violet Ray

Company, Chubb - Steinberg Company, United Radio Laboratories Company, Artistic Iron Works Company, Evanston Electric Shop Company, Premier Service Company, Westinghouse Electric and Manufacturing Company, Beltzhoover Electric Company, Star Radio Specialty Company, Klein & Kramer, Radio Corporation of America, Brown & Twenhof, Scientific Engineering Association, Simplicity Radiophone Company, Cincinnati Storage Battery Company, Cleartone Radio Company, F. B. Zieg Manufacturing Company, Wise-McClung Company, Jewett Manufacturing Company, Harmony Manufacturing Company and the Hanke Brothers Company.

In addition to these the United States Navy, the United States Army, the Cincinnati Young Men's Christian Association, the Cincinnati Public Library, the Ohio Mechanics Institute and the University of



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Madame Radora at the permanent radio fair in the Hotel Imperial, New York, is arousing widespread interest. The weird Madame tells fortunes and forecasts events.

Cincinnati had exhibits of an educational character.

### Range Tests

Nearly 1000 reports have been received by the Bureau of Standards on the signals transmitted from stations KBKA and WLB. A preliminary analysis of 500 reports on transmissions from the former station has been made using a sorting and counting machine very kindly loaned by the Bureau of the Census.

A report has been prepared describing this study entitled "A Preliminary Statistical Study of the Range of Radio Transmitting Stations." Brief attention has been given to the application of the theory of probability to the results of this transmission test. Plans have been made to continue the test through the assistance of the Department of Agriculture, a representative of that department carrying out his work at Minneapolis as a member of the staff of the Bureau of Standards.

### Atlanta Radio Show

The Southeastern Radio Exposition will be held in Atlanta, Ga., December 4th to 9th inclusive.

This exposition is sponsored by the Co-operative Radio Sales Association, composed of leading Radio Jobbers, Dealers and Manufacturers' representatives of the Southeast. Supported and endorsed by the Atlanta Radio Club, and other civic and commercial organizations, including: Chamber of Commerce, the Atlanta Journal, the Atlanta Constitution, the Atlanta Georgian.

The widespread publicity being given this exposition insures record breaking attendance of Southern Radio Dealers, Professionals, Amateurs and the gen-

eral public, stimulating the already great interest in Radio throughout the Southeast.

### The German Method

September opened a new era in the history of radiophony in Germany. Hitherto the general public have not been allowed to have radio installations. They can now hire a radio telephone from the postoffice.

It has been arranged to supply subscribers in 140 cities with a service of business news by radiophone. At the central office of the express service in this city important items of news received from all parts of the world will be spoken into a microphone connected with the chief radio station at the Imperial posts at Konigs Wusterhausen, from where the news will be broadcast throughout Germany.

The subscribers to the service will be provided with apparatus by the postoffice, the annual payment for which will be not less than 4,000 marks.

Later in the autumn it is intended to broadcast instructive and entertaining lectures and concerts every evening. It is planned to have receivers in the smallest villages, so that at a certain hour every evening there will be instruction and entertainment for people in the remote districts.

### Loud Talkers Regulated

Indiscriminate demonstration of broadcast reception by exhibitors at the Second Boston Radio Show, such as prevailed at the first one, held here last spring, will not be permitted. They caused so much confusion and annoyance that they hurt rather than helped Radio. All reception will be controlled from a central station, and only one

demonstration will be permitted at a time, to insure the best possible results. Each exhibitor will be plugged in on the central antenna and ground connection, and each demonstration will be given at a specified time, according to a schedule to be arranged. The time and place of each demonstration will be posted on the bulletin board.

### Every State Broadcasts

With the issuance of a license in Laramie, Wyoming, every state in the Union has one or more broadcasting stations. As has been the case since the industry got a fair start, California still leads, having today 66 stations, Ohio follows with 35, and New York is third having 30.

### Standardization

Correspondence has been conducted by the Bureau of Standards with manufacturers concerning the radio receiving apparatus on the market and the material collected for a revision of Letter Circular 65. Arrangements have been made with Mr. F. H. Day, of the Bureau of Foreign and Domestic Commerce whereby that bureau will take over the activities of the Bureau of Standards in connection with this list and will prepare future revisions.

The chief of the Radio Section of the Bureau of Standards attended a meeting of the Standardization Committee of the Institute of Radio Engineers in New York on September 12.

Closely allied with the standardization of equipment is the revision of Rule 85 of the National Electrical Code and some correspondence has been carried on with Mr. W. S. Boyd in connection with this subject.

### Personal Par

Mr. Preston M. Smith has resigned as sales-manager of the Dubilier Condenser & Radio Corporation.

### Connecticut Instrument Co. Enters Radio Field

The Connecticut Instrument Company of Stamford, Conn. have entered the radio field as specialists in acoustic development and manufacture.

Mr. R. E. Gillmor, the President of the company was formerly the Vice President and General Manager of the Sperry Gyroscope Co. of Brooklyn.

Mr. G. B. Crouse, the Chief Engineer was formerly the Chief Engineer of the Ford Instrument Co. of New York.

Mr. J. B. Allen, the Factory Supt. was formerly the Plant Supt. of the Sperry Gyroscope Co.

Mr. G. M. Fisher, the Sales Manager has had many years of Sales experience in the manufacturing, jobbing and retail lines.

The principal trade policies of the company will be:

- (1) Specialization on one thing at a time with a view to qualitative rather than quantitative results.
- (2) To deal solely through exclusive jobbers for each territory.
- (3) Liberal jobbers discount with no variation for quantity.

The first product to be placed on the market will be a head set with a non-metallic diaphragm and an adjustable air gap.

### Radio Chicken Raising

Experiments conducted by John T. Thomas in an incubator hatchery at Columbus Grove, Ohio, have demonstrated that radio has a beneficial effect in

stimulating the growth and development of young chickens and produces strong and sturdy fowls.

The discovery was accidental, but the suggestion of such results were proven by a series of tests and experiments covering a period of several months. Mr. Thomas hatches approximately 3,000 chicks a week, requiring his personal attention almost hourly day and night. With a view to relieving the monotony of the long hours of vigil he installed a wireless outfit over which he received broadcastings for his own entertainment, consisting largely of musical concerts.

It was not long after Mr. Thomas sought this diversion that he noticed that the radio programs were having the effect of lulling his little chicks to sleep. Without the music they were restless and nervous but as soon as the instrument was tuned they became quiet and soon were asleep. The result of

the abundance of sleep and relaxation was more rapid growth, better health and physical condition and stronger development.

Mr. Thomas proved his unique theory by raising one flock with radio and another without, a complete record of both of which was kept. The former "retired" earlier and therefore slept longer, grew faster, developed more hardily and were better in every respect, and by this experiment Mr. Thomas proved also that the radio reduced the mortality, all but two of the radio flock surviving to the maturity and kill stage, while ten of those deprived of the soothing, sleep-producing influence of the radio lullaby died in infancy.

So thoroughly is Mr. Thomas convinced of the profit increasing efficiency of the radio in the chicken business that he is having a large equipment installed in his hatchery, so arranged that every chicken will be able to



©Kadel & Herbst.

Mr. Dealer, have you exhausted all your automobile owner possibilities? Retailers have found this a lucrative field, with large advertising possibilities.

"listen in" on the nightly wireless musical programs.

During the past few weeks, "radio chickens" have been shipped into practically every state in the union.

### Free Instruction in Radio Offered

The National Radio Engineering Company of Atlanta, Ga., is offering absolutely free of charge a complete course in radio. This instruction is given by one of the country's oldest radio instructors, who has trained operators many years for U. S. Shipping Board service. A few weeks of this instruction will qualify the student for a government commercial license. The code instruction will be transmitted from various stations throughout the United States daily.

This course is offered for the betterment of the radio business, as many dealers, to say nothing of the novice understanding the operation of their sets. Another drawback is that the novice does not understand the telegraph code, and therefore tries to freeze the amateur out of the field. The third and most important is that so many broadcasting stations are springing up and doing all their work in the afternoon and night, which makes it impossible for the owner of a real set to receive distant stations because of local interference.

### Radio for Motor Cops

Every motorcycle used by the state police of Michigan will be equipped with radio if experiments now being conducted by the State Department for Safety are successful.

## BOOK REVIEWS

**Armstrong's New Super-Regenerative Receiver.**—By Kenneth Harkness.

This is an eight-page leaflet which gives six diagrams and seven halftones of the famous receiving sets and hook-up. It tells how to make and operate it. **How to Make a Commercial Type Radio Apparatus.**—By M. B. Sleeper.

This book is well illustrated and it makes excellent instruction for the person who wants to make his own equipment like those of the commercial type. **Lafax Radio Handbook.**

A loose-leaf handbook. This book never grows old or out of date. All of the latest apparatus and hook-ups are added as time goes on. Anything that grows old is taken out and new leaves substituted.

**Home Radio—How to Make It.**—By A. Hyatt Verrill.

This book is particularly adapted for the amateur that desires to know how to make Radiophones. Twelve full page illustrations and diagrams.

**Radio for the Amateur.**—By A. H. Packer and R. R. Haugh.

The underlying principles of Radio thoroughly explained in simple language and understandable illustrations. This book will teach you how to construct and operate a receiving set successfully.

**Elements of Radio Telephony.**—By William C. Ballard, Jr., M.E.

A reliable, authoritative discussion, in simple form, of the essential principles of Radio telephony and their application. The use of mathematics has been almost entirely avoided.

Price, \$1.50.

## DEALER WINDOW DISPLAY COMPETITION

**T**HE radio merchant, alert in his calling, and realizing that he must compete with many other activities for popular favor, is giving due attention to adequate and consistent plans for window salesmanship.

As the day is yet so young for radio, it will only be a question of time before there will be window displays which will call for unusual skill and even for lavish expense. Eventually, fixtures for displaying radio merchandise will be worked out, and attention given to color schemes, and to suitable hangings. The subject lends itself to admirable treatment in a thousand ways.

This issue of RADIO MERCHANDISING contains many worth-while suggestions for the proper use of show windows—suggestions gleaned from the practical experience of radio merchants all over the country. We want our readers to take practical advantage of these suggestions, and to put them to work in upbuilding their sales.

As a stimulus towards this end we shall give a prize of Twenty-five Dollars for the photograph of the best radio window display—the photograph to be in our hands not later than November 20th.

We shall also give a prize of Twenty-five Dollars for the best five hundred word statement of what a radio window display should be, and what it should accomplish.

Photographs and statements should be mailed to the Editor,

**RADIO MERCHANDISING**  
342 Madison Avenue      New York City

# Impressive Buying Power Of the Farmer

By A. W. Fulton,

Director of Commercial Research Bureau "Farm and Home"

**T**HE basic industry of the country — agriculture—is just now rounding out another crop year with every assurance of bounteous harvests. This reasonably spells a prosperous autumn and winter for farmers, of far reaching advantage to manufacturers; to merchandising, to shipping. Cotton is short and so with the oats crop; but going prices to farmers in both instances offset the shortage in Bulk.

Wheat is practically a full yield, not counting the forced production in one or two war years; corn somewhat short of hoped-for three billion crop, yet a year of plenty for every feed lot in the country, for every farmer's barn, with a surplus for export; oats a fifth larger than last year's short yield; rye, barley, a good showing; potatoes barring accident at October harvest a record yield and upward of a hundred million bushels more than last year. All secondary crops, fruits and vegetables alike, are plentiful.

Threshing machines and fanning mills are now separating and winnowing a wheat crop of over 800 millions. With four exceptions no season has ever produced so much. With the very moderate carry-over from 1921 there is a reasonably generous export surplus. The low level of prices in the recent past cannot be charged to burdensome over-production in North America; rather to upset conditions in Europe. They are bread

hungry over there, with a shortage officially stated at over 100 millions in the seasonal production.

As intimated by "Farm and Home" in its issue of October, 1922, grain production in the northern hemisphere may be no more than enough to supply normal food requirements for the ensuing 12 months, on basis of Europe buying what it really needs.

"Dollar Wheat" at Chicago the past few weeks has been due not to any fact of burdensome crop surplus in the United States, but to present lack of buying power in Europe. Milling demand, shipping and export demand and speculative support have been lacking irrespective of statistical situation.

The coming fall and winter ought to see a long period of activity in American milling west and east. This in turn means liberal supplies at moderate prices of mill stuffs and dairy feeds of greatest possible advantage to dairy interests everywhere.

## WHAT OF CORN

Uncle Sam's corn field nowadays is expected to turn off a three billion crop each November. It did just that last year. The grain speculators in recent weeks have made much of damage to crop west of the Missouri river, and this is indeed impressive. But after all, the September government crop report forecasts an ultimate yield not very much under 2900 millions. This

vast bulk was never reached but twice prior to the period of war stimulus.

This is not all. The 1922 corn crop, granted it is smaller than a year ago, is really worth more on the farm today by 70 millions of dollars than the corn standing in the fields 12 months ago; this through applying the farm price returned by the government a year ago to the crop of that season, and comparing this on similar basis of reckoning this September, with a substantially higher value of corn on the farm, and so with oats.

#### MEASURING UP WELL IN DOLLARS

Similar gratifying totals might be presented in other crops. Cotton, our great southern staple, is seriously short of world requirements, chargeable chiefly to boll weevil depredations. English spinning interests backed by the British government are continuing with renewed energy efforts, this time in Australia, to develop commercial cotton growing in outlying colony and commonwealth. Our own experts are putting up the biggest kind of a fight to destroy this latest menace and conserve our supremacy in world cotton markets.

Conversion on the farm of the major portion of our splendid cereal and forage crops through dairying, through the fattening of cattle, hogs and sheep will mainly prove a matter of good judgment, and proper financing of the farmer.

#### LIVE STOCK SITUATION IS HEALTHY

Dairy herds on the farms make a gratifying total and good breeding tends toward high level in milk production; similarly in the meats trade.

The estimated number of stock

hogs in the country at the opening of September was 7.4% more than one year ago. With the generous corn crop and similar conditions in forage there is promise of an active feeding season.

#### EXCELLENT BUYING POWER ON THE FARM

All this in turn must mean excellent buying power on the part of farmers in the way of machinery, implements, fertilizers, nursery stock, building material, up-to-date equipment for the home and the farm buildings. It applies not only to the buying of needed supplies this fall, but also looks ahead to the farming activities for the season of 1923.

#### MEASURING THE CONDITIONS

Sight should not be lost of some of the uncertainties and disturbing conditions which now seem in a fair way of being surmounted.

"Farm and Home" for October, 1922, editorially touches on these phases, while maintaining that with a sharp upward swing in wages of operatives, and in quotations on steel and other commodities, prices of farm products ought to go up to a substantially higher basis. This journal says:

"Inflation has started again Farmers must and will share in it. Already they are buying more freely than usual of hardware, building material, etc., against the expected advance. Long-headed farmers are contracting at today's prices for machinery, implements, fertilizers, feed, etc., for future delivery, in anticipation of higher prices. How long the coming boom will last no one can foretell, but while it is here farmers want and must have their share of it."

Glance momentarily at the world situation. Many impressive things are in sight which suggest the broadening outlook of business on the farms and with farmers. Exports of food-stuffs for seven months, owing to trying conditions abroad showed a shrinkage in volume of 590 million dollars. This is impressive, and makes a very substantial part of the total export business of the country. But with domestic strikes out of the way, agriculture will take its share in the increased general volume of business to follow, in fact already being realized.

#### FARMER ASKS NO SPECIAL PRIVILEGE

What the farmer needs and with all possible logic asks for, is something akin to a parity in the price of his products with those prevailing in other commodities, in labor and in transportation charges. Right here comes in the encouraging, and unquestioned growth of sentiment in public affairs favoring an economical and sound financing of the farmer in way of

short term loans to enable him to follow an orderly system in marketing.

#### ORDERLY MARKETING AND BUYING POWER

Summarizing in a word, there is splendid attainment in 1922 crop production on American farms. This is now an assured fact. Orderly marketing at prices which should show reasonable profits to producers points to increased buying power in the farm market. The artificial barriers in the way of strikes curtailed supplies and curtailed commodity movement are now over. And the farm crop situation is really the biggest and best asset in big business.

The spirit of optimism may be expected to prevail far and wide. American farmers may always be depended upon to keep their feet on the ground, properly conservative yet encouragingly progressive. Granted reasonable returns for seasonal work, farmers may be depended upon to fully maintain their place the coming fall and winter in contributing to business prosperity.

#### Coal Strikers, Beware!

A Spokane paper says when some fans try to operate a loud speaker with their sets, they hear a noise like a ton of coal being dropped down a chute in a cellar. To some of us that would be a mighty interesting noise.

#### And Chain Him to the Ground

Warden: "Who are you and what are you charged with?"

Prisoner: "My name's Spark, I'm an electrician and I'm charged with battery."

Warden: "Jailer put this man in a dry cell."

#### Or the "Shriek" in Arabia

"Choke off Caruso, Gertie, and let's hear what the wild waves are saying."

The golden tenor's record ends in a sobbing whir. Gertie adjusts her hair with one hand, and with the other languidly twirls a button and a couple of dewdads. Up aloft an aerial vibrates and through the phonograph horn comes a voice:

"This is RED, of the Moscow Daily Murder, broadcasting the noon report from the morgue. Seventeensky—" "Aw, gee, Gert! Get something cheerful! Try that fellow in Hong Kong. He's got the swellest lisp. His wave length is 431.5."



*De Forest  
D-7  
Reflex  
Radiophone\**

## HE WAS FEELING BLUE ON THE GROUND FLOOR— UNTIL D-7 CAME ALONG!

One dealer on the ground floor of a New York skyscraper said he couldn't sell indoor loop sets—because of the unfavorable position of his store.

Then along came De Forest's D-7 Reflex Radiophone\* Receiver and with an indoor loop he ranged a thousand miles or so, and picked up Louisville, Chicago, Atlanta, Pittsburgh, and Boston.

"That's the set I've been waiting for," said his customer, as the broadcast came crisply and clearly in from half way across the continent.

"It's what I've been waiting for, too," said the dealer to himself as his satisfied customer walked out. "I'm an authorized De Forest dealer from this day on!"

D-7 is the big sensation of the 1923 radio season. It's going to make this a radio Christmas—and a big one for De Forest dealers.

Get this. Five stages of amplification on three tubes. That means storage battery economy. Simple single knob control. No more puzzled customers. Either outside antenna or indoor loop. No more work of antenna installation for those who want to avoid it. Elimination of extraneous noises. No howls and screams. Just the broadcast—clean and crisp. Too good to be true? Prove it to yourself. We let this set do its own talking.

Make your demonstrations with D-7 and watch your sales jump. It's another De Forest triumph! Tune in!

**DE FOREST RADIO TEL. & TEL. CO.**  
**JERSEY CITY, N. J.**



\*Reg. U. S. Pat. Off.



## WINDOW DISPLAY SUGGESTIONS

Make your display fit the season—get ideas from merchants in other lines of business.

Plan your displays ahead—days and even weeks ahead.

Get all material ready for the new arrangement before the old display is taken out.

Keep a "window notebook." Jot down in it ideas you see.

To express coolness in a window use gray, light green or light blue for the color scheme.

To show warmth use reds, yellows, oranges—warm colors.

Have the backing of your window high enough to shut off view of the store interior.

Use a dark color in the background when displaying light-colored goods, and vice versa. Get contrast.

Keep your windows clean. Have them washed frequently. If your own employes haven't the time get outside help—it will pay.

Don't crowd your window.

Avoid the other extreme. Too

little in a big window will cause the merchandise to be "lost."

Card holders are useful. They'll keep price cards from falling over on their faces.

Make your display attractive to the eye—and the purse—but don't make it so "pretty" the merchandise is forgotten in admiration of the "trimmings."

Put the emphasis on the goods, not on the decorations.

Use art only to create a desire to buy the goods displayed.

Be sure your window lighting is the best available.

Dust out the window space frequently.

Never allow soiled or fly-specked cards or merchandise to remain on display.

To help the eye to travel quickly from a card to the object displayed connect the two with white tape or ribbon. An arrow will have the same effect.

Invest a little money in stands on which to better display your merchandise. It will pay.

Make your store front reflect you. It is the exterior which most people see. Impressions are made by exteriors.

# MALONE-LEMMON LABORATORIES

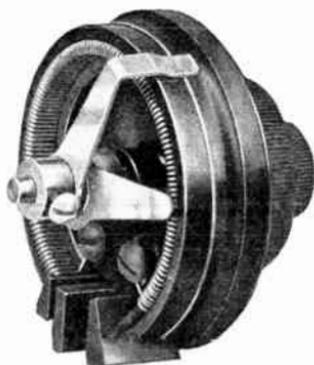
CANADIAN PACIFIC BLDG. MADISON AV. AT 44<sup>TH</sup> ST. N.Y.



*This is the MARK OF CERTAINTY of the MALONE-LEMMON LABORATORIES placed on such radio apparatus as has been tested and approved by them as your insurance of quality in manufacture and scientific accuracy in design.*

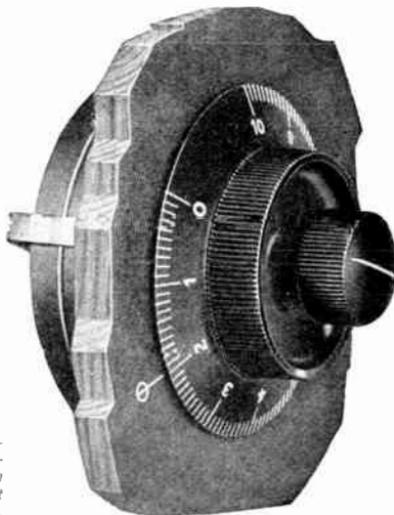
**T**HE Malone-Lemmon Laboratories seek to perform a needed service in the radio field. This service is not confined to testing completed products but reaches back to the development of new designs, or the improvement of existing ones. A striking example of this service is found in the new

**DUOTROL (Double Control) Vernier RHEOSTAT** which removes the difficulties commonly encountered in this type of device. A complete description of this new rheostat as well as a list of other certified products will be mailed to you upon request.

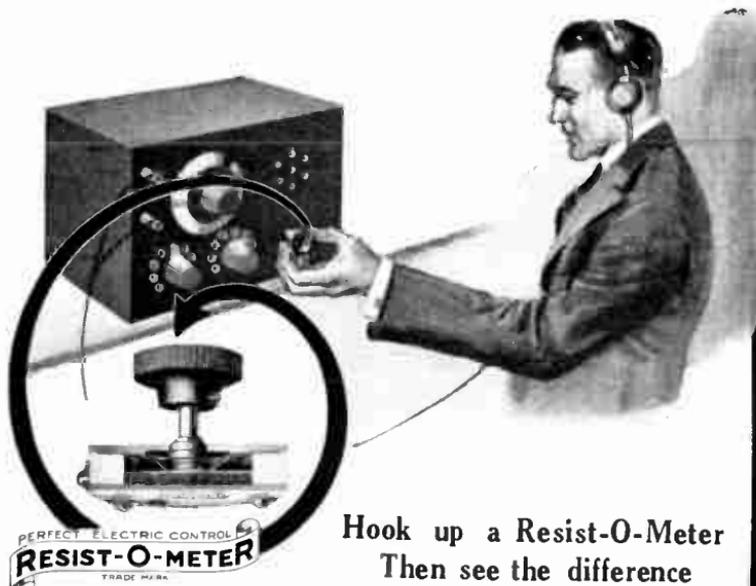


PAT. APPLIED FOR

*The MALONE-LEMMON DUOTROL VERNIER RHEOSTAT—moulded Condensite base, protecting extra heavy resistor; independent vernier control; special Rheostat dial.*



PAT. APPLIED FOR



## Hook up a Resist-O-Meter Then see the difference

PERFECT ELECTRIC CONTROL  
**RESIST-O-METER**  
TRADE MARK

The Resist-O-Meter illustrated is Type A Filament. Price \$1.80

We manufacture the products listed below:  
**Resist-O-Meters**

Type A—Filament  
.. B—"B" Battery  
.. C—Potentiometer  
.. D—Variable Grid Leak

**Test-Rite Condensers**  
in following capacities:

Phone .001 mfd.  
Grid .00025 "  
Grid .0005 "  
Grid  
Leak .0005 " 1-meg.  
V. T. Sockets  
Engraved Blinding Posts  
Accessories

Patent Attorneys  
*Pennic, Davis, Marvin,  
Edmonds*

The Scholes Radio and Mfg. Corporation have obtained an injunction against the Radio Service and Mfg. Company in U. S. District Court of the eastern district of N. Y.

This suit was for infringement of Letters Patent to Smith, et al., No. 1,395,931, prohibiting the Radio Service & Mfg. Company from making, using and selling the condensers in question. Other suits will be filed promptly against all infringers.

A VARIABLE resistance that is variable, not by a series of steps or by a sliding contact, but continuously between the extreme ranges of its terminals without a break-micrometer, controlled for accurate adjustment of proper current values of the "A" and "B" batteries.

This ideal has been developed—The Scholes Resist-O-Meter.

This Scholes Resist-O-Meter possesses the following additional and essential advantages:

1. It is non-microphonic.
2. It possesses the lowest resistance at full compression (almost zero).
3. It is made in models giving various ranges of control previously not attained (covering every requirement for radio use).
4. It is made in compact and conventional form, requiring minimum room for mounting.

The Scholes "Resist-O-Meter," in principle, has been used for more than seven years in electro-chemical processes in which exceedingly accurate and constant current control is required.

This apparatus, simple in the extreme, has been refined and perfected to adapt it to the minute currents and sensitiveness of control needed for radio work.

The Scholes Radio & Manufacturing Corporation holds the sole license to manufacture this type of current control, under patents granted Mr. F. A. Rojas, Nos. 1315579 and 1366945, other patents pending. It is sold only under the trade mark name "Resist-O-Meter." Ask your dealer to supply you.

Write to Mr.—G. Lehr

**Scholes Radio & Manufacturing Corp.**  
32-36 West 18th Street, New York City

*Eliminate the Unpleasant  
Metallic Screeching*

# FIBER RADIO HORNS

*For use with any Loud  
Speaker or Phones*

*Indestructible*

Adopted as most efficient by the largest loud speaker manufacturer.

Supersedes the metal horn.

Indestructible, will not dent.

Volume and clarity naturally greater because sounds are not smothered by counter vibrations.

**SPECIAL ADAPTER**

For use with Magnavox  
\$1.00

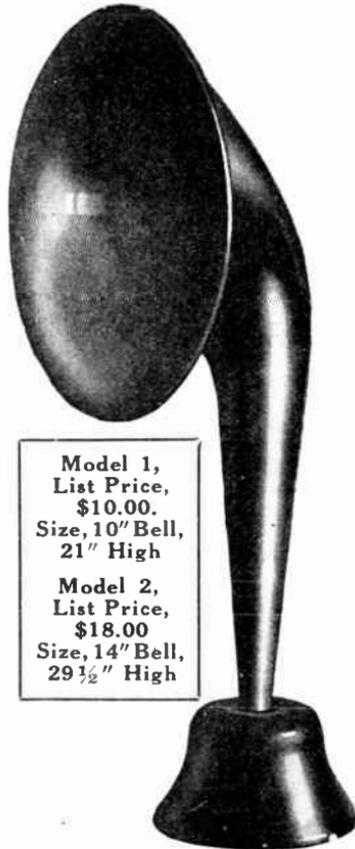
**Ask Your Nearest Jobber**

*A Few Territories Open  
for Distributors*

## National Light & Electric Co.

289-291 Market Street

Newark, N. J.



Model 1,  
List Price,  
\$10.00.  
Size, 10" Bell,  
21" High

Model 2,  
List Price,  
\$18.00  
Size, 14" Bell,  
29 1/2" High

## BOOK REVIEWS

Experimental Wireless Stations, by F. E. Edelman. This book assumes that the reader has some knowledge of fundamental electricity and mathematics and is a readily understandable text for beginners in the art of Wireless Communication who desire to start with the elements. Earlier editions of this book were published during the war. The 1922 edition has been revised and enlarged so as to cover the progress made in the last few years.

The Marine Wireless Pocket Book, by W. H. Marchant, is published by Isaac Pitman & Sons, New York. This book contains much valuable information but is intended mostly for commercial operators and students. Being published in London, it treats the subject from an English point of view, and some of the apparatus described has never made its appearance in this country. If you wish to have a better understanding of the marine and commercial phase of radio this book will prove helpful.

Radio Experimenter's Handbook.—By M. B. Sleeper.

Throughout the preparation of this book one purpose was kept in mind, "Answer the practical questions for the novice or the 'beginner' and the more 'advanced student.'" This book will help the selection or construction of simple apparatus for transmission and reception of Radio telegraph and telephone signals.

Price, \$1.00.

Radio Engineering Principles.—By Henri Lauer and Harry L. Brown.

The book covers thoroughly the operation and characteristics

of two and three electrode vacuum tubes, the practical application of the tubes, the generation and control of the electric flow, and the conditions which must be obtained to cause a tube to operate in any of its functions.

Price, \$3.50.

Radio for Everybody.—By A. C. Lescarbours.

A popular guide to Radio-telephone reception and transmission and to the dot-and-dash reception and transmission of the telegraph for the layman who wants to apply Radio for his pleasure and profit without going into the special theories and the intricacies of the art.

Price, \$1.50.

Home Radio—How to Make It.—By A. Hyatt Verrill.

This book is particularly adapted for the amateur that desires to know how to make Radiophones. Twelve full page illustrations and diagrams.

Price, 75 cents.

Fowler's Practical Radio Text Book.

A text book that tells you what you want to know about Radio. It explains Radio in plain language and it will help to get better results from your set.

Price, \$1.25.

Radio First Aid.

Illustrated with working drawings and complete data as to the necessary equipment and cost of constructing from the simplest to the most modern Radio outfit at home.

Price, \$1.00.

How to Retail Radio.

A new book telling of tested plans and methods and policies for the dealer in Radio. Financing, location, store equipment and arrangement.

The Most Up-to-date Treatise on Radio

# "TEXT BOOK ON RADIO"

By JAMES R. CAMERON

whose text books are used and endorsed by the U. S. Army,  
Navy, and Department of Public Instruction.



**350 Pages—Profusely Illustrated**

Written so the amateur can understand it. At the same time—Text Book on Radio—is a standard text book for the technical Radio student.

**ORDER NOW AND BE SURE  
OF YOUR SUPPLY**

**Cloth Bound \$2.50**

**Flexo-Leatho \$3.00**

**Exceptional Large  
Trade Discounts**

**ALSO**



This "Silent Salesman" furnished free with  
orders of "Radio's Three Best Sellers"

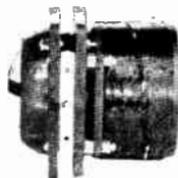
**TECHNICAL BOOK COMPANY**

130 West 42nd Street, Dept. M

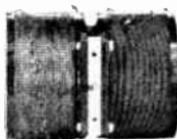
New York

## F. R. S. All Wave Combination

The F. R. S. Banked Winding, when directly mounted on our Vario-Coupler makes an ideal "all wave" coupler with a wave length range of 150-3,000 meters. It is also designed for direct mounting on our Vario-meter. This combination gives the well known Single Circuit Tuner and will respond to wave-lengths up to 3,000 meters.



**This is the Only All - Moulded Universal  
Combination Giving Five Units in Three.**



The accuracy to which these units are built, combined with the best of materials and most rigid inspection, make them highly desirable for the amateur who intends to construct his own Receiving outfit.

These units are sold separate or complete as illustrated.

Three units complete, list price, \$15.00.

**F. R. S. RADIO CORPORATION**  
409-F East Fort Street      DETROIT, MICH.

## MR. JOBBER

Have you seen the line of Howard Radio products? Their Micrometer adjustment rheostat without doubt is the most efficient rheostat yet placed on the market.

## SINGLE KNOB CONTROL

### *Instantaneous Adjustment*

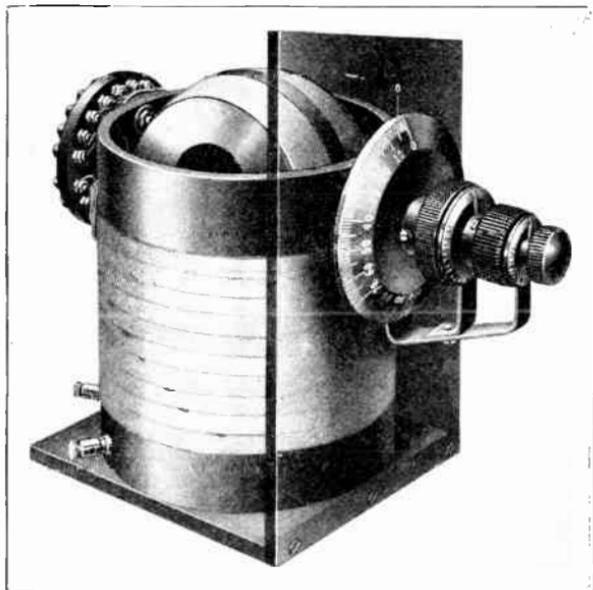
Just the thing the trade has been looking for. Howard potentiometers and rheostats spell efficiency in radio apparatus. See their new Multi Terminal Receiver Plug.

***All Big Sellers and Sold Only  
To the Jobbing Trade***

*Write for booklet and prices*

**HOWARD RADIO CO., INC.**  
4248 North Western Ave.      Chicago, U. S. A.

## An Epoch-Making Advance in Vario-Couplers



Selector Vario Coupler—3 units in one. Pat. Pending. Cat. No. 970

# The New Norris "Selector"

Every dealer should sell this new Norris "Selector" Vario-Coupler because it is an instrument each "Fan" will want. It combines in one compact unit, an efficient and accurately designed vario-coupler and the necessary tuning switches. It is actually three instruments in one as separate controls are provided for both the coupling and each of the two primary switches.

The "Selector" works easily and gives a very fine adjustment on each of the three controls.

Radio Fans can easily install this new Vario-Coupler on their sets with a great saving of panel space.

Radio Jobbers and Dealers—

*Write us now for full particulars  
and attractive discounts*

**Norris Radio Corporation**

126 Liberty Street, New York City

## RECENT RADIO PATENTS

Condenser: Robert T. Staples of New York; assignor to Western Electric Company, Inc. Patented August 15, 1922. No. 1,425,912.

Radiogoniometer: Geo. Maurice Wright, Chesterfield, England; assignor to Radio Corporation of America. Patented August 15, 1922. No. 1,425,137.

System of Sound Transmission: John Hays Hammond, Gloucester, Mass. Patented August 15, 1922. No. 1,425,522.

Transmission System of Radiant Energy: John Hays Hammond, Gloucester, Mass. Patented August 15, 1922. No. 1,425,523.

Signalling Apparatus for Detecting Submarines: Elmer A. Sperry, Brooklyn, N. Y. Patented August 15, 1922. No. 1,426,337.

Apparatus for Preventing Static Interference in Radiosignalling: Roy A. Weagant, New York, by mesne assignments to Radio Corporation of America, New York. Patented August 15, 1922. No. 1,426,133.

Electrical Measuring Instrument: Frank N. Waterman, Summit, N. J.; assignor by mesne assignments to Radio Corporation of America. Patented August 15, 1922. No. 1,426,132.

Battery Container: Roy William Taylor, Chicago. Patented August 15, 1922. No. 1,425,721.

Diaphragm-frame Mounting for Reproducers: David H. Wilson, Philadelphia. Patented August 15, 1922. No. 1,425,556.

Variable Resistance: Ernest G. Danielson, San Francisco; assignor to Elmer T. Cunningham of San Francisco. Patented August 22, 1922. No. 1,425,465.

Method and Means for Preventing Amplifiers from Oscil-

lating: Raymond A. Heising, East Orange, New Jersey; assignor to Western Electric Co. Patented August 22, 1922. No. 1,426,733.

Method of Manufacturing Audions: William F. Hendry, New York City; assignor to Western Electric Co. Patented August 22, 1922. No. 1,426,734.

Circuits for Electron Discharge Devices: Robert C. Matthes, New York City; assignor to Western Electric Co. Patented August 22, 1922. No. 1,425,754.

Vacuum Tube Circuits and Method of Operating Them: Robert C. Matthes, New York, and Harry S. Read, East Orange, N. J.; assignors to Western Electric Co. Patented August 22, 1922. No. 1,426,755.

Repeater for Undulatory Currents: William Wilson, East Orange, N. J.; assignor to Western Electric Co. Patented August 22, 1922. No. 1,426,801.

Method of and System for Testing Transmitters or Receivers: Harold D. Arnold and John P. Minton, East Orange, N. J.; assignors to Western Electric Co. Patented August 22, 1922. No. 1,426,807.

Electron Discharge Device Circuits: Henry G. Egerton, Passaic, N. J.; assignor to Western Electric Co. Patented August 22, 1922. No. 1,426,825.

Radiosignalling System: Ernst F. W. Alexanderson, Schenectady, N. Y.; assignor to General Electric Co. Patented August 22, 1922. No. 1,425,944.

Radiotelegraphic Coupling: Joseph Bethenod, Paris, France. Patented August 29, 1922. No. 1,427,350.

Radiotelephony: Frederick S. McCullough, Cleveland, Ohio; assignor to Glenn L. Martin,

Cleveland. Patented September 5, 1922. No. 1,427,832.

Radiotelegraphy: Frederick S. McCullough, Cleveland, Ohio; assignor to Glenn L. Martin, Cleveland. Patented September 5, 1922. No. 1,427,833.

Wireless Repeater System: Elmer A. Sperry, Brooklyn, N. Y. Patented September 5, 1922. No. 1,428,507.

Low Frequency Amplifier: Lloyd Espenschied, Hollis, N. Y.; assignor to American Telephone and Telegraph Co. Patented September 5, 1922. No. 1,428,156.

Spark Gap Apparatus: Leslie O. Parker, Swissvale, Pa.; assignor to Westinghouse Electric & Mfg. Co. Patented September 12, 1922. No. 1,428,856.

Variable Condenser: William Dubilier, New York City; assignor to Dubilier Condenser & Radio Corporation. Patented September 19, 1922. No. 1,429,227.

Radiosignalling System: Earl C. Hansen, Washington, D. C., and Edward T. Jones, New Orleans. Patented September 19, 1922. No. 1,429,240.

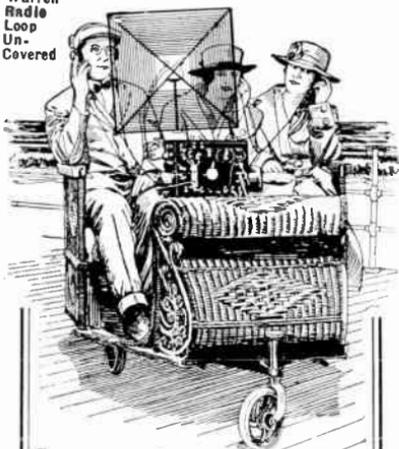
Inductance Device: Harold J. Power, Somerville, Mass.; assignor to American Radio and Research Corp. Patented September 19, 1922. No. 1,429,453.

Circuit Receiver: Henri Jean Joseph Marie de Regnaud de Bellescize, Toulon, France. Patented September 19, 1922. No. 1,429,572.

### How to Keep 'Em Down on the Farm

The large corporations find it profitable to provide entertainment by means of Radio for their employes in isolated places. This may be the solution of keeping the hired girl on the job in the country.—Daily News.

Warren Radio Loop Un-Covered



## Increasing Demand for the Warren Radio Loop

*How Many Are You Selling?*

**L**OOPS are rapidly replacing the old outside aerial — especially for the more sensitive tube sets. Most of them are Warren Radio Loops. Extremely powerful, extra well made, exclusive advantages. They leave nothing to be desired. Their advantages are being told every month to thousands of radio fans through generous national advertising. Your customers read this advertising. You can sell quantities of Warren Loops. One or two will demonstrate their profitability. Order TODAY.

- Type A-737 (300-700 meters) 6 inches square—non-directional ..... \$10.00
- Type A-7236 (175-1000 meters) 6 inches square—non-directional ..... 12.00
- Type B-2537 (300-700 meters) 18 inches square—directional ..... 20.00
- Type BL-2520 (200-18,000 meters) with honeycomb coil, 18 inches square—directional 25.00

Send for Bulletin H, 102

**V-DE-CO RADIO MFG. CO.**  
ASBURY PARK, N. J.

Dept. E



**Na-ald  
De Luxe  
V.T. Socket**

Contact strips of laminated phosphor bronze press firmly against contact pins, regardless of variation in length.

No open current trouble possible. Socket moulded from genuine Condensite. Practically unbreakable. Special protected slot, with exterior reinforcement. Unaffected by heat of bulbs or soldering iron. All excess metal eliminated, aiding reception. May be used for 5 Watt power tube. Highest quality throughout. Price **75c.**

Special proposition to dealers and jobbers.

**Alden-Napier Co.** 52 Willow St. Dept. O  
Springfield, Mass.

## DONGAN Radio Transformers

An unusual Radio Frequency Transformer with an adjustable Silicon core—an exclusive patented feature, enabling reception at 200 meters as well as on the higher wave lengths. Daily establishing DX records. Price only .....\$4.50



**Dongan Electric Mfg. Co.**

**DETROIT  
MICHIGAN**



An amplifying transformer scientifically built to bring out full, clear tones and eliminate howling. Price \$4.00.

**WANTED**—Travelling salesman to demonstrate, sell, install and operate new radiophone loud speaker and electrical phonograph attachment. Must have combination of experience including successful sales record in and intimate knowledge of Radiophones. Graduate electrical engineer preferred. Highest character reference required. Write, stating age, experience and salary desired. If convenient, enclose photographs and names of four references. Address Box No. 1, care Radio Merchandising, 342 Madison Ave., New York.

What the Wild Waves Say  
The telegraph and telephone  
Are now quite out of date,  
The Radio is now the thing  
The news to indicate.  
Just tune in your set,  
And let the ether bring  
Syncopated music,  
And every other thing.  
Vaudeville jokes  
And songs galore,  
How to bring up babies,  
And the baseball score.  
Doctor Windbag's version  
Of the Sermon on the Mount,  
And Dempsey's latest way  
To make 'em take the count.  
What the weather's goin' to be  
A week or so ahead,  
The time to set your clock by,  
And Conana Doyle on "The  
Dead."  
Some Bedtime Stories,  
To make the kiddies go asleep,  
And all the latest happenings  
Out on the briny deep.  
The best kind of fertilizer  
To make the garden grow,  
Crop reports and other things  
The farmers ought to know.  
The very last quotation  
On the price of German marks,  
And the proper care to take  
Of flowering shrubs in city  
parks.  
The way Lloyd George is hand-  
ling  
England's ship of state,  
And who some movie star has  
taken  
For his latest mate.  
Some famous chef's directions  
For making angel cake,  
And the latest drowning accident  
From bathing in the lake.  
Wall Street's finance gossip,  
Sunday's Golden Text,  
And where the coal is coming  
from  
The winter after next.  
The calculated distance  
From the earth to Mars,  
And just what Think is upper-  
most

In China's civil wars.  
Oh, it's all there in the ether,  
Everything you want to hear,  
Just turn the tuning gadget  
And clamp the phones upon  
your ear.

R. E. D. Conbourg,  
Toronto "Star."

**An Electronic Panegyric**

What brings the sunshine to my  
room  
Chasing far the shades of gloom  
And makes the day pass all too  
soon

**My Radio!**

I hear the news from far-off  
shore  
Of busy mart—the baseball score  
And list to songs I sung of yore  
By Radio!

With song and story I'm be-  
guiled  
And go to sleep like a happy  
child  
To dream an Angel passed and  
smiled  
On me and Radio!

**Senator Glass Will Insulate  
His Aerial**

Miss Ruth Sparks gives so-  
prano solos in the east, and in  
the west Mr. Sexton left his  
church long enough to broadcast  
a sermon.

**Oh for the Crying Out  
Loud!**

Here lies the body of young  
Charlie Crouse,  
Who had ten thousand volts  
very near his house.  
He threw a wire 'cross that volt-  
age, it's said,  
The result was quite shock-  
ing; poor Charlie is dead.

**MICON**  
Tested Mica Condensers



Now considered the highest type  
fixed Mica condenser made.  
ALL CAPACITIES  
Price 25c to \$6.00

**ANTENNELLA**



No Antenna or Aerial Needed  
Price \$2.00

JOBBERS: Wire or write for proposition  
Wonderful co-operation and  
sales campaigns furnished by  
Chas. Freshman Co., Inc.  
97 Beekman St. New York City

**N-a-a-l-d**  
Small Space  
**V. T. Socket**



35c each, 3 for \$1.00  
Moulded genuine  
condensite. Requires  
but small space for  
mounting. Readily  
accessible binding  
posts. No excess metal to interfere with  
efficiency. Unaffected by heat of bulbs  
or soldering iron. Phosphor bronze con-  
tacts. Nickel plated brass binding screws.  
slash cut slot. Price possible because of  
large production.

Special proposition  
for dealers and jobbers.  
**ALDEN-NAPIER CO.**  
52 Willow St. Dept O Springfield, Mass.

*Manufacturers, Dealers, Jobbers*  
**WE MANUFACTURE**  
**Special Design Radio Parts**  
SUCH AS  
Binding Posts, Switch Points,  
Stops, Etc.  
Detector Parts and other  
Screw Machine Products  
*Estimates Given on Receipt of  
Samples or Specifications*  
**LINDEN & COMPANY**  
891 Broad St., Providence, R. I.



**THE "MISSING LINK" FOR  
RADIO SETS**

**Lundstrom**

**RADIO CABINET**  
with  
**LOUD SPEAKER HORN**

**ONLY \$35**

A beautiful, mahogany finish cabinet for completely housing the 2 stage R. C. Westinghouse Radio Receiving Set and Magnavox Loud Speaker. It is completely wired and equipped with switches, ready for quick connecting with receiving set, contains a Loud Speaker Horn and provides hidden compartments for wet and dry batteries, switches, wire connections, etc. Does away with the mess of having radio set, batteries, etc., scattered over tables and floor. When not in use, and with all doors closed, it looks like an attractive cabinet phonograph. When used with Magnavox Loud Speaker the horn, located back of receiving set, throws the sound upward against open cover of cabinet which acts as sounding board and amplifies and deflects sound throughout the room. Can also be used with head sets.

Write for descriptive circular R1  
**The C. J. Lundstrom Mfg. Co., Little Falls, N. Y.**



**New Radio Inventions**  
—be sure to get the latest

**Combined Grid Leak  
and Micon Condenser**

Unbroken range from zero to 5 megohms; all intermediate points. Fixed capacity .00025 in f. Will improve your set wonderfully. Clarifies signals, lowers filament current, increases battery life and eliminates hissing.

**\$1.00**

**CHAS. FRESHMAN CO., Inc., 97 Beekman St., New York**  
**DEALERS: Write for proposition**

**DEALERS**

Our Weekly Radio Comic Strips, pasted on your window, will attract attention and boost sales.

*Free Samples Sent on Request*

**RADIO CARTOON SERVICE**  
234 Cambridge Ave., Jersey City, N. J.

**SUNBEAM**

**RADIO "B" BATTERIES**

Long Life — strength — freshness  
and in any quantity

**Western Electric Novelty Co.**  
1250 E. Sixth St. Los Angeles

NATIONAL DIRECTORY OF RADIO DEALERS, MANUFACTURERS, ETC.

SUPPLEMENTARY SERVICE OF ADDITIONS, REVISIONS, ETC.

# Sydell's Radio Directory and Service

553 SCHENCK AVENUE

BROOKLYN, N. Y.

**Card Catalog Directory of Radio Dealers  
Sent upon APPROVAL  
(Also available on SHEETS)**

No comparison between this directory and similar commercial "mailing lists"

No mailing list companies offer to send theirs upon approval

## WHY?

Names in our directory are annotated to indicate wherever possible the distinction between exclusive dealers in RADIO equipment; those who handle RADIO only as a side line, as dealers in electrical supplies, hardware stores, jobbers, manufacturers, distributors, etc.

This list has been compiled from information secured from State Chambers of Commerce, current RADIO periodicals and newspapers having RADIO departments, and contributions from Manufacturers, Dealers, Jobbers, etc.

Dealers desiring inclusion please send particulars without obligation.

**In Preparation**

**A similar directory of RADIO MANUFACTURERS**

*Please send descriptive literature*

# PATENTS

## To the Man With an Idea

I offer a most comprehensive, experienced, efficient service for his prompt, legal protection and the development of his proposition.

Send sketch, or model and description, for advice as to cost, search through prior United States patents, etc. Preliminary advice gladly furnished without charge.

My experience and familiarity with various arts, frequently enable me to accurately advise clients as to probable patentability before they go to any expense.

Booklet of valuable information and form for properly disclosing your idea, free on request. Write today.

**RICHARD B. OWEN**

Patent Lawyer

38 Owen Building,

Washington, D. C.

2276-V Woolworth Building,

New York City

*Replace The Storage Battery  
with a single Dry Cell and  
get the same Results*

## ARROW W. D. 11 ADAPTER

Fits all makes of sockets  
and requires no change in  
wiring.

Scientifically correct-base  
made of Bakelite.

List Price \$1.00

*Ask your nearest Jobber*

*A Few Territories  
Open for Distributors*



Pat. Pending.

## NATIONAL RHEOSTAT

With Dial Molded of Condensite

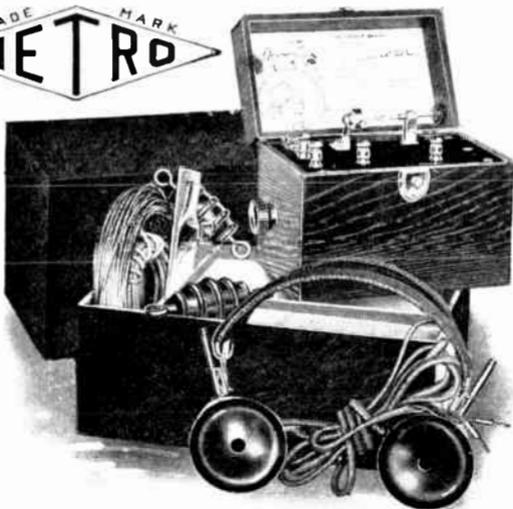
Specially adapted for use with  
1½ Volt Vacuum Tube

List Price \$1.25



**NATIONAL LIGHT & ELECTRIC COMPANY**  
289-291 Market Street, Newark, N. J.

# The Outfit Everybody Wants!!



## THE LITTLE GIANT RECEIVING OUTFIT

Greater Simplicity — More Efficiency — Popular Price

The Little Giant Receiving Outfit is surprising dealers everywhere with its extraordinary sales. People, who never showed any interest in radio, are buying this greatly improved high grade receiving outfit. It overcomes all the objections of difficult operation, unsightliness, inconvenience and great expense common to most types. Dealers are increasing business with this rapid seller. Things are brighter after they give the Little Giant a chance to prove its appeal to everybody.

The entire set is contained in a highly polished American Walnut cabinet that you can hold easily in one hand. The only adjustment necessary (once the detector is fixed) is the pulling out of a small rod on the side until the sound is clear and loud. Designed on entirely new principles, Coupled with super-sensitive Metro Headphones, the Little Giant outfit is surprisingly simple and efficient. Everything needed to install the Little Giant is packed in the neat, black leatherette box.

### Little Giant Outfit Complete

With Metro  
Headphones, In-  
sulators, Ground  
Wire, Ground  
Clamp and Com-  
plete Aerial. In  
Black Leather-  
ette  
Box; **\$15**  
List

*Write for circular and interesting proposition. Get your share of the profits in Little Giant Receiving Outfits.*

## METROPOLITAN RADIO CORPORATION

67-71 Goble Street

::

NEWARK, N. J.

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# 27 Reasons why you should concentrate on Radiobats

Because—entirely distinct from *all* other batteries for radio use—Radiobats are *radio batteries*.

Radiobats are advertised more powerfully than any three of the 27 battery advertisers in the leading Radio publications in October.

Radiobats "A" and "B" are *dry storage* batteries, with the only solid electrolyte. They eliminate battery noises absolutely.

Dealers will find both the list prices and the discounts liberally attractive.

Send for the intensely timely book, "The Permanent Power-UNIT for Radio"—free.

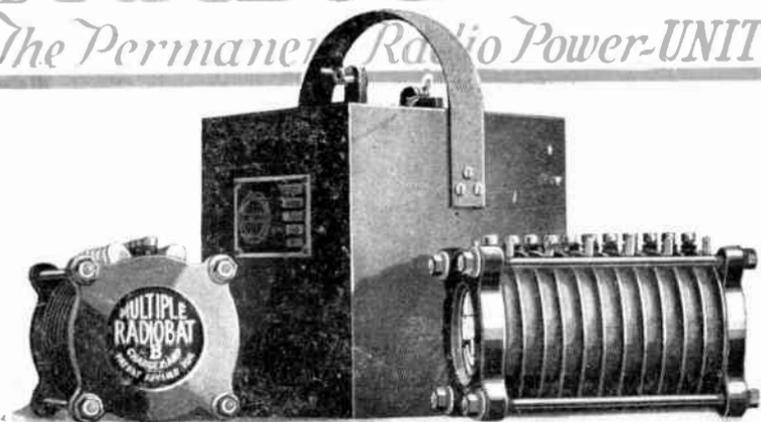
MULTIPLE STORAGE BATTERY CORP.

350 Madison Avenue, New York

A  
and  
B

# RADIOBATS

*The Permanent Radio Power-UNIT*



# Genuine Radiotrons

## all \$3.00

### for bigger radio sales

WD-11	UV-199	UV-200
WD-12		UV-201A



## There's Quality in everything

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

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



### Now \$3.00

WD-11 UV-199  
 WD-12 UV-200  
 UV-201A  
 Radiotrons with these model numbers are only genuine when they bear the name Radiotron and the RCA mark.

Radio Corporation of America  
 Sales Offices:  
 233 Broadway New York  
 10 So. La Salle Street Chicago, Ill.  
 28 Geary Street San Francisco

# Radiotron

REG. U.S. PAT. OFF.



The symbol of quality is your protection.



This symbol of quality is your protection

# Radiotron

REG. U.S. PAT. OFF.

### Radio Corporation of America

Sales Offices: Suite No. 143  
 233 Broadway New York  
 10 So. La Salle St. Chicago, Ill.

28 Geary Street  
 San Francisco Cal.



This symbol of quality is your protection

have. You will want to add one to your kit."

\* \* \*

**Tuesday, April 7:** Make your second portable window display a Boy Scout window. Some of your local scouts will undoubtedly be glad to give you the necessary paraphernalia to fix up a good window. This window should announce the fact that you have complete sets, also the component parts for the scout who wants to build his own.

\* \* \*

**Wednesday, April 8:** Your Scout window can be converted easily into a Girl Scout display, or you can combine both together. The girls are probably even better prospects than the boys, for they haven't been so long at the game and a lot of them are now making their own sets.

\* \* \*

**Thursday, April 9:** If you find your Scout displays arouse outstanding interest, get the boys and girls on your sales force by starting a competition on securing prospective customers. Offer as a prize one of your portable sets to the youngsters securing for you the most productive list—the set to be presented just before the summer vacation.

\* \* \*

**Friday, April 10:** Some mighty attractive toy automobiles are on the market—some of them large enough to house a small receiving set. Get the loan of one from your local toy store and radio equip it for your window. You can build up an attractive window display around it, and use it as a way to get the portable idea through to motorists. Work in some of the automobile slogans, such as "Our portables haven't got four-wheel brakes, but they do BREAK the records."

**Saturday, April 11:** Some merchants are finding it a good Saturday night stunt to have an envelope of printed material for every visitor to the store. Collect all your manufacturer and dealer literature and pass it on as Sunday reading. Slip in some new hook-ups in the envelopes for the hams.

\* \* \*

**Monday, April 13:** The dealer in the small town should use special market days for portable demonstrations. Equip a car and drive around to the different strategic points, park the car as long as the law will allow and give outdoor concerts. You'll be able to give the farmer the latest products quotations.

\* \* \*

**Tuesday, April 14:** Set up an honor roll of "Townsmen Who are Radio Equipped for Vacation Time," and list all those who have purchased portable models. Prospects, seeing names of friends on the list, will be easier sold.

\* \* \*

**Wednesday, April 15:** Few radio dealers are taking advantage of the telephone. Call up your customers every once in a while, find out how their set is working and take the opportunity of calling their attention to some unit they may be lacking—a battery charger, a loud speaker or probably a new set of B-batteries.

\* \* \*

**Thursday, April 16:** Some merchants are finding that it pays to have a follow-up system on B-batteries. When such batteries are sold to a customer try to find out the number and type of tubes in his set, and from this you will be able to approximate the time when he will be in the market for new batteries.

\* \* \*

**Friday, April 17:** "Free stor-

## Important News from Sam!

Right now, Radio Sam's telling the fans about the 180 broadcasting stations that use

### WILLARD RADIO BATTERIES

and why they prefer these batteries. Full pages in color in The Saturday Evening Post, The Country Gentleman and Radio News. Full pages in Popular Radio and Radio Broadcast.

Write or wire your nearest Willard Branch for particulars about these batteries.

WILLARD STORAGE BATTERY CO., CLEVELAND, O.  
In Canada: Willard Storage Battery Co. of Canada, Ltd., Toronto, Ont.

#### Willard Storage Battery Company Branches

ATLANTA, GA. Corner Ivy and E. Baker Sts.	KANSAS CITY, MO. 2020 Grand Ave.
BOSTON, MASS. 760 Commonwealth Ave.	MINNEAPOLIS, MINN. 36-40 South 10th St.
CHICAGO, ILL. 3916 S. Canal St.	NEW YORK CITY 4-6 LaSalle St.
CLEVELAND, OHIO Chester Ave. and E. 23d St.	OMAHA, NEBR. 1108-10-12 Nicholas St.
DALLAS, TEXAS 2020-22-24-26 Jackson St.	PHILADELPHIA, PA. 1423-25 Spring Garden St.
DENVER, COLO. 2145-2155 Market St.	PORTLAND, ORE. 106 14th St. North
DES MOINES, IOWA 410-16 West 16th St.	ST. LOUIS, MO. 2918-20 Washington Ave.
DETROIT, MICHIGAN 5946-54 Cass Ave.	SAN FRANCISCO, CAL. 480 Second St.
INDIANAPOLIS, IND. 914 North Senate Ave.	SYRACUSE, N. Y. 440 W. Taylor St.

Say you saw it in Radio Merchandising



## This Is Not a Kit—

Do you as a dealer realize the enormous field for large unit sales which is opened up by the ALL-AMERICAN factory-quantified ready-to-wire sets? Equalling in quality the finest finished sets selling at around twice the price, featured in ads like this in twenty magazines and seventy-seven newspapers, ALL-AMAX means for you mass sales and satisfaction—the same that the mention of an ALL-AMERICAN Transformer calls to your mind.

Remember these sets come fully mounted no danger of the customer losing or misplacing parts. The photographic wiring directions, on the inside lid of the carton, are of unprecedented clearness—complete illustrations also furnished for those who prefer them.

Have you an ALL-AMAX SENIOR Demonstrator Set? If not, write your jobber at once, or write us, mentioning his name.



## Now You Can Afford a modern precision-made set which "cuts through"

Ⓒ Tuned radio frequency for distance and selectivity, reflex for economy, the unequalled loudspeaker tone quality and volume which comes with ALL-AMERICAN precision manufacture—all are present in this non-radiating three-tube receiver. Ⓒ And, owing to the economy of "wiring it yourself," ALL-AMAX SENIOR costs less than a finished one-tube set of equally high quality. Price \$42.

The RADIO KEY BOOK is a radio education in itself. Send ten cents, coin or stamps, for your copy.

**ALL-AMERICAN RADIO CORP**  
PIONEERS IN THE INDUSTRY  
Chicago  
2656 Coyne Street

Long Wa  
(Intermed  
(15-75 kc.) F

10,000 Met  
Transf  
Tuned ty  
input) R-

Radio  
(Oscillat

Consisti  
R.120 e

T  
ALL-

This s  
they  
You—  
com  
pane  
board  
phc  
wir  
tio

All-



# ALL-AMER

age battery charging service for a year" is a sales inducement being used by some radio merchants. It parallels the free service for a year of the phonograph merchant. The idea is worth consideration on the part of the retailer.

\* \* \*

**Saturday, April 18:** Make a point of visiting your customers who have built their own sets. A Connecticut retailer has made a practice of doing this, and he has found lots of opportunities of suggesting the use of various accessories, such as battery chargers, improved aerial equipment, radio tables, completely contained cabinets, etc.

\* \* \*

**Monday, April 20:** Stage a wave-trap demonstration in your store tonight, and have one of your clerks telephone a lot of your customers to come in and see it. There's a good profit in the line, and if your customers are satisfied as to the efficiency of the wave-trap in eliminating station interferences you'll make a lot of sales.

\* \* \*

**Tuesday, April 21:** Most receiving set purchasers prefer to have the "completely equipped" price rather than the price of the set alone. In describing a set to a customer say: "In your home and operating for \$...."

\* \* \*

**Wednesday, April 22:** "We maintain a well-equipped work-room for our customers who desire to build their own sets." is a paragraph from a letter sent out to prospects by a Pennsylvania radio merchant. It has worked out very well. Usually the dealer can persuade a one tube fan to be a little more ambitious and build a two or three tube set—with the consequent expansion of sales. In the work-room are neatly printed

cards offering complete tool kits. After the first set is built some of the amateurs buy these kits and do their building at home.

\* \* \*

**Thursday, April 23:** Powerful stations in the East and Middle West are now broadcasting educational courses which the radio merchant can cash in on. The foreign born population and those who had not the advantage of much scholastic training in their youth can all be interested in purchasing radio sets in order that they may receive these educational lecture courses.

\* \* \*

**Friday, April 24th:** The weather is now suitable for the erection of outdoor aerials. Your customers who have indoor aerials and loops can be interested in greater distance by the use of outdoor aerials, and there's money in their erection.

\* \* \*

**Saturday, April 25:** A dealer in New Jersey made a unique window display out of a series of hook-ups, culled from the newspapers and radio fan magazines. The entire window was blanketed with them and a card in the center foreground announced: "We have all parts required for all these circuits." The stunt moved a lot of parts. Try it out.

\* \* \*

**Monday, April 27:** Some dealers have found it profitable to present each of their regular customers each week with a radio section from a newspaper. A rubber stamp is used to print on the margin of the different advertisements, "You can secure this at Brown's Radio Shop, 1 Main Street," and a hand points to the particular product.

\* \* \*

**Tuesday, April 28:** A large  
(Concluded on page 113)

# Parts that make profits— are parts that stop leaks!

*New!*  
**RASLA  
MAR-CO**  
RADIO PRODUCTS  
**3tube KIT**

**T**HE immensely popular improved Rasla Reflex now comes in Kit form! This Kit contains the correct MAR-CO and Rasla parts—matched together—and sealed with the personal approval of J. Clyde Davidson, perfecter of the Rasla Reflex, \$40.00 worth of parts in a sealed Kit that lists for \$37.50!

Ask your MAR-CO jobber, or write direct, for details of this Kit and the entire MAR-CO line.

**MARTIN-COPELAND  
COMPANY**

Providence, R. I.

Branch Offices in

NEW YORK CHICAGO  
BOSTON SAN FRANCISCO

**L**EAKS—energy leaks—must be stopped—if the set builder is to get the results he should!

And radio fans today are beginning to realize that fully half the efficiency of any circuit depends on a careful selection of parts—parts designed to conserve radio energy—to stop leaks!

MAR-CO radio instruments are built by a maker with 45 years' experience in scientific, precision methods. MAR-CO parts cut down energy losses—and every fan who has used **one** MAR-CO part—looks to MAR-CO for the same leak-proof precision in other instruments!

**L**EAKS—expense leaks—must be stopped—if the radio dealer is to get the profits he should!

And far-seeing dealers today are beginning to realize that the secret of a profitable parts business, is to concentrate on a few complete lines of well advertised, quality parts!

MAR-CO is the most complete line of precision parts in radio. MAR-CO parts are handsomely finished, attractively packed, and thoroly advertised! Make MAR-CO the backbone of your parts department—cut out needless duplication—needless expense leaks—and count on mounting net profits!

**MAR-CO**  
RADIO PRODUCTS  
*Parts of Precision*

Say you saw it in Radio Merchandising

World Radio History



The exposed party  
will be made to eat  
Shakespeare or  
Charlie Dickens.

## RING ANNOUNCES NEW CURE FOR POETS

Follow the Inoculation System and Load Up On Same  
Disease Advises Lardner—Doctors Will Soon Be Broke.

By RING LARDNER

To the editor:



AS FAR as I been able to judge by shutting my mouth and keeping my ears open the latest craze ain't bobbed hair no more or cross worded puzzles or mah jong but the latest craze is different kinds of diseases and a specially contagious diseases and not what to do to get rid of same but how to keep from getting same. The words virus and preventive inoculation is on every tongue and at lease 75 per centum of my neighbors has either had themselves or their kiddies or dogs or something fixed up so as they can't catch typhoid fever or whooping cough or any of the ailments which has been running amuck lately around this part of the country.

### Educated Germs

Inoculation vs. sickness ain't no new thing but they say that the science has made rapid strides in the last 2 or 3 yrs. and where as in the old days about the only diseases which inoculation could head them off was small pox and diptheria why now days they claim that if you get inoculated in the right way at the right time you can

immune yourself to pretty near everything from a bad cold to ingrowing knees. A little while ago they was a big typhoid scare around N. Y. city and some of the important doctors got together and laid the blame on to raw oysters and for several weeks they was a lot of careful people that would not eat no raw oysters and one friend of

mine not only would not eat no raw oysters but he also got himself inoculated vs. typhoid, and when the worst of the scare was over he went around bragging about how it paid to be careful. Look at me he said, I like oysters but I would not take a chance on them and not only that but I was smart enough to take the time and trouble and have a inoculation, and you notice I did not catch typhoid.

Well in order to not hurt his

feelings I told him he certainly was a wisenheimer where as I might of pointed out to him that I personally had kept right on, eating raw oysters all through the panic and had gamely refrained from getting inoculated but still and all had not had no more typhoid than our parrot. This ain't saying that I hold any brief vs. inoculation or that I consider all oysters innocent and harmless, but merely to point out that they's a few of us



The Doc injects the bugs into the body of a would-be patient.

still able to be about that don't owe their health to inoculation or hurting the feelings of oysters.

Some of my readers may not be familiar with the theory of inoculation and maybe I would better exclaim to them what it means and etc. Well it seems that yrs. and yrs. ago they was a certain doc who made experiments on guinea pigs and mush rats and etc. and found out that if you got a hold of a lot of say small pox germs and cultured them and injected them inside of the guinea pigs and mush rats and then turned a crowd of uncultured small pox germs loose on the said animals, why the animals would not get the small pox where as animals who had not the pleasure of the cultured germs's company would get the small pox and get it bad. So what they do when they inoculate you is to get hold of a flock of the germs which you are scared of that kind of disease and they culture these germs and shoot them into you and then you are immuned to what ever it is you was scared of. I don't know exactly how germs is cultured but I suppose they send them to male and female finishing schools for bugs.

#### One Cure Sounds Good

If they comes along a typhoid fever scare like recently, why the doctors in that vicinity goes out with butterfly nets or traps of some kind another and visits the different hang outs of typhoid germs such as stagnant ponds or oyster orchards and bags as many of the bugs as they can find and cultures them and injects them into the body of the would be patient.

The science is now at a stage where doctors is predicting bad

luck for themselves in future, namely they say that some day it will be easy to prevent all germ diseases, which means that a big portion of doctors' incomes will be cut off and even worse than that, because the time ain't far distance when not only germ diseases but other kinds of diseases will be knocked for a ghouel before they get started and all by this same process of inoculation. Like for inst. if they happens to be a epidemic of callouses, why those who are scared of same will be immuned to same by swallowing a pair of shoes which is either too tight or so loose that they rub vs. the more tender portions of the feet. If it is dog days and a case or 2 of rabies is reported, why a person can protect themselves by catching a mad dog, culturing him and swallowing him. Dogs that ani't mad can also be inoculated in the same way and these will be cases of dog eat dog. Perhaps the pleasantest of all will be the inoculation vs. alcoholism. This will consist of gathering together all the cultured and refined drinks in sight and swallowing them all at once.

The next step forward to be looked for along these lines is inoculation vs. mental ailments, like for inst. suppose a person is suddenly throwed into a bohemian atmosphere like say Greenwich village and seems to be in danger of getting the idear that he or she can become a singer or a actor or a poet or a novel writer. Prevention will probably be effected by making the exposed party eat the score of Parsifal or a asbestos curtain or the complete works of Shakespeare and Charlie Dickens.

# Music Master Success



Model VI, \$30  
14" wood bell  
Model VII, \$35  
21" wood bell

Connect Music  
Master in place of  
headphones  
No batteries  
No adjustments

Prices of all models  
slightly higher  
in Canada

**Music Master**  
*Resonant Wood  
Insures Natural  
Tone Quality*

—its true significance



Model VIII  
Mahogany Cabinet  
with full floating  
wood bell

**\$35**



Model V  
Metal Cabinet  
mahogany finish

**\$18**

**T**HE ADVENT of Music Master assured satisfactory reception for all radio sets, and for some of them provided a success otherwise impossible.

It transformed mere radio receiving into artistic re-creation. It is the much imitated, but never equaled standard, by which all "loud speakers" are judged.

**Music Master — the Supreme  
Musical Instrument of Radio  
—there IS no substitute.**

Music Master sells fast and renders the retailer a handsome profit. Widely advertised—sells on demonstration—and back of the dealer, stands the Music Master Corporation to guarantee its product direct to anyone, anywhere, at any time.

## Music Master Corporation

Makers and Distributors of High-Grade Radio Apparatus

10th and Cherry Streets

Chicago PHILADELPHIA Pittsburgh

Canadian Factory—Kitchener, Ontario

Say you saw it in Radio Merchandising

# The Returned Merchandise Problem

By W. F. Crosby

**I** BOUGHT this vacuum tube from you last week and now it won't work. I want you to exchange it or I will take the matter up with the District Attorney."

What dealer has not had trouble with some fan over this question, and what dealer would not give a good deal to be able to sidestep such a conversation?

It not only requires him to exchange the tube, but it also casts a reflection on all his goods, and other customers who happen to be in the store at the same time are apt to lose confidence.

What is to prevent a dishonest fan from returning a tube which he has bought from some other dealer, or possibly a tube which he has made defective by overloading the filament? Ev-

ery dealer is open to such accusations, yet it has been met in a simple manner by progressive New York dealers, and the difficulty has been practically eliminated.

The whole secret lies in a small rubber stamp with the firm's initials on it. This is impressed on the base of the tube between the prongs, and the cement will take it up and make it impossible to eradicate it.

When a tube comes back the dealer can look at the base first, and if it has his stamp on it he knows that the fan is right. If the stamp is lacking, then he can quickly get rid of the trouble maker.

There is no reason why this little scheme could not be tried out on other parts just as successfully as on vacuum tubes.

## I Am Rich—

**I**F I get more pleasure out of landscapes than the owner gets out of the land.

If I have a few friends who will defend me behind my back.

If I have a work to do by which humanity is made happier.

If I can keep my soul clean of envy when other men prosper.

If I can pray a blessing on my work when the day's labor is ended.

If I have made friends with a few good books.

If my son continues to hold me in high esteem.

# Dealers Keep Stocked!

## 13,341,819

More Ads are appearing  
in Metropolitan Newspapers

**E-Z-TOON**  
(EASY TUNE)  
**Radio Dials**  
*The Key to Simplified Tuning*

Replace your old dials with E-Z-TOON and marvel at the simplicity of tuning—a fine smooth vernier—3 in. dial \$2.30, 4 in. \$2.45, 2 in. non-vernier \$2.45. Black 40c. Major 40c. If your dealer cannot supply, write us.  
**E-Z-TOON Radio Co.**  
8334 N. Washington St.  
Indianapolis, Indiana.

3" and 4"  
Dials \$2 to  
\$2.45 List

**They're  
in Big  
Demand**

**Reorder  
Today!**

We will furnish metal demonstration panels—also window show cards for mounting 3 and 4 inch vernier (80-1) dials and a 2 inch non-vernier rheostat dial. All dials come in standard package of 12, each in an individual display carton. Write us today for full particulars on display stands also.

### **E-Z-TOON Radio Company**

3233 W. Washington Street Indianapolis, Ind.

**SALES OFFICES:**

- |   |   |   |
|---|---|---|
| 15 Ruggery Bldg.,<br>Columbus, Ohio                               | 719 Raymond St.,<br>Philadelphia, Pa.                         | 50 Church St.,<br>Room 961<br>New York, N. Y. |
| 1610 Union Ave.,<br>Memphis, Tenn.                                | 508 S. Dearborn St.,<br>Chicago, Ill.                         | 204-212 Rialto Bldg.,<br>San Francisco, Cal.  |
| Sterling Specialty Co.<br>213 Somerset Bldg.,<br>Winnipeg, Canada | 207 Calo Bldg.,<br>413 S. San Pedro St.,<br>Los Angeles, Cal. | Terminal Sales Bldg.,<br>Seattle, Wash.       |



## *He Makes Service Pay Its Own Way*

*How a Pioneer Amateur Operator Turned Out to Be a Leading Dealer and Some of the Things That Are Making Money for Him Today*

By Ruel McDaniel

**T**HE night that the East Pittsburgh broadcasting station, now known as KDKA, sent its first message, back in the days when it began operating as an experimental station only—there was no more interested listener than R. O. Holland, Greensboro, North Carolina.

Mr. Holland still is in his 20s, yet he is probably the oldest amateur radio man in his section of the country. He began working with radio, purely as a hobby, back in the old "spark" days; and he has followed it in each of its steps to the vast thing which it is today. He still maintains his receiving and broadcasting station and has built quite a name for himself among radio fans in many parts of North America for his

long distance records in broadcasting with a 100-watt outfit.

He receives cards almost every week from Canada, Florida, California and other sections a long distance from North Carolina; and he often gets cards from amateurs in England, Porto Rico and other foreign points. One of his most prized notes is from Don Mix, Arctic explorer, who said that he received Mr. Holland's signals while he himself was ice-bound in northern Greenland.

These facts are brought out for the reason that they have a direct bearing upon Mr. Holland's experience as a radio dealer. His long experience as an amateur—and he has long been a licensed operator, too, for that matter—has enabled

---

The picture above shows Mr. Holland and his sister.

him to keep in close touch with the trend of things in the radio field, and it has helped him to see the public's side of the radio question as well as that of the dealer. No wonder he has been successful with his shop, known as the Holland Radio Company.

The concern soon will round out its third year in business. During this period Mr. Holland declared that he learned some valuable lessons in the conduct of a radio shop, and probably the most important is the matter of handling service.

"We started in the radio business with the primary idea in mind of selling sets, regardless of the cost of doing so," said he. "The result was that we found ourselves going to extremes to give service. We let the public abuse our trial offer on sets. Consequently, our service department cost us a large part of the profits made on the sale of sets. In those days, we also went in for parts more strongly than we do today, our idea being to get the bare set in a man's home, then sell him the parts to keep it going. It was a good idea but it didn't work, so far as the profits were concerned.

"And in our effort to meet the demands of all the people, we stocked practically everything that we thought the people would call for. The result of which was that we had a half-dozen or more different makes of sets on our shelves and found ourselves trying to keep a supply of parts for all makes. The investment ran into real money.

"Gradually we have reversed our original methods, believing that the industry has reached the stage at which it can support more sound merchandising policies than many dealers are accustomed to apply to the field.

We are now ignoring volume—the thing that was foremost in our minds for the first eighteen months or so we were in business—and are going in for sales that carry a real profit with them."

About the first thing the company did in clearing the decks for the policy which is now making money was putting on a sale to clear out all old lines—the first and only clearance sale the firm has held. As the odd sets sold the shelves were filled with the latest creations of the two manufacturers on whose lines the company now concentrates.

"I believe that the mistake we made at the start is one that is too common among the smaller and medium-sized dealers all over the country," Mr. Holland said. "We have found that it is poor policy trying to carry everything that the people want. They are not sure what they want, and it is up to the dealer to develop his salesmanship to the point of putting over his line, regardless of what it is. Let him get the best one if he can; if he can't, let him get the next best, and concentrate on it with all his might. He soon learns the one or two lines well, and it costs so much less to keep parts for them.

"I think that manufacturers ought to give more exclusive franchises in the smaller cities. In a city the size of Greensboro it is easy for one dealer to cover the field, and cover it thoroughly, if he is allowed the exclusive dealership of the line he carries for that city.

"We want to carry advertised lines of merchandise and tie up with the manufacturers' copy with our own newspaper advertising, but we sometimes hesitate to advertise a nationally known line too freely, for the reason that there are other deal-

ers in the city carrying the same line, and our advertising is creating sales for them as well as for us. An exclusive deal would eliminate this troublesome feature and would give the dealer an opportunity to push the line to the fullest extent."

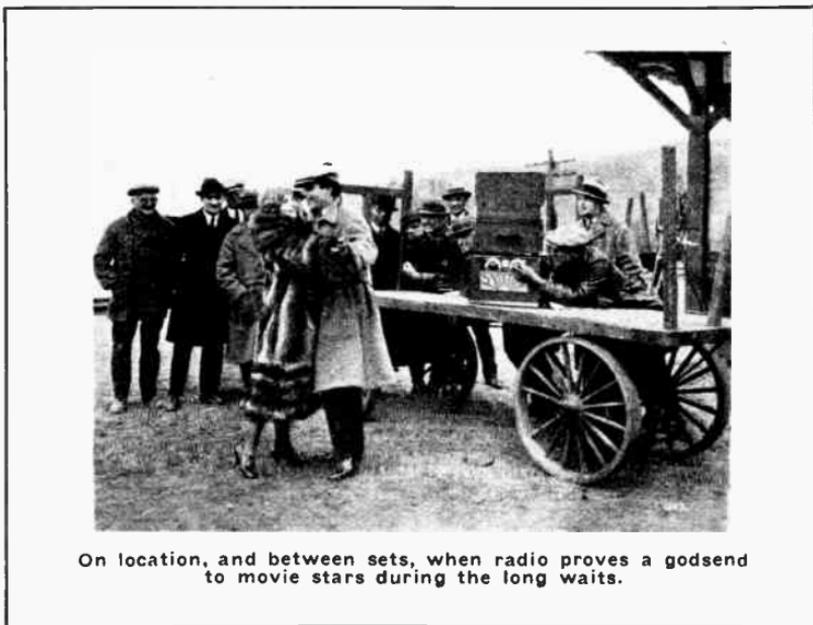
In speaking of the revision of his service plans, Mr. Holland declared that the service department of the shop cost the company \$1,500 last year, whereas there was no logical reason why it should not have been at least self-supporting, had it been run on sound business principles.

At the present time the concern gives nothing free, and the plan has already proved practical. Not even a new set will be installed free of cost. To the retail price of every set is added \$10 to take care of the installation. This sum is quoted as a part of the selling price, but the customer is told that \$10 of the price includes installation.

When a prospective customer

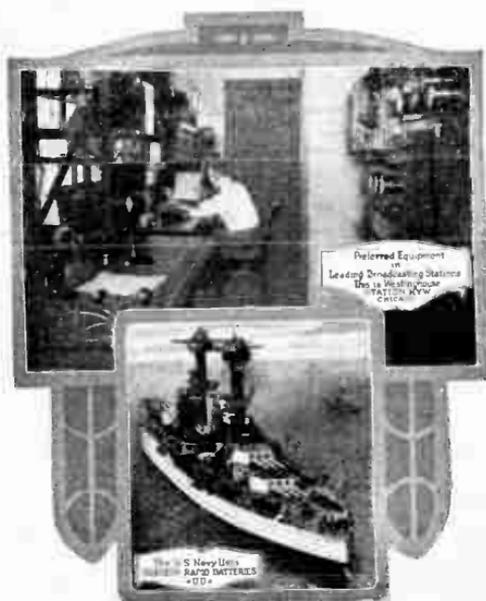
comes into the shop, looks at the best set in the place and says that he is much impressed, and would the management kindly send it out for a few days' approval? the reply is: "Certainly, but we require a deposit of \$10 to cover cost of installation." If the prospect purchases the set the \$10 applies on the cost of it (which has the installation cost figured in); and if he doesn't buy, he kisses his \$10 good-bye. It costs him that sum to see whether or not he likes the set, if he is inclined to put it that way; and the shop loses nothing in the deal. All this is explained to the prospective buyer before the set is installed.

"Such a policy may lose some sales for us," said Mr. Holland, "but one thing is certain, it has eliminated our big losses on approval installations. If a man is in earnest he doesn't object to making the deposit; and if he isn't in earnest, then we don't lose much when he walks out on us. Under this plan we



On location, and between sets, when radio proves a godsend to movie stars during the long waits.

*You tell these tales of*  
**BURGESS RADIO BATTERIES**



U. &amp; U. Photo

**F**ROM these tales will come sales. You like winners. So do your customers. And Burgess is a winner—every day in every way.

Burgess Radio 'A,' 'B' and 'C' Batteries get first call of the radio engineers everywhere.

Just tell the people who are buying batteries a few of the big exploits Burgess has taken part in. Turn these tales of adventure into sales.

## **BURGESS BATTERY COMPANY**

Engineers      DRY BATTERIES      Manufacturers  
 Flashlight · Radio · Ignition · Telephone

General Sales Office: Harris Trust Building, Chicago  
 Laboratories and Works: Madison, Wisconsin  
 Branches: New York · Boston · Kansas City · Minneapolis · Washington  
 Pittsburgh · St. Louis · New Orleans

In Canada: Plants, Niagara Falls and Winnipeg  
 Branches: Toronto · Montreal · St. John

do not get the volume of business we did formerly, but we do make a profit from every sale—and that is the big thing."

The installation fee pays for erecting the aerial, installing the set and the putting of it into proper operation. This requires usually the actual work of installing, and then a part of the first evening in which the customer has his set. The shop always arranges to install no more new sets that the men can get around to the first night. This evening trip includes the service rendered by the shop for the fee. Thereafter each service call costs the customer a fee, the amount depending upon the distance the place is from the shop and the amount of work needed. Jobs requiring no more than an hour's work are charged for on a flat rate basis; those requiring longer time are charged for by the hours of work done.

Another profit leak which Mr. Holland cut out along with the change in service policy is in the matter of guaranteeing tubes. "We test each tube thor-

oughly before it goes over our counter, and we do this before the customer," explained Mr. Holland; "and that is as far as our guarantee on tubes goes. There is no reason why a dealer should have to stand the cost of a customer's carelessness in handling his tubes. Our experience has shown that the sooner radio dealers get their business down to a sane merchandising basis, the sooner they are going to begin increasing profits. The public expects services from the radio man that it would not dream of asking of the department store, the automobile dealer or any other well-established merchant. It demands more of the radio dealer because the dealer has allowed his zeal to get the better of his merchandising judgment."

Besides the ownership of the Holland Radio Company, Mr. Holland has an automobile accessory store adjoining the radio shop, where he has an extensive business in automobile batteries, tires, gasoline and oils.

---

### De Forest Factory Addition.

A four-story building in course of construction joining the factory of the De Forest Radio Company in Jersey City has been acquired by that company for use as an office and laboratory.

\* \* \*

### Jewett to Broadcast

The Jewett Radio and Phonograph Company of Detroit have placed their order with the Western Electric Company for a 5,000 watt broadcasting station. The transmitting apparatus will be at Pontiac; and the studio, in the offices of the Jew-

ett Company in Detroit. This station is expected to be in operation on June 1st.

\* \* \*

### Jobbers Use Billboards

Zimoiski Company, radio jobbers of Baltimore, are using billboard advertising throughout their territory.

\* \* \*

### Pearsall Enters Jobbing Field.

The Silas E. Pearsall Company of New York, former Victor wholesalers, have entered the radio jobbing field. Lloyd E. Spencer is general manager of the company.

# Revolutionary!



## The new Ultra Marvel

### 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.

### An Entirely New Principle of Tuned Radio Frequency

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.

Exclusive territory assigned to representative dealers. Write for full particulars.

## INDUSTRIAL RADIO SERVICE

NEWTON AND RUST AVENUES, SAGINAW, MICHIGAN

Say you saw it in Radio Merchandising



© Underwood

Telling the radio audience all about a style show. In the future the radio audience will see, as well as hear, what's going on, making radio reception much more interesting.

## Radio Shop Talks

*Getting a Line on the Other Fellow's Ideas*

By Sewell Peaslee Wright



HE sweet young thing, with her most alluring smile, instantly captured the attention of both my friend, the radio dealer, and his two assistants. As one man they gathered around to wait on her.

"I was wondering," she remarked demurely, with a most engaging smile, "if you would mind showing me some radio sets. I don't know a thing about them, really, but mom and I were thinking of getting dad one for his birthday, and—" But by this time all three men were talking at once, and all the little lady could do was to smile and nod.

In the meantime a young chap had sauntered into the shop and stood glancing idly around at the shelves. After a few minutes the boss noticed the new arrival and requested the junior clerk to wait on him.

Not to prolong the story, the charming young lady took something like half an hour's time in looking over various sets and then thanked the radio dealer with a nod and smile and departed. The quiet young chap, even with a poor salesman at the helm, bought over a hundred dollars' worth of radio equipment and wrote out a check for the entire amount.

I've often noticed this tenden-

cy, especially in small shops, for everybody to pick out the best-dressed customer, especially if that customer happens to be a very charming young lady. The male of the species is susceptible, and in a way I don't blame young clerks for clustering around a fair and smiling customer, but at the same time it's a fact that the well dressed and captivating young lady doesn't very often come through with a big order, while a less likely looking prospect is often a tree bearing ripe and golden fruit.

It used to be the same in automobile salesrooms, but now the spruce young man on duty comes forward just as quickly and just as courteously to greet the visitor in overalls and a three days' growth of beard as he does the smartly turned out prospect in a pearl gray overcoat and spats. He has learned his lesson, and the radio dealer who profits thereby is going to cash in.

But while I was turning all this over in my mind another customer had come in, and I became aware of the somewhat desperate efforts being made by the boss of the shop to sell the man.

"But," the man was saying, "I've told you that I can get a five tube neutrodyne in just as good a case for twenty dollars less than you quote me, and a bigger allowance on my old set besides."

"You want to realize, however, that there is a lot of difference in sets," argued my friend, the radio dealer. "Now, the set I'm offering you is built by a maker of national reputation, and I will personally stand behind this set. If it doesn't suit you after you've tried it out, your money's waiting for you. Fair enough, isn't it?"

"We-e-e-l, I don't know," hesi-

tated the man. "This other set's guaranteed, too. I've heard you were high, and, naturally, I don't want to pay any more for a set than I have to. I'll go over and inspect that set again, anyway."

So far, I would say, the thing had progressed all O. K. But listen to what my friend said at this point:

"Glad to have you make a comparison, for we've got the quality goods, and I know you'll come back!" And with a self-satisfied smile that was almost a smirk he bowed the customer out.

If it had been written on that man's forehead it wouldn't have been any easier to see what he was thinking. "Like hell I will!" He wasn't in any too good a humor, anyway, and my friend's parting remark was gall on a sore spot. A man in that frame of mind doesn't want to be assured that he's made a big mistake and that he's going to admit it.

If the radio dealer had put on the soft pedal and said something about being glad to see him again should he change his mind and thus made it easy for the fellow to come back, the chances are that he would have done just that; as it was, he never came back—and I for one didn't expect him.

Things were quiet for awhile, and nothing much attracted my critical attention until I noticed several accessories that were sold were wrapped up or handed to the customer without the carton or package in which the manufacturer originally placed them. I wondered why. Often there are valuable instructions on the cartons or on booklets and leaflets packed in the carton; material that the purchaser should have to aid him in installing and using the device.

It seems rather foolish to leave such a wide opening for dissatisfaction when the manufacturer has taken such steps to prevent it, doesn't it? And yet it's being done every day—as like as not right in your own store!

A middle-aged woman came into the store, looking around at the array of black and nickel sets with wonderment.

"I'd like to look at something in a radio set," she stated, rather timidly. Not very definite, you'll admit, when you stop to consider that there were in stock little crystal sets at around fifteen dollars up to console types costing several hundreds.

I wondered what the boss' reply would be and watched the transaction with interest.

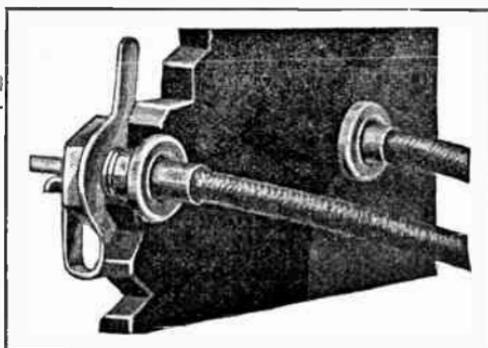
"Yes, indeed, madam," he replied courteously. "We have one here which sells, complete and installed in your home, for eighty dollars. That includes

everything, you know." He placed the set before her. "This one is very simple to operate; just the thing for the average person who doesn't know a thing about radio. This dial here picks up the different stations for you, and this one governs the loudness of the music. Then we have another set"—he turned and reached down a large instrument—"that we can put in your home, complete and ready to operate, for a hundred and ninety dollars. It looks a bit more complicated, but really is simpler than the first to operate." And he showed her just how the three dials were used to "explore" with and how the stations always came in on the same settings, night after night.

The woman followed every movement and every word with careful attention, and when my friend finished his explanation she nodded her understanding.



Perhaps the largest loudspeaker in the world. Miss Hazel Whitcomb, who is shown standing beside the speaker, asserts it is woman's only rival in broadcasting.



*Your Customers Want*  
**UNION RADIO TIP JACKS**  
*Only 25c a pair*

Replace binding posts—and uncertain contacts. Quickly applied by anyone. Heavily nickel plated they enhance the appearance of a set. Will firmly grip all wires from No. 11 to No. 24 B & S gauge. Can easily be reamed to hold antenna wire.

**NOW USED BY MANY LEADING  
 SET MANUFACTURERS**

Packed in attractive counter display cartons of 1-12, 1-2 and 1 gross.

**THREE SIZES FOR ALL MOUNTINGS**

Standard Type A for panels 3-16" to 1-4" thick.

Special Type B for panels, cabinet walls and partitions 5-16" to 1-2" thick.

Special Type C for panels up to 1-8" thick.

**OTHER GUARANTEED UNION RADIO PARTS**

**Tube Sockets:** of highly polished moulded condensite. Phosphor bronze contact springs. Reinforced bayonet slot. For all standard tubes—Retail price 70c.

**Dial Adjusters:** for minute adjustment of dials, necessary for close tuning. Retail price 60c

*Attractive proposition for radio set manufacturers.  
 Ask for illustrated pamphlet F.*

**UNION RADIO CORPORATION**  
 124 ~ SUSSEX ~ AVENUE, ~ NEWARK ~ N.J.  
 NEW ~ YORK ~ OFFICE ~ 116 ~ WEST ~ 32 ~ STREET.

lllll

"I think I should like a set something like this last one, only in a bigger cabinet," she remarked. "Something that would keep all the batteries and things out of sight, you know." And in the end he sold her a medium-priced console.

It was a nice piece of intelligent salesmanship. Too often when a customer walks in with a non-committal remark that they want to look at a radio set the first thing the salesman says is, "About what price did you have in mind?" And right there a lot of good sales are lost or aborted into little sales where they should have been big ones.

Price is the last thing to put into any customer's mind. Sell them the merchandise and keep price out of the conversation unless they introduce it. You're selling radio, not price tags.

Of course, the intelligent clerk will readily see what class of merchandise the customer

takes the most interest in, and will work up his sales talk along those lines. Perhaps my friend made a mistake in bringing out such a moderate priced set at first, but in selling radio, which people are convinced is an expensive proposition, to show them high-priced merchandise at first, may sour them on a cheaper set, when they may be unable to buy the better product. The medium course is undoubtedly the best, and it is best for the salesman not to commit himself to a definite recommendation of any particular set until he is absolutely sure as to what his prospect needs, wants and can afford.

It was nearly closing time by the time this customer had fixed upon the set she wanted, and so I adjourned shortly after. But I'm going to spend a few more days there soon, and if I pick up anything of interest and value I'll pass it on to you fellows next month!

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## Yogasamyana

By Thomas Dreier

Years ago some writer wishing to suggest the interdependence of all things spoke of the old man sitting quietly in his study whose winking eyelids affect the motion of some distant star.

Men who have studied in the Far East testify that some of the learned natives by performing what is called yogasamyana can tune in with any state of being.

It is recorded that one man asserted he found himself in tune with the vibrations of plant life and could not help suffering when in a room where a plant was dying of thirst.

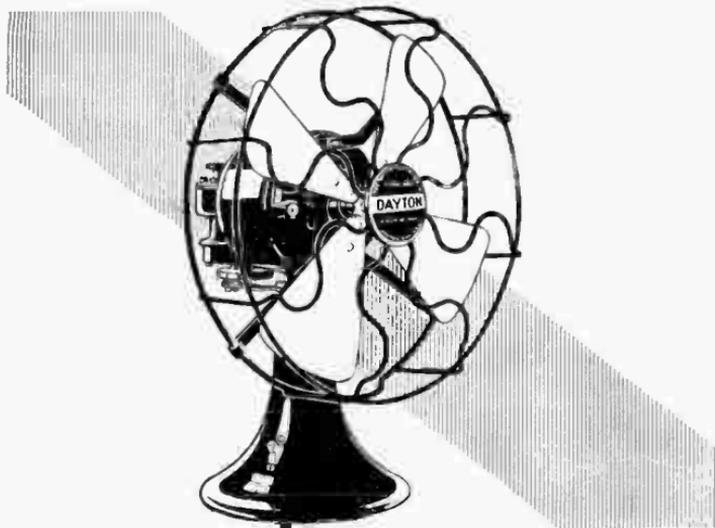
There is no doubt at all but that by our thinking we affect the lives of people who are in tune with us. Oftentimes what we think has greater power than what we say.

By making ourselves receptive, by trying to get in tune with people, we arrive at truths which would never become our possessions by the crude question-and-answer method.

Why is it that lovers have little use for words when they are together? Being in tune they have no more need for words than a wireless operator has for wire.

What we are is of more importance than what we say.

(Copyright King Editors' Features)



## Dayton Fans will keep up your summer volume

**N**OW is the time to make your plans for summer business. The big summer seller is fans. The big fan sellers are Dayton Fans.

Dayton Fans combine in a pleasing way the three essentials of fan construction: *durability, large volume of air delivery, and attractive appearance.*

Your customers know the quality of Day-Fan products. They do not have to be "sold" on Dayton fans.

"Trade Winds," a very unique, easy-to-read booklet, is full of fan merchandising ideas. Send for it.

**The Dayton Fan & Motor Company**

Dayton, Ohio

*For 36 years manufacturers of high-grade electrical apparatus*

# Day Fan

RADIO • MOTORS • FANS  
PRODUCTS

Say you saw it in Radio Merchandising



© Underwood.

What are Winter sports without a radio? A good time is apparently being had by all.

## *Sell Him the Right Battery*

*The Best Method of Keeping the Good Will of Your Customers*

By Edgar H. Felix

"Give me a B battery!"

"How many volts?" asks the salesman.

"Forty-five."

"We have 'em \$1.50, \$1.75, \$1.90, \$2.00, \$3.75 and \$4.75. What size do you want?"

"Oh, give me the \$1.50 one. It's a good battery, isn't it?"

"The best little battery made," responds the clerk with a confidential smile.

And that is the point where his sales effort usually ends.

The customer takes his little treasure home and at the end of three weeks finds that he needs a new set of batteries. Meanwhile a friend tells him of a ra-

dio store where he bought a set of batteries which lasted eight months and the customer determines never to visit the \$1.50 place again.

### **Sell the Most Economical Battery**

If you know a few simple facts regarding the customer's set, you can save him money in his set upkeep cost. It is a simple matter to determine what battery will give him the most radio for his dollar and it is worth your while to let him know that your store gives it to him. Tubes and batteries constitute 90 per cent of radio

upkeep costs and B battery costs can be substantially reduced by several methods. One of the most important ones is buying the most economical battery for the current drain which is required by the user.

In a general way, four sizes of cells are used in making up radio B batteries. They are known as the small, intermediate, large and extra large cells. Each has its special sphere of usefulness.

The small cells are made up in the tiny 22½ volt units. They are made especially for portable sets. Their depreciation is rapid, whether the current drain is large or small. Under no conditions are they economical and they should not be given a customer unless space requirement makes it necessary to use a battery of this size.

Intermediate cells are used in batteries made up in two types; one is designed especially for use with the Radiola IV and Radiola Grand sets and the other for small portable sets. They should be used only in connection with sets having battery compartments of such dimensions that a larger battery cannot be placed in them.

The large size of cell is used in the most familiar type of battery, such as the Eveready 22½ volt No. 766, measuring 6¾ x 4¾ x 3 3/16, and is also made up in 45 volt vertical and horizontal units, adapting it to sets with the more capacious battery compartments. The 45 volt vertical battery has the widest application of any form on the market. It is adequate current supply for three tube sets and for four tube sets having no C battery, as well as economically designed five tube sets which do not draw more than 15 milliamperes.

Recently there has been a strong demand for the heavy

duty battery, made up of extra large cells, and designed for heavy current drains. The use of this battery with sets drawing 15 milliamperes or more results in substantial savings, but users having sets which draw less than 15 milliamperes will obtain more economical service from the larger rather than this extra large type.

#### Heavy Duty Type Popular

Frequently the extra large size is called for by customers who would get more value for their money with the large size. If a battery of unnecessarily large capacity be used, a part of its energy is wasted in depreciation, and only a part in useful service. For instance, a set drawing five milliamperes—a reasonable drain for a three tube set equipped with a C battery—may give eight to ten or more months of useful service with a large battery, while the average extra large battery would last but a few weeks longer. Therefore, considering the higher initial cost of the extra large size, it is a service to the customer to recommend the large size in its stead.

By showing an interest in your customer sufficient to assure him of the utmost economy, you establish a lasting and friendly contact which almost invariably breeds future business. It is shortsighted policy to refrain from this practice on the ground that it will reduce sales in the most profitable line of accessories by reducing turnover in B batteries, for sooner or later a customer will learn that a small battery is wasteful and expensive. If a rival dealer informs him, he will be your rival's customer for a long time to come.

**The C Battery is a Money Saver**

There are other methods of reducing upkeep expense with

which the dealer's salesman should be acquainted. The installation of a C battery in audio frequency amplifiers reduces their B battery drain by one-half to two-thirds. A typical instance of this kind came to the attention of engineers at the Eveready Laboratories, when a certain well known make of three tube set, consisting of one stage of tuned radio frequency, regenerative detector, one reflexed audio and one straight audio, was found to draw 7 milliamperes of B battery current. As a result of adding a C battery, its current drain was reduced to but 2 milliamperes, a saving of 72 per cent.

The functioning of a C battery is well known to radio listeners and a dealer makes no mistake in inquiring of his B battery customers whether they are familiar with the advantages of the C battery. A customer will appreciate this interest in his problems.

Another purchase which soon earns its cost in upkeep expense is an accurate voltmeter for determining the voltage applied to vacuum tube filaments. Operating a vacuum tube at 5 per cent above its rated voltage frequently cuts its life in half, while adjustment below 5 per cent below that voltage will double it. Obviously, such an instrument soon earns its cost. In the case of a five tube set, the vacuum tubes for which cost a total of \$20, doubling their useful life earns the cost of a volt within the life of the first tubes with which it is installed. This is another service which the dealer who believes in retaining his customers for future purchases can perform. The voltage should be measured by connecting the voltmeter across the filament terminals during test.

In the last analysis, your clientele is built up through your service,



© Keystone.

A radio store in Japan. Something different in "window displays."

# CIR-KIT

## More Power per Tube brings Greater Radio Most Economically

Triple power is the basis of Erla Supereflex records. Tubes, as used in Supereflex, simultaneously amplify received radio frequency currents, reflexed radio and reflexed audio frequency currents. Sol-tube Supereflex rivals the power of conventional 3-tube circuits. And 3-tube Supereflex readily outclasses the ordinary five!

Only such power can provide the thrill of Supereflex distance and volume; always with Erla crystal-pure tone—and with uncanny selectivity.

This finer radio is brought within the reach of all by Erla Supereflex *CIR-KIT*, the factory-sealed carton of genuine Erla apparatus for building Supereflex.

### ERLA RECEIVERS

Inherent Erla advantages in power, tone and selectivity are embodied in beautiful complete Erla receivers. Retail prices range from \$67.50 to \$225. Both price and performance place Erla receivers among the sensations of radio history.

Anyone can follow the *CIR-KIT* assembly plan perfectly, using only screwdriver and pliers, without drilling or soldering.

Pride of workmanship, extreme economy, priceless radio performance, assured by Erla Supereflex *CIR-KIT*, make it the staple big seller of radio.

Electrical Research Laboratories  
Dept. N, 2500 Cottage Grove Avenue, Chicago

# ERLA

Say you saw it in Radio Merchandising



## *Selling Radio Through the Country Banks*

*An Excellent Opportunity for the Rural Dealer, With  
Unusual Publicity Advantages*

By J. Farrell



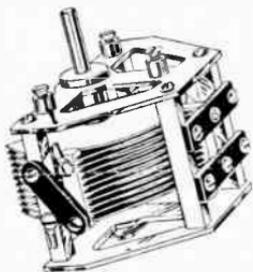
COLLEGE friend of mine on a cross-continent motor trip last summer sold 55 radio sets "to help pay expenses." He sold these sets to country banks. He believed that the best advertising that a bank could do was to install a radio set for the convenience of its local people who wanted late market news, and that the establishing of close contact with depositors and prospective depositors through inducing them to come regular-

ly into the bank was of tremendous advantage to the bank.

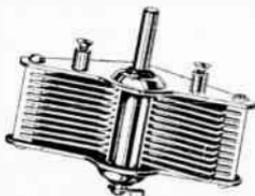
He assembled a sample set while he was talking and handed the headphones to the banker. He was careful in this to select a time of day at which farm market news was being broadcast from some station within range, for it would never do in a sales talk on the economic value of radio to have the prospective customer informed in a dusky sing-song that "It ain't gonner rain no mo'!"

"When they heard the market

**MATCHED  
DUPLIX  
STANDARD  
CONDENSERS**  
(IN SETS OF 3)



**DUPLIX  
STANDARD  
CONDENSERS**  
SERIES FR



**DUPLIX  
JUNIOR  
CONDENSERS**  
SERIES DR

## Your Condenser Selling Problem Solved

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

### "Matched Set of Three" Argument

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

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

### These Duplex Condensers Will Standardize Your Sales

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

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

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

Signed \_\_\_\_\_

Address \_\_\_\_\_

RM325

Say you saw it in Radio Merchandising

quotations come clear as a bell the sale was as good as made," he told me. "It was the old story that an actual demonstration is worth ten times all the talk you can make about a thing. The more performance and less talk the better. People like to think that they are deciding matters for themselves.

"In most of my sales talks I stressed the importance of getting the farmers to come into the bank every day, so as to establish an intimate relationship with them. This would naturally induce the farmer to make the banker his confidant and to discuss his financial affairs more freely.

"The immediate value of the radio service was during the harvesting season, when farmers were financing the marketing of crops. Very often by reason of his business experience and general information on agricultural and industrial conditions the banker was in a position to advise his customers whether to sell or wait for higher prices. The daily price quotations also gave him a more tangible basis on which to make loans on warehoused products, farm mortgages and other property. In a word, he got an inside track on the farmer's financial condition, minus the inflation."

The experience of my college friend opened up a vista of possibility for developing the rural sales outlets for radio. Selling the country bankers was merely the first step. The real value to the radio dealers was in thus effectively bringing the practical value of radio to the attention of rural people. Most of the farmers and townspeople were compelled to visit the banks, and radio was virtually forced on their attention as in no other way.

A survey made by the United

States Department of Agriculture demonstrates that many radio dealers in various parts of the country have developed their sales promotion along this line. These dealers have seen to it that radio was demonstrated in places frequently visited by the local people and have increased their radio sales as a result.

The survey developed the fact that several hundred banks have put in radio sets, as have also a large number of flour mills, grain elevators, grain dealers and other local business organizations. The dealers have emphasized the importance of receiving grain and other market news when selling sets to these organizations, but the main thought has been the radio business that would result from the public radio demonstrations in these places. A farmer who is skeptical about the "new fangled music box" and who stubbornly refuses to enter an electrical or other shop that carries radio is a ready buyer when he finds in the course of a business transaction that the deal is based largely on radio information.

The general offices of the First National Bank at Raymond, Ill., which is in the heart of an important grain and live stock region, looks like a small stock exchange. A clerk at one end of the room records grain and provision prices on a large blackboard as they are received over the radio.

"Grain buyers, stock buyers and farmers call each morning to learn the quotations received by radio and to compare notes," declared Mr. C. McNaughton, cashier of the bank. "They are all strong for the service. Heretofore they had to depend on the commission houses and country branches for commodity news, and that service was not entirely satisfactory. Price dis-



## “Bakelite” on the carton helps sales

Your customers look for the “Bakelite” mark when buying radio parts.

Recognized authorities writing on new “hook-ups” in the magazines and newspapers are specifying Bakelite more than ever before.

Tie in with this professional and amateur preference for Bakelite by displaying radio parts and panels that are plainly marked “BAKELITE.” It leads to customer satisfaction and bigger sales.

Write for Booklet 36

### BAKELITE CORPORATION

247 Park Ave., New York, N. Y.  
Chicago Office: 636 West 22nd St.

Bakelite is everywhere  
Trade marks and you, be  
used only the product  
made from materials  
manufactured by the  
Bakelite Corporation.  
It is the only material  
which may bear the  
Bakelite mark of excellence.

# BAKELITE

**B**  
**50**  
BAKELITE  
is the registered trade  
mark for the plastic  
resin product, manufac-  
tured under pat-  
ents owned by the  
Bakelite Corporation.

THE MATERIAL OF A THOUSAND USES

Say you saw it in Radio Merchandising

World Radio History

crepancies were frequently disclosed and the farmers could never be certain that the news was accurate.

"The folks hereabouts now get accurate quotations almost as fast as they are made. This has frequently prevented considerable money losses to grain and live stock dealers through enabling them to enter buying or selling orders as the market might indicate. Another feature is that the service brings people in closer contact with the bank."

Mr. McNaughton gave the names of numerous other banks in the state that furnish similar service. The First National at Albion, Ill., has installed radio equipment to receive grain and live stock reports. The cashier of the Dime Savings Bank at Carthage said that the farmers were hungry for more news. More than 250 places throughout the state where market news is received were listed. Many of these were individual homes, but business houses in

towns that have installed public radio service, banks and grain elevators easily took the lead.

More than a score of banks in each of the states of Missouri, Illinois, Nebraska, Ohio and Iowa maintain daily radio reception service for their customers. They include farmers' banks, trust companies and savings banks. R. D. Bower, assistant treasurer of the Caldwell County Trust Company at Kingston, Mo., said that "it is the best service we have ever had of getting prices. I hardly know how we could get along without it. The majority of the banks are using this just the same as we are." The cashier of the Farmers' Bank at Stephens, Mo., said the service is especially valuable, as "we did not formerly have access to any means of receiving the markets other than by newspapers, and newspaper markets are always a day late when they reach the rural districts."

Thousands of letters from



The radio booth of the Department of Agriculture was one of the main drawing cards of the Chicago Live Stock Show.

# KESTER *Radio* SOLDER



*Oh boy*

**What force behind it**

A rolling stone may gather no moss but it certainly gathers a speedy turnover when you push it down hill. Speedy turnover is the most noticeable thing about Kester Radio Solder.

The merits of the package itself give Kester Radio Solder a neat turnover. But we're not satisfied with that alone—No Sir—

We're putting some real advertising force behind it and it's going to make our dealers hustle to keep up! Of course, those who are already stocking Kester Radio Solder are going to cash in on our advertising.

Dealers who have hesitated are not yet lost, but we suggest you order from your jobber or send in this coupon without delay.

**CHICAGO SOLDER COMPANY**

4234 WRIGHTWOOD AVENUE  
CHICAGO, U. S. A.



**IF YOUR JOBBER CAN NOT SUPPLY YOU**

Chicago Solder Co.  
4234 Wrightwood Ave., Chicago, Ill.

Gentlemen Please send me the following as indicated

CARTONS (10 Cans)  
 CASES (10 Cans, 100 Cans)  
 Send C.O.D.  Bill thru my Jobber

Name \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_  
My Jobber \_\_\_\_\_

farmers and bankers in the files of the Department of Agriculture at Washington attest the value of such service. Many of those correspondents assert that the prompt reception of market advices has frequently saved farmers much money through indicating the most favorable time at which to market their products. The service has been particularly valuable to the farmer co-operatives that keep their members informed up to the minute on the crop and marketing situation.

The country banks in some instances through a co-operative arrangement with local telephone exchanges relay the market news at designated hours each day to all the telephone subscribers on party lines. Thus at 11 o'clock each morning, for example, the subscribers by merely lifting the telephone receiver off the hook may get a combined price report on hogs, cattle, sheep and other live stock at half a dozen or more of the leading live stock markets.

"But," you radio dealers may inquire, "if radio service is made so easily accessible to the farm population, why should they wish personally to own radio sets? Wouldn't such service cut down the sales possibilities instead of increasing them?"

The answer is simply that to hear creates a desire to see and to own. When you hear a sound

you turn instinctively whence it comes. The best illustration that I know of this is the experience of an opera house in Hamburg, Germany. There is a *telefunken*—meaning telephone company—there which for many years has been giving a daily broadcast service of news and entertainment over its telephone lines to several hundred subscribers. The opera house management at first refused to permit the company to broadcast its plays in this fashion on the plea that to do so would probably cut down the box office receipts. It finally proved, however, that instead of cutting down the receipts the box office sales increased because the telephone listeners were eager to see the things they had heard.

And so with radio. Department of Agriculture officials declare that the service by country banks and other local business men has been a large factor in encouraging farmers to buy radio sets. The proposition in a nutshell is simply that keen radio dealers have put their sets in places frequently visited by a large part of the population.

There are some 33,000 banks in the United States, of which about 22,000 are in rural districts. Radio has been sold to only a few hundred. The business is there. Why not go after it?

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### Radio Announcers Form Club.

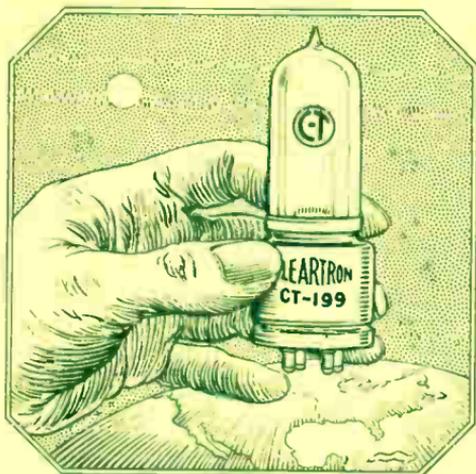
As the result of a suggestion made by Dutee Wilcox Flint, director of entertainment for Station WDFW, Providence, the organization of a club to be known as the "Radio Announcers of America" has been started. The

initial meeting will be held in Providence early in March.

\* \* \*

### Ayres in Chicago

Albert B. Ayres, sales manager of the Eagle Radio Company, is spending a month in Chicago surveying the situation there.



## MORE PROFIT *for* YOU on CLEARTRON *Guaranteed* Tubes

CLEARTRON Tubes—backed by a rigid, lasting guarantee—backed to help you and help us in creating satisfied customers and swelling the sales turnover.

Our sales policy entails very little red tape and very much co-operation—the sort to help us both make more money.

### IN THREE SIZES

Cleartron Tubes come in three regulation sizes: C-T 201A SMALL with regular 199 base and C-T STANDARD. The latter is the only so-called "peanut tube" made with a standard size base. All retail at \$3 a piece.

We are dealing through responsible carefully-chosen jobbers. Write us for information. We shall gladly cooperate.

CLEARTRON VACUUM TUBE CO.

22 West 44th St., New York, N. Y.

C-T 201A



C-T 199 SMALL



# CLEARTRON

GUARANTEED RADIO TUBES

## Reception



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Anna Pavlova, the famous danseuse, delights in radio reception. There is always a set in her dressing room.

© Underwood.

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© Keystone.

Theodore Creo, noted Broadway stage dance instructor, utilizes radio in his class instruction work.

## Broadcasting

---

Mme. Frances Alda delighted millions on her first appearance before the microphone.

© Keystone.

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© Underwood.

Anticipating the future. Ballet dancers who performed in the studio of WLW while the orchestral music was being broadcast. The radio audience of tomorrow will be able to see as well as hear.

# Your March Window Displays

*A St. Patrick Day Window and a Big Cross Word Puzzle Sales Stunt*

By Sewell Peaslee Wright

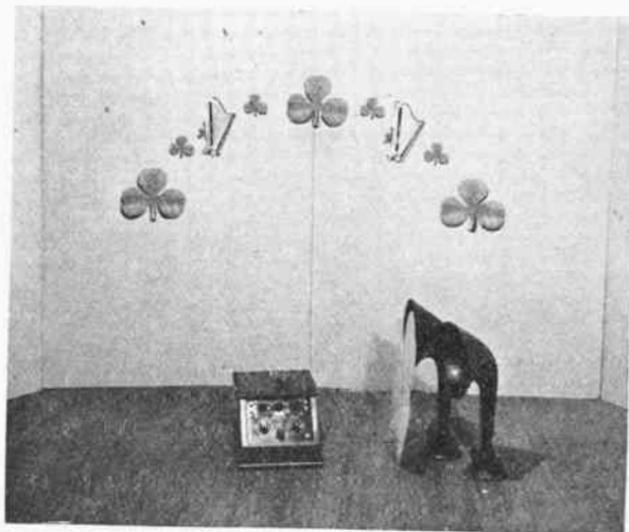


THE first window for this month I am going to describe briefly and pass over quickly, as the second window is one of the best that I have had the pleasure of presenting to you so far, and I have considerable to say about it and how it may be developed into a really big business-getting device by means of proper "promotion."

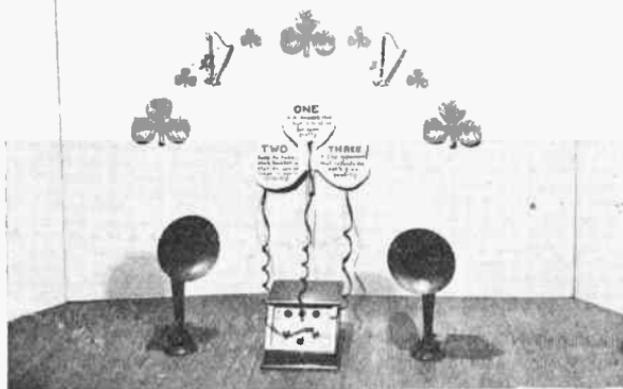
In most communities there is usually considerable interest shown in St. Patrick's Day, and so this first window is a sham-

rock affair that can be cheaply and easily put in by any dealer. Yet, like all the special day windows I have described, it ties up a selling idea with the decorative idea—and this is the true test of the value of any window of the sort.

The background, as shown, is easily put in if one will buy a few cut-out shamrocks. Any stationery store will have a supply on hand, for use as party decorations, and if you want to elaborate upon my decorative scheme by means of twisted streamers of green crepe paper



No. 1—The background in place; a suggested grouping of the decorative materials being shown. Use your own judgment—and as many shamrocks and harps as you like.



No. 2—All ready for the public eye on "St. Patrick's Day in the Mornin'"—and several days before. Simple and effective and surprisingly easy to put in.

at the sides and top of the window, your stationer has the material for this as well. You may wish to add to the background by drapes of green either at the back or at the sides; this is optional, of course.

Shamrocks, clay pipes, and Irish harps are all symbolic of the day, and they may all be used in the background if desired. The various symbols of the day may also be strewn upon the floor of the window, which may be either bare or covered with green crepe paper, as desired.

In the center, and at the back of the display, is placed a very large cut-out shamrock, which you will have to make yourself out of heavy cardboard; wall-board is fine if you have any means of working it; if not, corrugated brown packing board will work very nicely. It can be cut out with an ordinary knife and can be painted any color desired. It was used in the present display, and, as will

be seen, works up very nicely.

In the foreground is the radio set which is to be featured, and from each of the three leaves of the big shamrock a twisted green silk ribbon leads to some feature of the set, and a few words of explanation appear on the leaf in question. On the display shown, these wordings were as follows:

#### ONE

A trade-mark that is known to stand for super-quality.

#### TWO

Easy to tune; once located a station can be tuned in again instantly.

#### THREE

A fine appearance that reflects the set's fine quality.

The first ribbon leads to the trade-mark, the second crosses all the dials, and the third runs to a corner of the panel, as shown.

The set may be placed either upon the floor of the window or upon a raised dais of some kind,

but in either case it should be placed some distance back from the window; not half way, perhaps, but still not close to the glass. The big shamrock may be leaned against the back of the window or stood upright by means of a small, invisible

pedestal a few inches from the back of the window. The big shamrock may be painted solid green, and the lettering put on in white, or it may be merely edged in green, and the lettering put on in black.

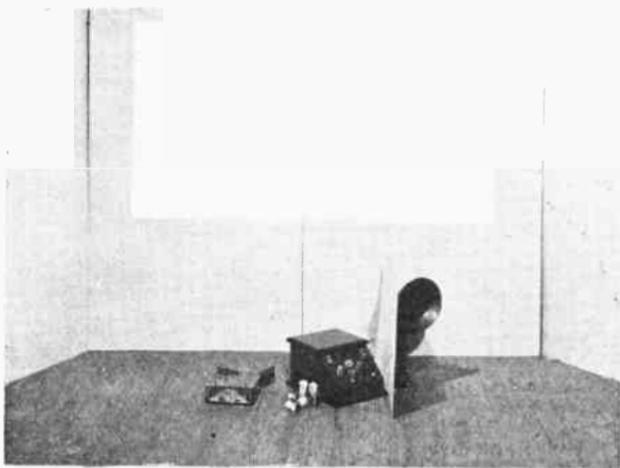
### *Window Number Two*

Everybody is crazy over cross word puzzles these days. Every paper you pick up features them. The magazines run them by the dozen. Your best friends come up to you and beg you to give them a six letter word meaning the chief of a tribe of South American head-hunters, or an eleven letter word meaning happy though married. And it's time we cashed in on the craze.

You can go as far as you like with the background of this window. Make it as crosswordy as you please. I've shown about the simplest possible ef-

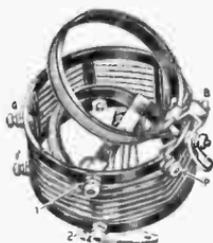
fective background, and you can enlarge and improve upon this as much as you wish.

The central point of interest in the window is a great big white card with a cross word puzzle upon it, and an announcement of a big cross word puzzle contest. As will be seen, the "key" to the puzzle is not shown in the window; they come into the store for that, and are there told the full rules of the contest, which will be related later in this article. Around the big card, in orderly array, are the various prizes offered in the contest, each one



No. 1—Simplicity itself, as you see. The sign at the back is shown here unlettered and none of the "props" are in place. As stated in the article, you can carry out the checkerboard cross word motif in the hangings (if any) and on the floor, if desired. Only the bare essentials are shown here.

## A. R. R. L. Members—



always leaders in choosing most efficient parts are almost unanimous.



## *Boosters of B-T Tuners and Condensers*

The B-T TUNER is found in the stations of such men as  
**KRUSE**, Technical Editor of Q S T,  
**CLAYTON**, Information Service Manager,  
**BUDLONG**, Editor Current Service of the League,  
 and  
**F. H. SCHNELL**, Traffic manager, uses

**B-T CONDENSERS** in the 12-meter set just built for his Navy-Amateur experimental cruise to Honolulu, Australia and New Zealand.

### *B-T Parts Are Bought—Not Sold*

The 7th edition of Better Tuning is out. It's the greatest sales help ever devised. Send for sample and literature.

Provide the stock and your customers will do the rest.

### **Bremer-Tully Mfg. Co.**

530 S. CANAL ST.  
 CHICAGO

tagged appropriately: "1st Prize," "2nd Prize," etc. The window itself is simplicity itself to put in, but to put the whole affair over with a bang, there are a lot of details to be attended to, and none of them should be slighted if you want to reap the big profits from the idea.

First of all, on the day the window goes in you should run an ad in all the papers, calling attention to the big contest, and listing in glowing terms the prizes offered.

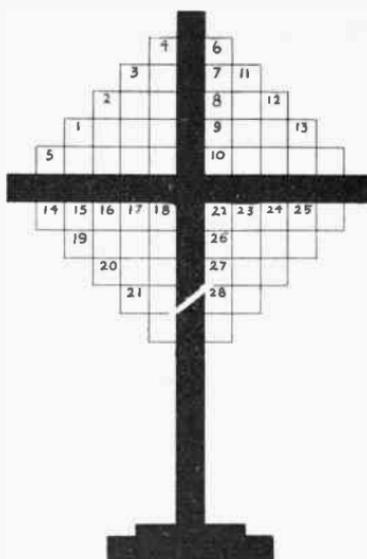
When the people start coming into the store, have a slip with the cross word puzzle, the "key," and the rules of the contest all neatly printed and ready for them. The cross word puzzle and its "key" are illustrated herewith, and the rules of the contest should run something like this:

No. 1. The cross word puzzle illustrated herewith is submitted merely as a sample, and no prize is offered for its solution. It is not necessary to use this design in making up your puzzle; as a matter of fact, as stated later, an original design will help you win.

No. 2. Prizes will be awarded NOT for the solution to this cross word puzzle, but for original cross word puzzles submitted. This puzzle is given only as a sample. Only original puzzles will be considered, and in making awards the judges will consider physical form of puzzle, neatness, cleverness, and above all, the number of radio words used in puzzle. Either generic terms or trade names may be used.

No. 3. All entries must be in our hands before 5:30 p. m. April 00, 1925.

No. 4. There will be three judges, all well known men not connected with this firm. Names will be announced later. Their



#### HORIZONTAL

- 1—A tuning device.
- 2—Prefix meaning three.
- 3—A tramp (abbr.).
- 5—Tall marsh grasses.
- 7—Part of the verb "to be."
- 8—A terminal of a battery (abbr.).
- 9—A garden mentioned in the Bible.
- 10—A popular citrus fruit.
- 14—Hooked up.
- 19—External olfactory apparatus.
- 20—Modern powerful explosive (abbr.).
- 21—A degree in engineering (initials).
- 22—Carriers of radio signals.
- 26—Imitated.
- 27—A numeral.
- 28—Prefix meaning "out" or "out of."

#### VERTICAL

- 1—French for "from."
- 2—Worn with a collar.
- 3—Small headless nail.
- 4—Inductances.
- 6—The front of a radio set.
- 11—Often spoken of with the Persians.
- 12—Jewel.
- 13—Negative answer.
- 15—Reverse of "out."
- 16—Decay.
- 17—A hireling.
- 18—To restrain from proceeding.
- 22—H<sub>2</sub>O.
- 23—Peak.
- 24—Abbreviation of famous Italian city.
- 25—Familiar title of Mr. Wardrop, of Radio Merchandising.

# MARWOL

BABY GRAND  
FIVE TUBE TUNED RADIO FREQUENCY



At last  
**A Guaranteed Set  
Price Beyond Comparison**



**Marwol Tuned  
Radio Frequency**

fills the long-felt want for a well-constructed, popular-priced, quality Phonograph Panel that meets with no sales resistance. At the price, the Marwol is without a peer.

**\$70.00**

The remarkable success of the Marwol Circuit as incorporated in the Marwol Model A-1 is so great that it has made possible a Baby Grand Marwol. This identical famous Circuit is now available in a different, unique design—a great departure from the conventional model—at considerable decrease in cost!

Result: the Baby Grand Model is a 5-Tube Tuned Radio Frequency Receiver which differs from the original Marwol only in design! Cuts through the most powerful locals and pulls in DX—giving remarkable selectivity and range with ease of operation—exactly like the Model A-1—today's best radio buy for the money!

The Marwol guarantee backs all Marwol products. Ask your jobber. Write for descriptive folder and discounts.

**MARWOL RADIO CORP.**

85-B Mercer St., New York

**DOLLAR FOR DOLLAR RADIO VALUE**



The complete display in simplified form. If you use more prizes—and that would be advisable—they should all be put in the window.

decisions will be considered final by us and by all contestants.

No. 5. All puzzles receiving prizes become our property, and we reserve the right to publish same in our advertising.

These rules may be revised to suit your requirements, but they will serve to give you an idea of the nature of the contest.

Your newspaper advertising should play up the window display and the whole contest. After about three days, it would be well to publish in the newspaper the cross word puzzle shown; your engraver at very small cost will make you a cut direct from the accompanying illustration, or perhaps you can prevail upon your newspaper to set the thing up in type for you. It is a pretty fussy job, and will cause the compositor a lot of grief, but if you can get them to do it for you, fine!

About a week after the campaign opens, publish the solu-

tion to the puzzle (the cut for this can also be made from the illustration) and at the same time explain the rules of the contest, playing up the splendid prizes offered and also the fun of making up cross word puzzles, especially to vary the monotony of *solving* them.

The whole campaign should run at least a month, and you should back it up with good newspaper advertising and store publicity of all kinds.

When the newspaper advertising "breaks" with the solution of the puzzle, another big card, bearing the solved puzzle, should be placed in the window instead of the original one. Later, as the entries keep coming in, a gilded bushel basket, overflowing with submitted puzzles, and bearing an explanatory card, should be introduced into the window.

The size of the prizes can best be determined by yourself. Make them as good as you can, so

(Continued on page 114)

# BOSCH NOBATTERY

THE Bosch Nobattery is a device which enables anyone to obtain from an electric light socket perfect and ample plate voltage for radio vacuum tubes. It takes the place of all "B" batteries and is decidedly more efficient, reliable, convenient and economical.

Do not confuse the Bosch Nobattery with other "B" battery eliminators. It uses no tubes, and is radically different in design and construction. It is the perfect "eliminator" which conservative radio users and dealers have been waiting for.

### DEALERS

Here's a radio device you can sell with absolute confidence. It is the same high quality as all Bosch electrical units, and is backed by the famous Bosch guarantee of "satisfaction or your money back."

Don't delay—the demand is already enormous. Live dealers who place their orders immediately will get a big share of the profits.

Wire today for sales proposition and discounts. State whether you are a dealer or jobber, and give references, to aid in quick allocation of territories.

Type BAN—For alternating current. \$49.50  
Type BDN—For direct current. . . . . 30.00

**American Bosch Magneto Corp.**  
SPRINGFIELD, MASS.

## Mr. Dealer Have You Got Yours ?

We want every Radio Dealer in America to see this

### Solderless

#### RAJAH Snap Terminal

The product of the largest makers of ignition terminals in the U. S.

No solder, no screws. Just snap on or off. Base Studs fit all B Battery terminal screws and attach to panel or base board by standard 8-32 screws.

Perfect contact assured by double spring clip of phosphor bronze.

A positive, instantaneous connection for Aerial, Ground and Battery Wires.

Retail price, terminal and base stud, 20 cents. Base studs only, each 6 cents.

#### Rajah Ground Connection

A positive ground connection in half a minute. A Time and Money Saver for any one installing a receiving set, and a guarantee of a perfect connection.

Price, Special base stud and regular Rajah Connector, 20 cents.



Patented  
9-23-24

## Rajah Auto Supply Company

Bloomfield, N. J., U. S. A.

### Describing in Detail

Narcissus—Looky here, Black Man, whut's you all gwine gimme for my birthday present?

Black Man—Close yo' eyes, honey. (She did as he said.) Now, whut yo' see?

Narcissus—Nothing.

Black Man—Well, dat's whut you all gwine get.—Boll Weevil.

"You can't laugh that off," said the warden, as he adjusted the straight jacket.—Harvard Lampoon.

### A Matter of Necessity

She—Do you always take the other girls for such long walks?

He—No, it isn't always necessary.—Reel.

### We Would, Too!

Doctor—I have to report, sir, that you are the father of triplets.

Politician—Impossible. I'll demand a recount.

(Concluded from page 72)

map of the United States, going completely across the top half of the display window, mounted on thick cardboard, with red indicating tacks, showing stations received, and with the slogan below, "Stations Heard on Our Sets, will prove a good interest getter."

\* \* \*

Wednesday, April 29: There will be big sports broadcasts this Summer. Be sure you tie in with their sales opportunities.

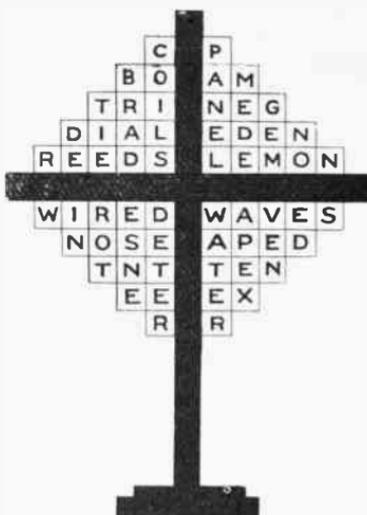
\* \* \*

Thursday, April 30: Sales should not slump this summer. The merchants who get out and sell, instead of merely taking orders, can maintain their sales curve if they have a mind to. Try a little special effort this summer and see how it works.

(Concluded from page 112)

they'll be worth going after. One good capital prize and a comparatively large number of small prizes will be found more attractive, probably, than a few expensive prizes. After the contest is over, a whole set of wonderful material for advertising purposes will be available; you can use the prize-winning puzzles in your newspaper advertising and arouse real interest in it thereby, and you can use them as well to add pep to your periodic sales letters to customers and prospects.

Just in passing, let me suggest that those of you who are cross word fans can have some fun solving the puzzle suggested here. Don't pay any attention to the solution shown here at the end; turn back to the unsolved puzzle and the "key," and see how far you can go with it. If you have never tried a cross word puzzle, this will serve to show you what a good



The solution to the cross word puzzle.

idea a contest such as I have suggested really is; if you are already a fan, you'll not need to be told that this sort of a contest is bound to be a rip-roaring success, and you'll go for the puzzle naturally.

## Humor in Business

### Is Precious Asset

**A** SENSE of humor is one of the most precious things in the world to the man who possesses it. Many a man has been aided over some mighty rough spots by the fact that he was able to see the things through clear glasses and not through smoked lenses. Incidentally have you ever tried to carry on a lengthy conversation with a man who was proud of the fact that he was always serious-minded? You will probably remember that conversation only by reason of the fact that it was dull, drab and did not sparkle. Let the sun shine into your mind and do not live in a world of fog.

# *Building Up a Mailing List of Radio Owners*



**A**N excellent method of building up their mail order list of radio owners has been adopted by Stix, Baer & Fuller, St. Louis. In the corner of their daily general ad they place a coupon and advise that they will send free their broadcasting programs to any one who will write his name and address

upon the coupon and mail it in to them. Whenever they have a sale of radio merchandise or receive anything new in the way of apparatus they mail a little folder to all the names on their radio list—in this manner avoiding sending to any except those they know will be directly interested.

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## *When Great Men Meet*

By Thomas Dreier

I have just come from the office of a business man, where the man behind the big desk seemed to be puffed all out of shape by reason of the success which he has achieved in his business.

Judging by his conversation, he is quite convinced that the whole world is watching him with bated breath. He is so interested in himself and his own achievements that he has no time to read or hear about the achievements of others. He has reached that very dangerous period in life when he no longer listens.

One time when Joseph Jefferson made his great success with Rip Van Winkle—as John Drew tells the story—he thought himself fairly important and that every one knew of his success. At the very least, he felt that he had put Washington Irving on the map, with his Boucicault version of Rip.

One night after the theatre, as he was going to his home in the Fifth Avenue Hotel, a stockily built, grizzled bearded man got into the elevator.

“Are you playing in town now, Mr. Jefferson?” he asked.

Jefferson, as he replied in the affirmative, rather pitied the man for his ignorance and his total lack of understanding of what was going on in the world. What a simpleton he must be, who did not know that Rip was having a record run!

When this man reached his floor and got out, Jefferson asked the elevator boy, “Who was that?”

“Why,” said the boy, pitying Jefferson for his ignorance, “that’s General Grant!”



## *Bread Cast Upon the Waters*

### *A Double-Barrelled Old Timer Story*

By Sewell Peaslee Wright



OLD TIMER was busy waiting on a customer when Southwick slipped into "Seaford's Only Exclusive Radio Shop," and he was quietly making for the back of the shop, where the partners had a sort of office, when something Old Timer was saying arrested his attention.

"I think Johnson carries that make here in town, Mrs. Siever. Just around the corner, on Monroe Street, you know."

"Why— thank you very much. Good day!" And with a little smile and nod, the customer departed.

Southwick waited until she was out of the store before he spoke.

"How come you're sending our hard-earned customers around to Johnson," he queried

plaintively. "Afraid we'll have to pay too large an income tax?"

"Why, hello there, young feller, me lad! What's that you're worrying about now?"

"I asked you how come you sent the lady over to Johnson's," repeated Southwick, answering Old Timer's infectious grin with a smile.

"Oh, I not infrequently do that," replied Old Timer carelessly. "It's good business, you know."

"Oh, yes! nodded Southwick, "I see. Oh, perfectly!"

Old Timer leaned comfortably over the counter and his grin broadened.

"It's a stunt I've been trying out the last three or four weeks, and it works like a leather charm," he explained. "Every once in a while a customer comes in here who is sold head

over heels on a certain make of set. Couldn't sell 'em anything else if the panel was made of solid ivory and the dials were 14karat gold. Their brother has one, and they want that and nothing else. Or maybe some good strong advertising campaign is at the bottom of it—at any rate, they want a certain make, and that's the only thing that'll please them. You know the kind I mean?"

"I think so," nodded Southwick cautiously. "Most of the people who come in here with a preconceived idea of what they want can be sold, but——"

"But a few can't!" interrupted Old Timer. "Exactly! Well, I've made it a point to learn who's handling the various makes around town, and when I run across a customer who won't listen to reason, I send him or her to the right dealer—exactly as I did the lady who just left."

"Trusting to divine providence to see that your noble deed is appreciated and returned," smiled Southwick.

"Not on the tin-type of your grandmother's pet poodle! You know we generally get the names and address of our customers pretty early in the game, through one pretext or another, and when we send a customer over to Johnson's, say, I write Johnson a nice little note and say that Mrs. So-and-so was in to see us about a such-and-such set, and that as we didn't have it in stock, we have sent her over to him, and trust that he has been successful in selling her what she wants. Giving him the name like that assures him that it isn't the bunk, see?"

"It sounds pretty good, but that hard-shell won't appreciate it," grumbled Southwick, still not sold on the idea. "He'll

take all the business we can feed him and holler for more, but——"

"But me no buts!" interrupted Old Timer. "No less than three customers has he sent over to us since he got his first letter, and I sold every last one of them. You see, he isn't such an old hard-head as you thought!"

"It doesn't sound reasonable, but I suppose you're right." Southwick shook his head doubtfully. "How are the other dealers taking to the idea?"

"Just fine! You want to realize that it isn't very often that a dealer runs up against a case where he really can't change the customer's mind and sell him what he's got, so you can't expect a big volume of business, but it makes you and the customer and the other dealer feel better to work it this way than it does to fuss and fuss and then have the customer walk out on you and find the other dealer by hook or crook. It just sweetens up the atmosphere, that's all. But what I called you up about was something else entirely. Come back by the desk and we'll talk it over; I want you to OK it before I go into it."

The partners seated themselves comfortably where they could watch the front door.

"Wish I could light up the old pipe," grinned Old Timer regretfully. "I sure miss my 'tween times smokes! But this idea I was talking about goes something like this.

"In a town of this size there are several dozen, more or less, chronic invalids in the hospitals, and many more at home. Briefly, I plan to sell them radio sets; what more ideal amusement could the invalid have?"

"Good idea, but nothing new at all," commented Southwick,

rather disappointed. "As a matter of fact, I have already done quite a lot of work in that direction——"

"Yes, but here's what I'm planning to do," cut in Old Timer. "First of all, get permission of the hospital authorities. Then arrange to give any likely patient a little demonstration; portable, loop aerial set, with headphones only. Loud-speaker would, of course, disturb other patients. With the headset, the operator could listen-in at any hour of the day or night without disturbing a soul."

"And almost any good set would operate on a loop or small inside aerial if one did not require loudspeaker volume," nodded Southwick.

"Exactly. That would enable us to sell such a set at a really reasonable price, and there would be no charge for installing, either. Of course, patients in for only a few days might not be interested, but I've been looking into the matter and I find that a surprising percentage of the patients are in the

hospital for many weeks, and I know from experience that after a few days it gets pretty dog-gone wearisome, and puts the patient in a pretty good frame of mind to buy a radio set."

"Anything to break the terrible monotony of staring around at the four bare walls and taking horrible medicine and having bandages changed," agreed Southwick, grimacing. "I'm sans my appendix too, you know!"

"Correct!"

"But why did you have to ask me about it?" queried Southwick. "Go right ahead and——"

"Ah! I'm just coming to that," grinned Old Timer. "It's this way. In order to get in right with the powers that be, I want to donate a little set to each of the hospitals. Put them in the right frame of mind, so to speak. See?"

"Oh-ho! Bribery!" Southwick frowned with mock severity.

"No. Just soft soap where it'll do us some good. The sets will go into the nurses' home,

((concluded on page 125))



~~~~~

The universal appeal of radio — the bedtime story was enjoyed by both.

© Wide World.

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# Answers to Dealers

## Battery Chargers

J. R. M. wants to know about battery chargers, especially those for storage B batteries.

Chargers may be roughly divided into two classes, those for alternating current and those for direct current. The latter are, of course, far simpler, but the alternating current kind may again be divided into two classes, bulb chargers and vibrating chargers. In the latter kind, it is sometimes necessary to carry a line of replacements, especially the contact points, as these may become worn in time and must be renewed.

Both kinds of chargers come in the two ampere and five ampere sizes, but of course this rate is far too high for storage B batteries. Most storage B batteries require only one-tenth of an ampere, and for this reason the full charging rate cannot be used. A special attachment may now be secured for charging B batteries from the ordinary charger. This retails for about \$3.

For all around work the five ampere charger will be found to give more satisfaction except in the case where low rate A batteries are used. In selling a charger ask the customer whether or not he has alternating or direct current, the size of his battery and if he intends to use a storage B battery. By securing this information you will be able to sell him the right thing and thus make another satisfied radio fan.

## Variable Condensers

H. B. Smith of Syracuse has had some difficulty with customers who have bought variable condensers. He has sold these instruments by the number of plates and not the capacity and the result has not always been satisfactory.

For the benefit of the uninitiated dealer it might be well to point out that condensers are rated in microfarads of parts thereof and not in the number of plates. The area of these plates and their spacing determine the capacity in microfarads. Thus it will be seen that it is quite possible to make up a three plate condenser having exactly the same capacity as one having forty plates. Manufacturers are now taking particular pains to mark the correct ratings on their instruments, and dealers will generally save time and trouble by observing the capacities and completely ignoring the number of plates.

## Battery Eliminators

W. W. Metcalf, a dealer in Minnesota, wants some further information on A and B battery eliminators for use on the house lighting mains.

We want to point out that the first information which must be secured is the kind of current used by the fan, alternating or direct.

Once this has been determined, the rest of the sale comes down to a matter of price. There are many different kinds of eliminators on the market, es-

# Out of the Radio FOG



A great receiver  
for the VOICES of the Great

*Priess*  
TRADE MARK  
THE CONCERT GRAND of RADIO

LIST  
\$145.00

A FIVE-TUBE REFLEX CIRCUIT-LOOP SET

## ALL THE RADIO WORLD IS TALKING ABOUT IT!

PRIESS NATIONAL PUBLICITY has told, and is telling, through America's leading newspapers and magazines the story of this remarkable achievement.

A New Audience. Numbering Millions, eagerly awaits this new set.

A New Market has been cultivated for you—a market comprised of those who demand the superlative, in radio performance, as in all else.

Say you saw it in Radio Merchandising

# Priess

TRADE MARK  
The Concert Grand of Radio

## The Console Model

*In a rich, two-tone walnut cabinet, with concealed loop and loud speaker. All controls, including loop, are located on the rich etched malloy panel, as illustrated.*



LIST

**\$225.00**

Priess Sets are sold under a plan giving both the Distributor and the Dealer territorial protection and absolute assurance of relief from Cut Price and other unfair competition.

Write for details

**PRIESS RADIO CORP.**  
697 Broadway - New York City

pecially for the B batteries. However, the A battery eliminator is a different matter. While it is comparatively easy to rectify and smooth out a high voltage, low amperage current, such as that for the B battery eliminator, the problem of rectifying and smoothing out a low voltage and high amperage A battery current is quite different. In order to partially overcome this difficulty the makers of these instruments are generally arranging them in such a way that the filament wiring of the vacuum tubes is in series instead of the usual parallel connection. This, of course, is fine for home-made sets where the builder knows what he is doing, but it would be a hopeless task to rewire the filaments of commercially built sets. Such changes would also probably destroy any guarantee which the builder might furnish. Therefore it seems that the B battery eliminator is quite the thing, but the A battery unit is limited, and it should be sold only to those who are versed in things electrical as well as radio.

### Aerials

Fred Menzger in looking over the directions coming with different sets, finds that there is a wide variation in the length of the aerials recommended, and as he is doing installing on a rather large scale he would like to have some further information.

For most of the ordinary receiving sets up to five tubes, the matter of aerial is greatly overrated. There are just three important points which should be followed in every case.

The first is that the antenna be insulated carefully wherever it is fastened in place.

The second, make sure that it runs all in one direction with

the lead-in from one end. An aerial full of kinks and bends is not effective for its total length.

Third, avoid joints in the wire or the lead-in. If it is necessary to make a joint, solder it. Wire which is exposed to the weather will soon oxidize and make a poor connection, and when this happens you will have a hurry call from the customer and it may take some time to find the trouble. Make sure right at the start. The Board of Fire Underwriters also have something to say on this subject. Never wrap an outside connection with tape. Such connections will become bad long before one which has not been wrapped. The length may be from 70 to 125 feet. This is not particularly important.

### Variable Condensers

Several dealers want information on what sizes of variable condensers are the most popular. Probably the .0005 mfd. is the most widely used, but the .00035 mfd. is now running it a close second. The former size is used mostly in regenerative sets and the latter in tuned radio frequency or neutrodyne sets. The old .001 condenser is practically obsolete, and its work may be done with any .0005 mfd. instrument when the receiving set is used for the wave lengths of broadcasting. Usually the .0005 condenser has 23 plates, the .00035, 11 or 13 plates and the .001 43 plates. However, as stated in another question, do not rely on the number of plates, but use the actual maximum rating in microfarads.

### Honeycomb Coils

H. S. F. has a chance to buy up a lot of large size honey-

comb coils at a very reasonable rate and wants to know whether or not it would pay him to do so.

About two years ago, when super-regenerative circuits were the rage, such coils would have sold readily enough, but at the present time they are a drug on the market. Possibly some amateurs might buy them for use in experimental work or for long wave reception, but such coils would have absolutely no appeal to the ordinary broadcast listener.

### Radio Stock

The owner of an electrical store wants to go into the radio business as a side line and wishes to know what kind of sets he should stock. The answer to such a question as this depends a lot on the location of the store, but generally at least one line of neutrodyne or tuned radio frequency sets should be handled. The matter of models and prices is entirely up to the dealer and what he thinks he will be able to dispose of best.

Regenerative sets have practically gone into the discard in so far as complete sets are concerned. Nearly every such set is now made by the fan himself. Of course the single circuit set is entirely out of the question because of the wave of popular disapproval which has swept the country. Such sets, together with the two and so-called "three circuit" regenerators, cause a lot of interference on account of the whistles they set up.

Generally kits should be handled. These may be either reflex, neutrodyne, super-heterodyne or tuned radio frequency sets. As a general rule the three and five tube sets will prove to be the most popular.

### Installations

E. M. Gehr has found that in many installations he is unable to use the regulation type of outside aerial and wants to know whether or not it is possible to use a loop aerial with the ordinary run of five tube sets. The answer is, of course, no. In most cases it requires at least six tubes in order to successfully work a loop aerial, with the possible exception of some of the larger reflex sets. The five tube sets are designed for use with the ordinary antenna, and they will never function properly on a loop unless changed considerably, which is not advisable.

However, it is possible to use an indoor aerial in a great many cases, except where the building is all steel construction. Such an aerial as this simply consists of sixty or seventy feet of wire tacked up around a picture molding in one or several rooms. The connection is made to the set from one end of this wire and the regulation ground is also used. Such aerials will sometimes give fully as good results as an outside aerial, especially on five tube sets. Insulated wire will do very well for this work.

**WRITE us about the problems you encounter in your store. We'll endeavor to give you the answers in this department.**

# Recent Radio Patents

**Design for a Cabinet for Radio Receiving Apparatus:** Edwin S. Pridham and Peter L. Jensen of Oakland, Cal., assignors to the Magnavox Co. of Oakland, Cal. Patented Nov. 25, 1924. Des. 66,093.

**Design for a Sound Amplifier:** Albert O. Price of Coshocton, Ohio. Patented Nov. 25, 1924. Des. 66,092.

**Vacuum Tube Amplifier:** David Grimes of Grasmere, N. Y. Patented Nov. 25, 1924. No. 1,517,057.

**Means for Damping Vibratory Structures of Vibration Apparatus:** Heinrich Hecht, Hugo Lichte and Bernhard Nielson of Kiel, Germany, assignors to Signal Gesellschaft mit Beschränkter Haftung of Kiel, Germany. Patented Nov. 25, 1924. No. 1,517,063.

**Thermionic-Tube Adapter:** Carleton Fay Wright of Plymouth, Mass., assignor to Wireless Specialty Apparatus Company of Boston, Mass. Patented Nov. 25, 1924. No. 1,516,837.

**Radio Attachment for Phonographs:** Edward E. Linehan of St. Paul, Minn. Patented Nov. 25, 1924. No. 1,516,745.

**Tuning Device:** Lucien J. Bien-dorf of Chicago, Ill. Patented Nov. 25, 1924. No. 1,516,947.

**Signaling System:** Omar B. Buchanan of Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Co. of Pa. Patented Dec. 2, 1924. No. 1,517,277.

**Radio Condenser:** Ralph E. Marbury of Edgewood Park, Pa., assignor to Westinghouse Electric & Manufacturing Co. of Pa. Patented Dec. 2, 1924. No. 1,517,370.

**Spark Gap:** Robert H. Marriott of Bremerton, Wash. Pat-

ented Dec. 2, 1924. No. 1,517,566.

**System of Radio Transmission:** Joseph O. Mauborgne and Guy Hill of Washington, D. C. Patented Dec. 2, 1924. No. 1,517,568.

**System of Radio Transmission:** Joseph O. Mauborgne and Guy Hill of Washington, D. C. Patented Dec. 2, 1924. No. 1,517,569.

**System of Radio Communication:** Joseph O. Mauborgne of Chicago, Ill., and Guy Hill of Washington, D. C. Patented Dec. 2, 1924. No. 1,517,570.

**Antenna Safety Link:** Arthur M. Trogner of Takoma Park, Md. Patented Dec. 2, 1924. No. 1,517,602.

**Wireless Signaling System:** Henry Joseph Round of London and Archibald McLellan of Swansea, England, assignors to Radio Corp. of America. Patented Dec. 2, 1924. No. 1,517,654.

**X-Ray Film Carrier:** Sinclair Tousey of Garden City, N. Y. Patented Dec. 2, 1924. No. 1,517,767.

**Radio Transmitting System:** Ernest F. W. Alexanderson of Schenectady, N. Y., assignor to General Electric Co. of N. Y. Patented Dec. 2, 1924. No. 1,517,816.

**Exciting Means for Electrodynamical Oscillators:** Harry P. Lawther, Jr., of Dallas, Tex., assignor to John Hays Hammond, Jr., of Gloucester, Mass. Patented Dec. 2, 1924. No. 1,518,123.

**Radio Telephone Receiver Block:** Walter G. Conger of Independence, Mo. Patented Dec. 2, 1924. No. 1,518,050.

**Automatic Setting Device for Phonographs:** Stephen Joseph

(Concluded from page 62)  
out in Oshkosh, or Cousin  
Charlie from Kalamazoo.

Never put all your eggs in one  
basket and don't waste all your  
expensive reason-why advertis-  
ing on the fathers who think  
only of economy and the moth-  
ers whose only thought is of  
less furniture to dust.

Interest the kiddies and you  
have won 75 per cent of your  
community. They're the ones  
who get what they want, sooner  
or later. See that it's sooner  
for you.

(Concluded from page 118)  
and the Lord knows the poor  
dears rate a little amusement  
after a day's work in a hospital.  
Are you game to try it out,  
young feller?"

"It sounds good to me; if you  
think it'll go through in profit-  
able volume, hop to it. I'm for  
you!"

"I've looked into the matter  
pretty carefully," said Old  
Timer seriously. "I'm confident  
that if we go about it as I've  
suggested, the plan will be a  
real success."

And it was!

### Radio Freight Rates

The Music Industries Cham-  
ber of Commerce and the Manu-  
facturers' Association filed briefs  
with the Interstate Commerce  
Commission on January 30th  
protesting, on behalf of the mu-  
sic and radio industries, against  
the new freight classification on  
combined phonograph and radio  
instruments ordered to go into  
effect on February 10th. This  
proposed increase represented  
an advance of from 50 to 100  
per cent on prevailing freight  
rates.



The Super  
Amplifier

#### MR. DEALER:

You've heard a lot lately  
about Resistance Coupling—  
you have had many inquiries  
for Resistance Coupled Kits  
and the Daven Super Ampli-  
fier—you are going to get  
many, many more, for Re-  
sistance Coupling is the only  
logical method that amplifies  
all frequencies equally,  
therefore distortionless.

**RESISTANCE COUPLED  
KITS.** The Daven Knock-  
down Kits are supplied in  
either 3 or 4 stages. (Sock-  
ets and Condensers not in-  
cluded) Diagrams and com-  
plete instructions for  
assembly enclosed with each  
Kit.

**THE SUPER - AMPLIFIER**  
is a completely assembled  
Resistance Coupled Amplifier  
ready for immediate use. It  
is very compact and will fit  
within any cabinet. All wir-  
ing is beneath the molded  
Bakelite base. It is truly the  
"Aristocrat of Amplifiers."  
Be prepared to meet the de-  
mands our National Adver-  
tising Campaign will create  
for Amplifiers, Kits, Mount-  
ings and the well known  
Daven Grid Leaks.

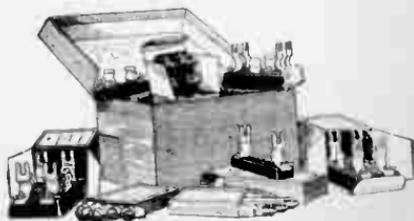
A free copy of our "Resistor  
Manual" will be sent to any  
dealer who wants to be well  
posted on Resistance Coupled  
Amplification. It tells how to  
adapt it to all standard tuners.  
To the public 25 cents—with 10  
cents extra for mailing costs.

### DAVEN RADIO CORP.

"Resistor Specialists"

Newark

New Jersey



Abt of New Haven, Conn. Patented Dec. 2, 1924. No. 1,517,690.

**Arc Transmitter for Wireless Telegraphy:** Alexander Meissner of Berlin, Germany, assignor to Gesellschaft fur Drahtlose Telegraphie M. B. H. Hallesches of Berlin, Germany. Patented Dec. 9, 1924. No. 1,518,439.

**Balancing Circuit for Telephonic Transmission:** Alexander Meissner of Berlin, Germany, assignor to Gesellschaft fur Drahtlose Telegraphie M. B. H. Hallesches of Berlin, Germany. Patented Dec. 9, 1924. No. 1,518,440.

**Radio Dial:** Herbert T. Whaler of Miami, Fla. Patented Dec. 9, 1924. No. 1,518,473.

**Interchangeable Battery System for Radio Sets:** Harry Hart of Chicago, Ill., assignor of one-third to Julius B. Rubenstein and one-third to Jacob I. Goldstein, both of Chicago, Ill. Patented Dec. 9, 1924. No. 1,518,508.

**Radio Telephone and Telegraph Apparatus:** Theodore S. Cole of New Haven, Conn. Patented Dec. 9, 1924. No. 1,518,564.

**Amplifying System:** William C. White of Schenectady, N. Y., assignor to General Electric Co. of N. Y. Patented Dec. 9, 1924. No. 1,518,624.

**Amplifying System:** William C. White of Schenectady, N. Y., assignor to General Electric Co. of N. Y. Patented Dec. 9, 1924. No. 1,518,625.

**Radio Signalling System and Apparatus Therefor:** Rufert Evan Howard Carpenter of Purley, England. Patented Dec. 9, 1924. No. 1,518,633.

**Radio Telegraph System:** Wendell L. Carlson and Earl C. Hanson of Washington, D. C. Patented Dec. 9, 1924. No. 1,518,655.

**Radio Telegraph System:** Earl C. Hanson of Washington, D. C. Patented Dec. 9, 1924. No. 1,518,656.

**Signalling System:** Walter R. G. Baker of Schenectady, N. Y., assignor to General Electric Co. of N. Y. Patented Dec. 9, 1924. No. 1,518,682.

**Condenser:** John M. Cage of Santa Monica, Cal. Patented Dec. 9, 1924. No. 1,518,688.

**Radiophone Amplifier:** Alfred N. Martin of New Dorp, N. Y. Patented Dec. 9, 1924. No. 1,518,744.

**Electric Connector:** Joseph Stansbury Jones of Brooklyn, N. Y., assignor to Charles Cory & Son, Inc., of N. Y. Patented Dec. 9, 1924. No. 1,518,795.

**Inductance or Tuner:** Lewis A. Morrison of N. Y. Patented Dec. 9, 1924. No. 1,518,810.

**Design for a Combination Radio Cabinet and Loud Speaker:** Henry O. Victor of Saginaw, Mich. Patented Dec. 9, 1924. Des. 66,212.

**Design for a Combination Radio Cabinet and Loud Speaker:** Henry O. Victor of Saginaw, Mich. Patented Dec. 9, 1924. Des. 66,213.

**Design for a Combination Radio Cabinet and Loud Speaker:** Henry O. Victor of Saginaw, Mich. Patented Dec. 9, 1924. Des. 66,214.

**Design for a Combination Radio Cabinet and Loud Speaker:** Henry O. Victor of Saginaw, Mich. Patented Dec. 9, 1924. Des. 66,215.

**Design for a Combination Radio Cabinet and Loud Speaker:** Henry O. Victor of Saginaw, Mich. Patented Dec. 9, 1924. Des. 66,216.

**Design for a Combination Radio Cabinet and Loud Speaker:** Henry O. Victor of Saginaw, Mich. Patented Dec. 9, 1924. Des. 66,217.

# PATENTS

## To the Man with an Idea

I offer a most comprehensive, experienced, efficient service for his prompt, legal protection and the development of his proposition.

Send sketch, or model and description, for advice as to cost, search through prior United States patents, etc. Preliminary advice gladly furnished without charge.

My experience and familiarity with various arts, frequently enable me to accurately advise clients as to probable patentability before they go to any expense.

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### RICHARD B. OWEN

Patent Lawyer

38 OWEN BUILDING  
WASHINGTON, D. C.  
2272-V WOOLWORTH BLDG.  
NEW YORK CITY

## Manufacturer's Representative

well known to the radio trade, is now open for a proposition to represent high grade radio manufacturer on the Pacific Coast. Has been associated with the radio business for past seven years and has been very successful with the line he now represents. Radio manufacturers wishing to establish a branch or secure representation on the Pacific Coast to increase their business, write me your proposition. Box 25, Radio Merchandising, 243 West 39th Street, New York City.

(Concluded from page 26)

that is by selling sets at the proper list price or else a few dollars under this price, thereby stimulating sales.

No dealer can possibly slash prices and give real honest service, for it is out of part of the profits he makes on a sale that the service charges must be paid.

(Concluded from page 32)

panel. Each of the other binding posts is simply wired to one of the tap points in the center of the panel. It is not necessary to break both connections in order to switch from one speaker to the other.

(Concluded from page 58)

extra trips to the establishment and would thus be "exposed" to

that many more sales, which, of itself, would be a splendid thing for the establishment's business.

Also, many of the customers whose logs were displayed on the walls of the store would tell their friends and relatives about it, and this would make many of such friends and relatives come to the store to see the logs, which, also, would be a splendid thing for the store and a distinct help to the store in increasing its business.

And, too, the fact of the store having so many logs displayed on the wall in this way would have the effect of making the establishment much more interesting to the average radio fans of the city, and this would bring more and more people to the store with a consequent fine boost in the concern's business.

# Humor



## Explained

Farmer (showing friend over the farm): "How many sheep would you guess were in that flock?"

Visitor (considers a moment, and ventures): "About five hundred."

"Absolutely correct! How did you guess it?"

"Waal, I jest counted the legs, and divided the number by four."—Good Hardware.

Woman Customer (after the tired assistant had pulled down blanket after blanket until there was only one left on the shelf): "I don't really want to buy a blanket today. I was only looking for a friend."

Clerk: "If you think he's in the other one, madam, I'll gladly take it down for you!"—Good Hardware.

## Classified

Recently a woman depositor entered a Boston bank to make a deposit. She had some bills and checks to deposit, so she procured a deposit slip which required the listing of bills, specie and checks. She listed her bills and checks in their respective places, but was somewhat in doubt as to what to list under specie. After a few moments' thought she wrote after the word specie "Female" and turned in her deposit.—Forbes Magazine.

## Moonlight—A Soaking Good Romance

Gliding in the moonlight,  
Moonlight on the sea;  
She caressed by white-caps,  
You caressed by me.

Floating on the water,  
Sparkling green and blue;  
Waves are kissing tenderly;  
We are kissing too.

(Clouds begin to gather,  
Lightning in the sky;  
Lightning on the water—  
Lightning in her eye.

Rain is pouring madly—  
Nothing, nothing dry;  
While it soaks me on the head,  
She soaks me in the eye.  
—Record.

## So Spoke Thomas

"Well, I do declare!" said Thomas Jefferson, as he signed the Declaration of Independence.  
—Widow.

## Fortunate, at That!

Soph—I was over to see her last night, when someone threw a brick through the window and hit the poor girl in the ribs.

Frosh—Did it hurt her?

Soph—No, but it broke three of my fingers.—Panther.

## Too Ambitious

"Why did you fire young Jones?"

"Spent too much time reading success stories."—Judge.

# Compo-site INC.

MANUFACTURERS OF

## Moulded Electrical Mechanical and Radio Specialties

207-215 ASTOR STREET

NEWARK, N. J., U. S. A.

Radio Specialties - Dials - Insulators - V. T. Sockets

Write for Prices

Representative:

John W. Ruzicka  
326 W. Madison Street  
Chicago, Ill.

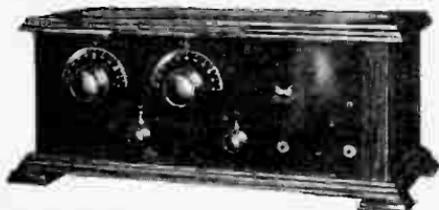
Representative:

Pacific States Commercial Co.  
443 So. San Pedro Street  
Los Angeles, Cal.

### THE SENSATION OF THE SEASON THE RECO RECEIVER

THE  
FINEST  
RECEIVER

TUNED  
RADIO  
FRE-  
QUENCY



LONG  
DISTANCE  
WITH  
VOLUME  
AND  
CLARITY

LIST PRICE  
**\$85.00**

The Armstrong Cabinet Speaker and other High Grade Products  
DEALERS WRITE FOR LIBERAL SALES PLAN  
DAVENPORT-HICKORY CORP. - 331 So. La Salle St., Chicago



The Tops Don't Come Off

## EBY BINDING POSTS



NOW **15c**

PLAIN OR ENGRAVED  
IN 25 DIFFERENT MARKINGS

Same quality — Same discounts



The Coil  
Without  
Losses

A World Beater  
For Sales!

The New

## UNCLE SAM MASTER TUNING COIL

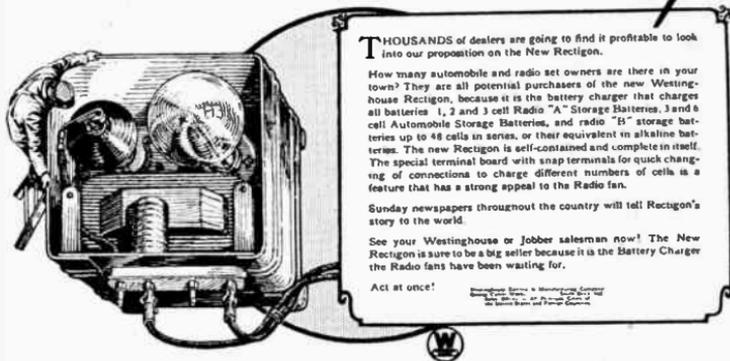
Don't Let Your  
Stock Get Low

Uncle Sam Elec. Co.  
210 E. 6th St., Plainfield, N. J.

Say you saw it in Radio Merchandising

# WORTH LOOKING INTO

## *Charges all batteries*



**T**HOUSANDS of dealers are going to find it profitable to look into our proposition on the New Rectigon.

How many automobile and radio set owners are there in your town? They are all potential purchasers of the new Westinghouse Rectigon, because it is the battery charger that charges all batteries 1, 2 and 3 cell Radio "A" Storage Batteries, 3 and 6 cell Automobile Storage Batteries, and radio "B" storage batteries up to 48 cells in series, or their equivalent in alkaline batteries. The new Rectigon is self-contained and complete in itself. The special terminal board with snap terminals for quick changing of connections to charge different numbers of cells is a feature that has a strong appeal to the Radio fan.

Sunday newspapers throughout the country will tell Rectigon's story to the world.

See your Westinghouse or Jobber salesman now! The New Rectigon is sure to be a big seller because it is the Battery Charge the Radio fans have been waiting for.

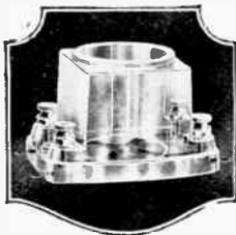
Act at once!

Westinghouse Electric & Manufacturing Company  
Newark, N. J.  
Sole U. S. Patentee  
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# Westinghouse

## **DURAY**

### **ALL-GLASS SOCKET**



An Instantaneous Favorite.  
A Big Seller.

RETAILS AT \$1.25

In Attractive Cartons.

Distributors Wanted Everywhere  
Write for Interesting Proposition

**DURAY RADIO CORPORATION**  
Dept. 24, 263 Washington Ave.,  
Newark, N. J.

## Recent Radio Patents

**Radio Broadcasting System:**  
Lloyd Espenschied of Hollis, N. Y., assignor to American Telephone and Telegraph Co. of New York. Patented Jan. 13, 1925. No. 1,522,581.

**Balanced Antenna System:**  
Abraham Press of Winkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Co. of Pa. Patented Jan. 13, 1925. No. 1,522,745.

**Electrical Signaling:** Louis Cohen of Washington, D. C. Patented Jan. 13, 1925. No. 1,522,807.

**Method of and System for Selective Energy Transmission:** John Hays Hammond, Jr., of Gloucester, Mass. Patented Jan. 13, 1925. No. 1,522,882.

**Polypulse System of Control:** John Hays Hammond, Jr., of Gloucester, Mass. Patented Jan. 13, 1925. No. 1,522,883.

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# "Keeping Step"

By James Edward Hungerford



**A**RE you "KEEPING STEP!" with the you that's  
 YOU,  
 In the soldierly game of Life?  
 To your own true SELF, are you staunch  
 and TRUE,  
 In the struggle and stress and strife?  
 With shoulders back, are you keeping abreast  
 Of the YOU that you DREAMED you'd be?  
 Are you giving your WORK and the world your  
 BEST—  
 Though the world doesn't always SEE?

**A**RE you "KEEPING STEP!" with your STERL-  
 ING self—  
 The YOU that you KNOW you are?  
 Are you "shooting square" in the game of  
 "pelf,"  
 And trailing your GUIDING STAR?  
 Are you treading the "straight and narrow way,"  
 Toward the goal of the "pastures fair"?  
 Are you "KEEPING STEP!" on the path, TODAY?—  
 My friend, we are SEEING you there!

**W**E vision a SMILE on your upturned face,  
 And a LIGHT in your steadfast eyes;  
 In our dreams, we picture you "keeping  
 pace"—  
 Just a comrade who STICKS and TRIES!  
 We're seeing you marching with head erect,  
 And with vigor and vim and "PEP"!  
 In our HEARTS, we know you as Life's ELECT—  
 And we see you as "KEEPING STEP"!

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**Campbell RADIO CABINETS**

"From the Lumber to You"

PRICES—Cash with order, prepaid east of Missouri River; west, add 15 cents to quoted price. Send Post Office or Express Money Order.

Panel Sizes	Imitation Walnut or Mahogany	Genuine Walnut or Mahogany
7x16x 7	\$ 2.00	\$ 4.75
7x14x 7	3.50	5.50
7x18x 7	3.82	6.75
7x24x 7	5.25	9.00
7x26x 7	6.05	10.00
7x28x 8	7.25	11.50
7x27x 9	7.25	12.50
7x40x10	11.25	18.00

Special Sizes to Order



Mounting Boards 50c Each

Will not warp or crack. Made of No. 1 wood finished in either Mahogany or Walnut, bright or rubbed finish to match the finest of furniture.

Manufacturers' and Dealers' liberal discounts sent upon request.

**THE PERKINS-CAMPBELL CO.**  
(Established 1879)  
410-440 New Street, Cincinnati, O.  
(Telephones: Dun or Braintree's)

**ANOTHER Masterpiece!**

*The Kit the Whole World's Been Waiting For*



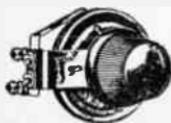
Contains every single item necessary to build this wonder set.

Write for new complete catalogue and discounts **\$39.50**

**Chas. Freshman Co. Inc.**  
*Radio Receivers and Parts*  
FRESHMAN BUILDING  
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**VERNIER CONTROL RHEOSTATS**



Pat. 7-10-23

3-6-10-20-25-30 ohms

**\$1.75**

In All American "All-Amaz" Kits—Carter Rheostats have been adopted as standard equipment. Completely advertised—attractively packed.

Carter quality and workmanship

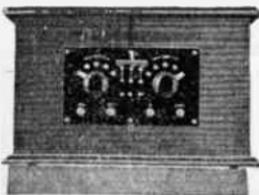
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**Continuous Wave - Transmission System:** William E. Garity of New York, assignor to De Forest Radio Telephone and Telegraph Co. of New York. Patented Jan. 13, 1925. No. 1,523,011.

**Method of Producing a Conductive Path Between Spaced Electrical Conductors:** Grover R. Greenslade of Pittsburgh, Pa., assignor to J. Rogers Flannery of Pittsburgh, Pa. Patented Jan. 13, 1925. No. 1,523,013.

**Signaling System:** Harold J. Fisher of Jersey City, N. J., assignor to Western Electric Company, Inc., of N. Y. Patented Jan. 13, 1925. No. 1,523,111.

**Means for Control of Electric Impulses:** Edmund B. Wheeler of New York, N. Y., assignor to

Western Electric Co. of New York. Patented Jan. 13, 1925. No. 1,523,149.

**Radio Antenna for Aircraft:** Carlton David Palmer of Washington, D. C. Patented Jan. 13, 1925. No. 1,523,280.

**Radio Telegraph System:** John B. Brady of Somerset, Md., assignor to Morkrum Co. of Chicago, Ill. Patented Jan. 13, 1925. No. 1,523,377.

**Radio Speaker:** Emil R. Meyer of Brooklyn, N. Y. Patented Jan. 6, 1925. No. 1,522,255.

**Automatic Filament Control for Wireless Apparatus:** Arne Gudheim of Blackburg, Va. Patented Jan. 13, 1925. No. 1,523,193.

**Vernier Instrument:** Morris Klosner of New York. Patented Jan. 13, 1925. No. 1,522,634.



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Toronto, Ont.

**Storage Battery:** William S. Gould of New York, N. Y., and Raymond A. Klock of Closter, N. J., assignors to Gould Storage Battery Co. of New York. Patented Jan. 13, 1925. No. 1,522,719.

**Terminal:** Clarence D. Platt of Bridgeport, Conn. Patented Jan. 13, 1925. No. 1,522,649.

**Switch for B Batteries:** Frederick G. Mitchell of Ridgefield Park, N. J., assignor to Fahnestock Elec. Company of Long Island City, N. Y. Patented Jan. 13, 1925. No. 1,523,032.

**Container:** Ferdinand S. Oppenheim of New York. Patented Jan. 13, 1925. No. 1,522,902.

**Signal Device:** Joseph O. Cadieux of Meriden, Conn., assignor to the Connecticut Telephone & Electric Co., Inc. Patented Jan. 13, 1925. No. 1,523,371.

**Movable Coil for Electrody-**

**amic Receivers:** Edwin S. Pridham and Peter L. Jensen of Oakland, Cal., assignors to the Magnavox Company of Oakland, Cal. Patented Jan. 13, 1925. No. 1,523,349.

**Signaling System:** Harold J. Fisher of Jersey City, N. J., assignor to Western Electric Co. Patented Jan. 13, 1925. No. 1,523,111.

**High-Frequency Signaling:** Eugene Peterson of New York, assignor to Western Electric Co. of New York. Patented Jan. 13, 1925. No. 1,523,139.

**Telephone Headset:** Glenn W. Carpenter and Wendell L. Carlson of Schenectady, N. Y. Patented Jan. 13, 1925. No. 1,523,051.

**Receiving Circuit:** Walter L. Betts of Brooklyn, N. Y., assignor to Western Electric Co., Inc., of New York. Patented Jan. 13, 1925. No. 1,523,102.

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