30110 Publication The Business Magazine of the Radio Industry





Compo A-B-C-Power Supplies A-current up to 2 amperes—B-Voltage to 180— Two variable C Voltages, one to 4C volts.



Compo A-Power Supplies pure direct current up to 2 amperes. Humless — simple — requires no attention.

Now ready

True socket power units for COMPLETE battery elimination

Backed by adequate resources—designed with circuits proved in performance-merchandised by a plan assuring complete protection to dealer and jobber-plus generous profits-the Compo Complete Socket Power demands your investigation.





WISE-McCLUNG COMPANY, LTD., NEW PHILADELPHIA, OHIO





The JUNIOR CONE is the Outstanding Speaker for 1927

UTAH RADIO PRODUCTS CO., 1615 S. MICHIGAN AVE., CHICAGO

171/2-in. Senior Cone \$16 13-in. Junior Cone \$10 14-in. Standard \$22.50 11-in. Junior \$12.50 171/2-in. x 131/2 in. Book \$19

Each One Suaranteed



CONFIRMED BY UNBIASED JUDGES

What thousands of Stromberg-Carlson owners have long been telling the world, has been officially declared, "There is nothing finer than a Stromberg-Carlson."

By its award, the greatest International Exposition since 1914 has endorsed every claim made by the Stromberg-Carlson Company for scientific total shielding which is the basis for the famed Stromberg-Carlson selectivity, distance ability and accuracy of tone.

The Stromberg-Carlson franchise means that its possessor represents a product honored by all and desired by all—and—that he represents a company trusted by all and respected by all. Such universally acknowledged leadership is not the fruit of sudden success. It has taken years of conservative, constructive effort to build it for the Stromberg-Carlson Company.

STROMBERG-CARLSON TELEPHONE MFG. CO., ROCHESTER, NEW YORK

Makers of voice transmission and voice reception apparatus for more than thirty years.





Real Profit for Grebe Dealers

Easy Selling

because the unusual features of the Grebe Synchrophase produce superior reception.

Minimum Servicing

because sound design and construction assure extremely satisfactory performance.

> Booker RR gives full details. Send for it.

A. H. Grebe & Co., Incorporated 109 West 57th Street New York City Western Branch.

443 S. San Pedro St., Los Angeles, Cal. Factory Richmond Hill, New York
The ordest exclusive radio manefacturer

The CREBE Synchrophase TRADE HARK TRADE HARK



The Synchrophase is also supplied in five console models.

Thousands of Radio Sets sold in this way

The Dealer says:

Regarding the Radio Goods approved by Popular Science Institute of Standards, we wish to say that we constantly refer to this list, and as a result we carry Radio Goods as advertised in Popular Science.

THE ALEXANDER SUPPLY Co., New Philadelphia, O.



Professor Sampson K. Barrett, E.E., of the faculty of the College of Engineering of New York University, testing batteries and battery chargers for the Popular Science Institute of Standards.

The Consumer says:

I have pleasure in informing you that I have found the products recommended by the Popular Science Institute of Standards to be satisfactory and as advertised. I am using Radiola Radio, Burgess Dry Cells, Tungar Charger, Trimo Pipe Wrenches, Eveready Dry Cells Starrett and Goodell-Pratt Tools.

RUDOLF KOUTNY,

Pasadena, Calif.

THE letters quoted above are typical of 8,000 letters written to Popular Science Monthly in the past year.

Do you, as a Radio Dealer, get the full significance of this? Do you realize that here is a magazine which has so won the confidence of dealers and consumers that hundreds of thousands of dollars in radio goods are bought and sold on this magazine's recommendation?

Popular Science Monthly is edited for practical men (300,000 of them) who must have facts.

To get the facts on *Radio*, the Popular Science Institute of Standards was established. Here radio apparatus and tools are tested, and products of merit approved.

Popular Science readers were

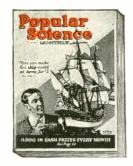
not confused by the maze of conflicting radio claims. They bought the sets and equipment advertised in Popular Science, secure in the knowledge that this equipment had been tested.

And dealers soon found it a good plan to stock those products which the Institute had approved.

FREE Service

Take advantage of this "buying confidence". Get the trade of the Popular Science readers, and their friends whose purchases they influence, by stocking and displaying those products which have the Popular Science Seal of Approval.

Ask us to send you our free Dealer Service. Popular Science Monthly, 250 Fourth Avenue, New York City.



300,000 "interested" men readers pay 25¢ every month for the practical information contained in the editoral and advertising pages of Popular Science Monthly.

Popular Science



It will never Run Down! Majestic "B" Current Supply

delivers pure direct current-from your light socket

"B" Power at full strength any time and all the time



Majestic"B"is fully guaranteed. No acids or liquids. No hum. Uses Raytheon tube. No filament to burn out. Voltage can be accurately adjusted to varying conditions in any city—and on every set.



G.G.H double sealed — moisture proof condenser positively prevents breakdown due to heating the cause of 95% of the trouble experienced with

B-battery eliminators.

When you bry a Majestie-B"
you say Good-by to trouble

caused by poor "B" power. Majestic gives you an even, continuous flow of "B" current today, tomorrow—whenever you turn on your set. It's economical, too. When you put a "Majestic" to work it stays put. You'll never have to "replace" it as you did "B" batteries. Majestic's first cost is low, and the upkeep only a fraction of a cent per hour.

To know how good, really good radio reception can be, try a "Majestic" on your radio set. Your dealer will arrange a trial without obligation to buy. Phone him today.

Majestic Standard-B

Capacity, nine 201-A tubes or equivalent. 45 miliamperes at 135 volts.

\$26.50

West of Rocky Mts., \$29.00 Raytheon Tube \$6.00 extra

Majestic Super B

Capacity one to twelve tubes, including the use of power tubes. 45 mils. \$29.00

West of Rocky Mts. \$31.50 Raytheon Tube \$6.00 extra

Majestic Master-B

Positive control of all output voltage taps. For sets having high current draw or heavy biasing batteries. 60 mils. at 150 volts.

\$31.50

West of Rocky Mts. \$34.00 Raytheon Tube \$6.00 extra

Can Be Purchased on Deferred Payments

GRIGSBY ~ GRUNOW ~ HINDS ~ CO. 4570 ARMITAGE AVE. CHICAGO-ILL.

This is a reproduction of advertisement appearing in newspapers and leading radio publications, to help you sell Majestics.

POWER

with

Acoustical Amplification!



PRICE \$28.50

NO TUBES
NECESSARY

DEALERS:

Ask your Distributor for Melofonic Speakers. If he cannot supply you write us for the name of distributor nearest you.

DISTRIBUTORS:

Write us at once for desirable territory still open. F.O.B. point for wholesalers either Louisville, Kentucky or New York, N. Y

Licensed and Manufactured Under U.S. Patent 1414801 Other Patents Pending



And now we introduce the New Melofonic Cabinet Speaker Model LB! It embodies the finest acoustical principles used by the leading phonograph manufacturers. Yet it is a cone operated speaker with 14 inches of surface drive and eight cubic feet of tone chamber. This model will unquestionably appeal to those who seek depth in tone without sacrificing high pitch range. Finished in English Two-Tone Brown Mahogany. 20 foot speaker cord. Size 38¾-in. high, 18-in. wide, 18-in. deep.

Hear the Melofonic Model M Speaker and you will immediately recognize why we say: "Best by Comparative Test." It STANDS UP under high voltages—will not rattle no matter how much power you give it. There's a big need for the Melofonic—TODAY!

Finished in High Polished Walnut, Brown and Gold Burtex diaphragm. Size 181/2-in. in diameter.

The New

Melofonic Radio Speakers

PROGRESSIVE MUSICAL INSTRUMENT CORP.
319 Sixth Avenue, New York City

Hyatt6TubePortableReceiver

The First Real Portable Set With Proven Performance and a Popular Price

> Weight fully equipped—28 lbs. Single Dial Control—Loop Aerial Built-in Speaker with Unit

Ideal for homes, hotels, clubs, hospitals, for use when traveling, on vacations, etc.

Here is the portable set which will complete your line of dependable, high grade merchandise, and for which a real market already exists. Here is a set that weighs only 28 pounds,—that can be sold the year round —that gets good reception the year round and is suitable anywhere because of its quality and attractiveness.

The Hyatt Portable will meet the demand in your neighborhood for this class of receiver. It will bring you a reasonable profit the year round. The quality, the policy, the price and the organization back of the Hyatt are right.

\$95.00

"Model "A"

\$115.00

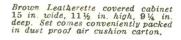
Without Accessories

Complete

F. O. B. Chicago, Ill.

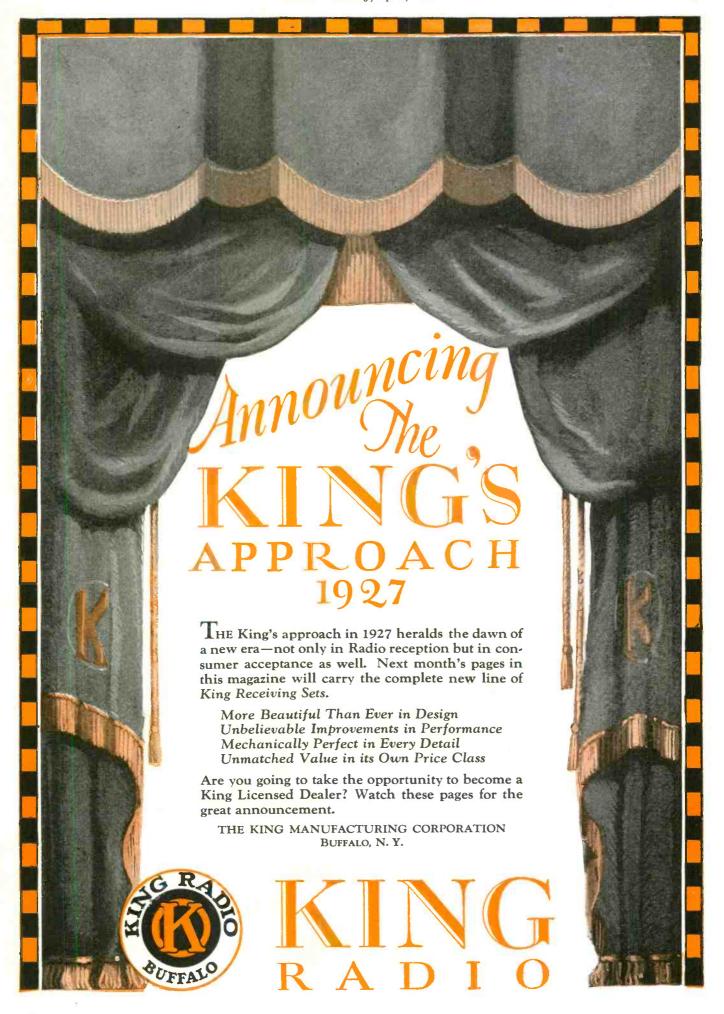
We have some desirable territory available. Keep your salesmen busy during the summer months with outside selling. Write or wire us

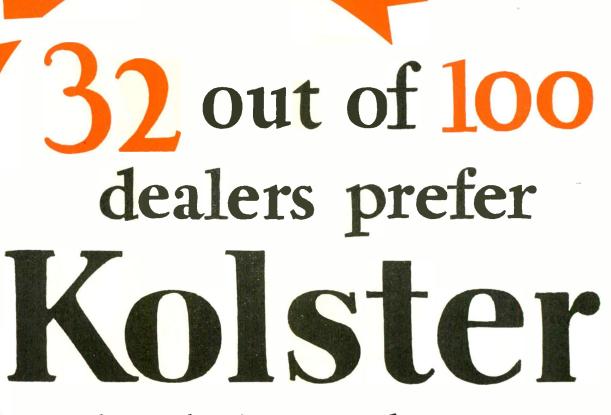
at once.



ELECTRIC CORPORATION

CHICAGO, ILL





in their own homes

A fact revealed by a recent survey



FUTURE PERFECTION OF RADIO RECEPTION DEMANDS RADIO TUBES DESIGNED FOR EACH RADIO FUNCTION.

deforest



DE FOREST engineers have recognized certain characteristics in the functioning of tubes in all radio units. Our laboratories have labored long to

advance these characteristics that so improve radio reception, and now, these highly desirable elements have been developed in De Forest Audions for specific operations in the various radio reception departments.

Fans who are keen to bring their radios up to the highest degree of efficiency will eagerly adopt these Specialist Audions, the idea of which has long been appreciated in England.

These new De Forest Specialist Audions are now available for detector work, radio frequency amplification and use in all audio stages in types taking up to 500 volts on the plate.

To demonstrate the advantages of this idea and the improvement possible in your radio's performance tune in a weak and distant station

or turn down the volume of a local until you can just barely hear it in the loud speaker. Substitute De Forest DL-4 Specialist radio frequency Audions in place of the RF amplifiers you have been using. Note the remarkable increase in volume—how much louder the distant station and how the music of a local is raised to room filling proportion.

Radio amateurs will appreciate the characteristics of these efficient tubes. We must remember that regardless of RF circuits, tubes for best results must be uniform. The rigid limits, both electrical and mechanical, to which De Forest Audions are held assure a high standard of uniformity. With a very constant grid-plate capacity and high mutual conductance the volume these Audions obtain from distant reception is both amazing and satisfying.

These DL-4's are recommended for trial before you change all the tubes in your set.

De Forest Audions have been standard since 1906. The same genius who has made the broadcasting of voice and music possible is still hard at work for greater perfection and greater achievement in radio reception.

Of course, De Forest has designed a general purpose Audion. It is a good one and where price is a consideration the

DOI-A Audion is an unequalled value at \$1.65. This tube is built to the same high standards of quality that mark all De Forest Audions.

De Forest dealers are pretty much everywhere. Look for displays of the brilliant black and orange Audion containers in shop windows. (Metal boxes in which De Forest Specialist Audions are packed insure their safety and dependability.)

If dealer is not available write for booklet which describes characteristics of each Audion and for chart indicating proper replacements for all standard makes of radio.

DE FOREST RADIO COMPANY

Powel Crosley, Jr.



President.

JERSEY CITY, N. J.

Announcing The CASE Charger



The Most Dependable and Satisfactory Automatic Control

The man who owns a receiving set wants convenience but he is not willing to sacrifice volume nor clear reception for the sake of convenience alone.

Repeated tests have proven the storage battery by far the most satisfactory for supplying "A" current. Several successful "B" eliminators are now on the market.

The new CASE Charger combines the two into a most satisfactory and convenient power supply unit. It is well designed both mechanically and electrically—special care having been taken to insure proper ventilation.

The CASE Charger and Automatic Control offers greater profits because it assures greater satisfaction at a lower price.

Send for full details today!

Indiana Manufacturing and Electric Company
Marion, Indiana

Retail Price

\$1650

Without Automatic Relays
but with trickle and full
charging rates

\$10⁰⁰

The CASE Charger offers these advantages

Makes receiving set fully power operated; charges the "A" Battery at a high rate; controls automatically from receiving set switch; charges battery when set is not in operation; and if "B" Eliminator is used, controls it automatically; charger automatically shuts off when battery is fully charged, preventing overcharging and gassing.



VESTA Quality Radio Units



The Line of "All-Year-'Round" Profits Will Be Still Further Augmented

Central or	W	VV
VESTA BATTERY CORP.	RITE	
2100 Indiana Ave., C		
Please have your Cer near me present the	tral Distributor Vesta	ERA
Radio Line	🗆 Auto Battery Line	600
Name		
Address		

Mail coupon

R.R.April

VESTA BATTERY CORPORATION 2100 Indiana Ave., Chicago, U. S. A.

Makers of Vesta Quality Automobile and Radio Batteries — for 30 Years

Very-Important Doints

You Most Certainly Should Consider Before Selecting a Radio Line

Who is the manufacturer? Has he a reputable name of long standing? What experience has he had in the manufacture of electrical products? What facilities has he for production and delivery? How long will he be in the radio business?

Stewart-Warnerisinternationally known as a successful manufacturer of highest financial standing. For twenty years they have built mechanical and electrical equipment and are today the largest manufacturers of their kind, with adequate space and manufacturing skill. Just as they have obtained a leadership in the automotive accessory field, so are they steadily climbing toward a like position in the radio business. A dealer franchise will be worth more with each succeeding year.

Does he offer you a complete line with a price range that will enable you to sell all prospects?

Stewart-Warner offers both cabinet and console models with a wide price range

6

—an excellent Reproducer and Stewart-Warner Tubes; the famous Match-Unit combination. 3 Is he given to radical departures in manufacturing.

Stewart-Warner does not make a practice of using their dealers as experimental outlets for "trick" hook-ups and fanciful designs.

Is the name nationally known and the line nationally advertised?

Stewart-Warner have been consistent national advertisers for years. During 1927 Stewart-Warner Matched-Unit Radio will be advertised in magazines, billboards, newspapers and over the air through Station W. B. B. M. the Stewart-Warner Air Theatre.

Will his dealer policy protect you against "next-door" competition on the same radio? How about protection against price reductions?

As each Stewart-Warner Wholesale Distributor has a certain territory in which he alone operates, he can and does place dealers so that their selling efforts should not over-lap. No dealer is placed so near to another Stewart-Warner Dealer as to "cut in" on his rightful prospects. The Stewart-Warner Protective Franchise gives complete protection against factory price reductions.



Model 355 - One of the latest Six-Tube, One-Dial Console Models. Other attractive cabinet and console models priced from \$50 to \$400

What do his jobbers offer you in the way of co-operation and service?

As Stewart-Warner Wholesalers handle no other radio they are in the best position to give you all co-operation and assistance within reason. Although Stewart-Warner Blue-Ribbon Dealers are expected to adequately service Stewart-Warner Radio, every Wholesaler has a technical man to assist dealers' service men.

The Stewart-Warner Dealer Franchise is a sound radio merchandising plan that assures a permanent and profitable business for any dealer that will live up to it. Begin to build now for permanency. A word from you will put a Stewart-Warner Representative in touch with you immediately.

STEWART-WARNER SPEEDOMETER CORPORATION CHICAGO, U. S. A.



—the name that for 30 years has stood for the finest of QUALITY

For 30 years Kellogg telephone equipment has been made, not to a price, but to the highest quality standard of this great industry. In the Kellogg organization, Quality is a tradition.

The telephone pioneered in perfecting sound transmission. Radio utilized many of the processes the telephone had developed. What then, was more natural, than that Kellogg, a leader in the old industry, should achieve leadership in the new one.

Correspondence is invited with dealers who see the wisdom of identifying themselves with a manufacturer, who not only has the ability to produce quality radio, but one with the financial stability to insure the dealer that he has standing back of him a Permanent Institution.

KELLOGG SWITCHBOARD & SUPPLY COMPANY, DEPT. 54-74, CHICAGO



Capitalize upon the reputation of Bakelite in radio

SHOW a customer that a radio part is made of Bakelite, or that a radio receiver is equipped with it, and the sale is half made. When a part is made of Bakelite none of the sales clerk's time is wasted in describing the merits of

the insulation, for the radio public is well acquainted with them.

But, for your own protection as well as the customer's, it is always best to look for the trade-mark BAKELITE on each device or carton.

Write for Booklet No. 39

BAKELITE CORPORATION

247 Park Ave., New York, N.Y. Chicago Office: 635 W. 22nd St. BAKELITE CORP. OF CANADA, LTD., 163 Dufferin Street, Toronto. Ontario



"The registered Trade Mark and Symbol shown above may be used only on products made from materials manufactured by Bakelite Corporation. Under the capital "B" is the numerical sign for infinity, or unlimited quantity. It symbolizes the infinite number of present and future uses of Bakelite Corporation's products."

The stage is set-

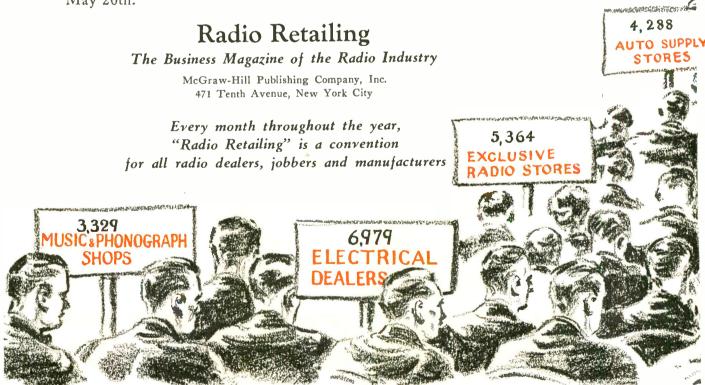
JUNE is convention month. The Music Industries Chamber of Commerce will hold its convention in Chicago, June 6-11, the National Electric Light Association will convene and hold an exhibit in Atlantic City, June 4-10, the Radio Manufacturers Association will get together, and at the same time its First Annual Radio Trade Show will get under way in Chicago, June 13-16.

Thousands of radio dealers, jobbers and manufacturers will attend these conventions in June. Other thousands will be prevented from going to Chicago or Atlantic City by business or distance.

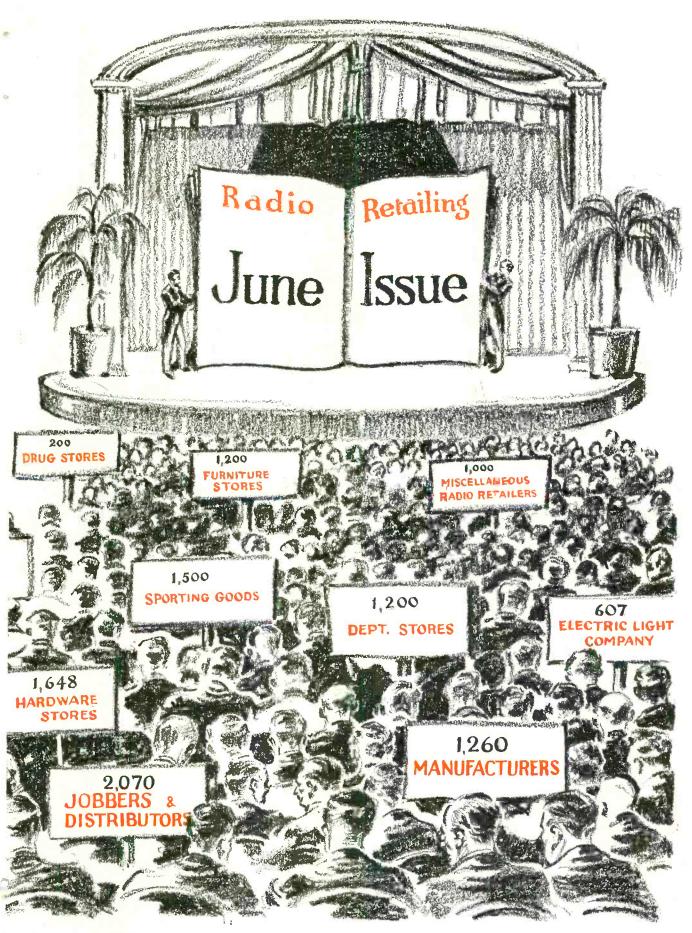
Whether they go to Chicago or Atlantic City or stay at home, radio dealers, jobbers and manufacturers will all receive the June issue of Radio Retailing. They will all read the editorial section of this issue, with its review of new radio products and products that manufacturers will feature in the 1927-28 season. They will keep the June issue of Radio Retailing because of its special directory of radio manufacturers, special articles and many other features.

And these 30,000 radio dealers, jobbers and manufacturers will see the advertisements—the "exhibits" of radio manufacturers—in the special June issue of *Radio Retailing*.

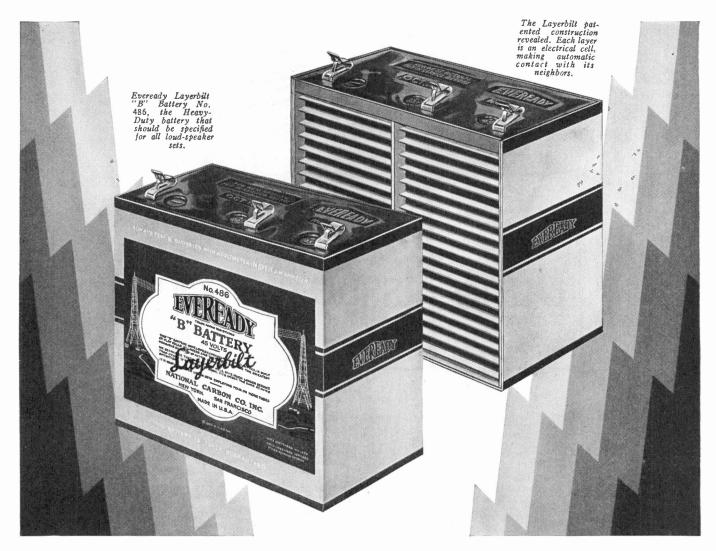
Manufacturers are invited to write for additional data about this important June issue of *Radio Retailing*. Advertising forms close May 20th.



A Convention of 30,000 Radio De



alers, Jobbers and Manufacturers



Radio is better with *battery* power

RADIO receivers designed for quality reproduction operate best on well-made dry cell "B" batteries. What your ear tells you about the performance of batteryrun sets is confirmed by laboratory tests that reveal that batteries alone provide steady, noiseless "B" current, taking nothing from and adding nothing to radio reception. Batteries, and batteries alone, provide pure DC (Direct Current). Only such current can give the best results of which a set is capable.

Battery Power is dependable, convenient and reliable, under the user's sole control, ever ready to serve when the set is turned on. As "B" batteries approach the end of their usefulness, a slight drop in volume gives warning in ample time. No one need ever miss even a single concert from a battery-equipped set.

Not only in results, convenience and reliability are "B" batteries unequaled, but they are also unapproached in economy, provided, of course, the correct size batteries are used. That means the Heavy-Duty type for all receivers operating loud speakers, as most do nowadays. Smaller batteries are not as economical, though they give the quality advantages of Battery Power.

Those are the fundamental

facts about radio batteries, as given to the public in our April advertising. That it will have a tremendous influence on battery sales is evident. Stock up on the Eveready Layerbilt "B" Battery No. 486, the best and most economical "B" battery ever built. Order from your jobber.

NATIONAL CARBON CO., INC.

New York San Francisco

Atlanta Chicago Kansas City

Unit of Union Carbide and Carbon Corporation

Tuesday night is Eveready Hour Night
—9 P. M., Eastern Standard Time

WEAF-New York
WJAR-Providence
WEEI-Boston
WTAG-W orcester
WFI-Philadelphia
WGR-Bufjalo
WGAE-Pittsburgh
WSAI-Cincinnati
WTAM-Cleveland
WWJ-Detroit

Lastern Standard I in

York WGN-Chicago

wGC-Davenport

wcco St. Paul

bhia KSD-St. Louis

wRC-Washington

wox-Schenectady

whas-Louisville

wsm-Nashville

wmc-Memphis



Three Styles Adapted to All Radio Sets:

Radi-"A" may be operated from any 110-volt A.C. 50 or 60 cycle electric power line. Radi-"A" 6 Volt Standard is for use with radio receivers of 4 to 8 quarter-ampere tubes inclusive. It develops a 6-volt direct current of 2 to 2-3/10 amperes. Radi-"A" 6 Volt Special is for use with sets of 8 to 10 quarter-ampere tubes inclusive only, and develops a 6-volt current with a maximum output of 3 amperes. Radi-"A" 4 Volt is made for any set using up to 12 No. 199 UV tubes inclusive.

See the BASCO line at the R.M.A. 1st Trade Show, Stevens Hotel, Chicago, June 13 - 18, 1927.



Radi-"A" Sales Are Still Going Strong

RADIO dealers have found that the market and season for Radi-"A" is not closely limited by the sale of new sets. Radi-"A"s are being sold right now, not only to purchasers of sets but to those who own a radio and are tired of the fuss and bother of an "A" battery and charger.

Radi-"A" replaces both the "A" Battery and Charger. It is not a combination trickle charger and battery. It takes 110-volt A. C. current directly from the household power line and, by passing it through a transformer, rectifying tube, electrolytic condenser and choke coil, converts it into smooth, direct current of suitable voltage to operate the radio at peak efficiency always. Current flows into Radi-"A" only while the radio set is in actual operation—there is no trickle charge during idle periods. Radi-"A" never runs down—its voltage is uniform and constant.

It is entirely automatic in operation and makes "B" Eliminator automatic also. Radio set switch controls both instruments.

Satisfactory Radi-"A" performance is guaranteed, and so is the instrument itself, as a mechanical unit. It is the product of a thoroughly responsible, long estab-lished concern, nationally known as a producer of dependable electrical and automotive equipment. There's a good profit for you in the sale of Radi-"A" in your territory. Ask your radio jobber about this instrument—or write us for details.

BRIGGS & STRATTON CORPORATION WISCONSIN

Radi-H"
Replaces
A Battery and Charger



Radi-"A" telps you sell more radio sets and nets you a double profil per sale—one on the radio set, one on Radi-"A"

Power from Light Socket Without Battery

ATWATER KENT RADIO



With more than a MILLION SALESMEN

What sells more Atwater Kent Radio than anything else? Performance in the homes of owners. Neighbors look, listen, ask questions—and join the parade to the Atwater Kent dealer's store.

Isn't that your experience?—"One person hears it in another's home and that's the way Atwater Kent Radio is sold."

So every Atwater Kent Receiver is a sure-fire salesman—and there are more than a million of them on the job.

Think what this means in your town, think what this means to you, if you are an Atwater Kent dealer.

In the business of selling, is there anything like having a product that makes friends wherever it goes?

Write for illustrated booklet of Atwater Kent Radio
ATWATER KENT MANUFACTURING COMPANY
4733 WISSAHICKON AVENUE A. Atwater Kent, Pres. PHILADELPHIA, PA.

EVERY SUNDAY EVENING:—The Atwater Kent Radio Hour brings you the stars of opera and concert, in Radio's finest program. Hear it at 9:15 Eastern Time, 8:15 Central Time, through:

WEAF New York WOC	1 4	· Davenbort
WEEL Boston KSD		St. Louis
WRC Washington WWJ		. Detroit
WSAI Cincinnati WCCO .	M_{I}	pls. St. Paul
WTAM Cleveland WGY	- 4	Schenectady
WGN Chicago WSB		- Atlanta
WFI Philadelphia WSM		. Nashville
WCAE Pittsburgh WMC .		. Memphis
WGR Buffalo WHAS.		. Louisville



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Associate Editor
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Radio Retailing The Business Magazine of the Radio Industry

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New Radio Parts Announced This Month

Editor Caldwell Takes Year's Leave-of-Absence

PRESIDENT COOLIDGE having on March 5th appointed O. H. Caldwell as the member of the Federal Radio Commission for the Eastern District, Mr. Caldwell was given a full leave-of-absence by the McGraw-Hill Publishing Company, effective with that date. He has been freed of all editorial and publishing responsibilities, in order that he may devote his energies and attention to the Commission's work in solving the radio tangle—an opportunity for vast immediate service to the American public and to the radio trade and industry.

WE OF the McGraw-Hill Company see Mr. Caldwell's selection by President Coolidge as a recognition of the radio industry and the radio industry's interest in the solving of the great problem of broadcasting.

For no institution or organization anywhere in radio today is in such intimate touch with the radio industry and trade as *Radio Retailing*.

Its readers include the 28,000 radio dealers, large and small, from coast to coast, as well as the hundreds of jobbers who serve them. These men make up the fring line of radio's actual contact with the public.

firing line of radio's actual contact with the public.

On the business side, Radio Retailing has as its friends and advertisers the great body of independent radio manufacturers, little and big, who are creating radio for the American public.

As a publication, Radio Retailing's support and future are therefore dependent upon its continuous impartial serving of every shade of interest among these thousands of radio business men.

Radio Retailing itself is, of course, absolutely independent in ownership and in management, owing no dollar to any individual, group, or company, and has no obligation except to the industry which it serves. Its entire ownership is vested in the McGraw family and the employees of the company.

* * *

DUE to Mr. Caldwell's appointment, therefore, there is on the Radio Commission during the critical first year a man who intimately and broadly understands the trade's problems, both technical and commercial.

Incidentally, Mr. Caldwell's 17-year record as an independent thinker and journalist in electrical and radio matters, gives unique force to his avowed purpose to act solely in the best interests of the listening public and the whole radio industry, including every group and shade of opinion,—in the work of straightening out the radio wavelength situation.

JAMES H. MCGRAW, President, McGraw-Hill Publishing Company.

Member Audit Bureau of Circulations

Circulation 30,000

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WASHINGTON, D. C., Colorado Bldg, CHICAGO, 7 South Dearborn St, PHILADELPHIA, 1600 Arch St, CLEVELAND, Guardian Bldg. ST. LOUIS, Bell Telephone Bldg. SAN FRANCISCO, 883 Mission Street LONDON, E. C., 8 Bouverle St.

Have you started your



Following the suggestion of "Radio Retailing" in its March issue, many dealers have embarked on campaigns to check up every set in town in order to sell more accessories

ROM reports reaching this office, this plan is meeting with widespread success in selling new accessories of all types

Have You Started Yours?

For articles on this subject in this issue, see Pages 38, 41 and 57

APRIL 1927



Independent Journalism and what it means

To be completely independent in thought and action—

To be responsible only to the best interests of the American public and the whole radio industry—

To be absolutely fearless in editorial policies—

To be subservient to no individual and no company and no advertiser-

To refuse to be dominated by politics,—trade or national—

To owe no dollar to any commercial interest, and to owe no allegiance in any quarter but to its own conscience—

To offer its pages freely for the expression of every shade and kind of opinion bearing on industry problems, whether such expressions agree with the editors' policies or not—

To serve its field and its readers faithfully and to the best of its ability—

To fight for what it believes right and not to stop fighting until the fight is won—

HESE are some of the high principles upon which Radio Retailing and the Mc-Graw-Hill Publishing Company are founded.

They are the principles of independent journalism that have been laid down by the President of the company, James H. McGraw, during 42 years as an independent publisher, and they are the principles which have been

strictly carried out by every one of the McGraw-Hill publications, including Radio Retailing.

The McGraw-Hill company and the McGraw-Hill publications are built on this broad foundation of independent journalism and to these high principles Radio Retailing is perpetually dedicated.



sales argument. To the dealers who carry musical instruments, such as pianos and phonographs, there is no need to point out this fact. Other dealers-and they are in the

majority-do not seem to be sufficiently aware of it. Instead of concentrating their sales efforts on performance, they lose themselves in a maze of details of construction that fail to interest the average

radio prospect. What the average listener wants is good music.

Without it, of what use is a radio set, in the long run? Its mechanism and appearance are interesting, of course; but not half so interesting to the prospect as what he can get out of it. And by that he means in most cases music. But how many dealers realize what the faithfully reproduced, into the home broadcasting stations are doing to supply this popular demand? Do they know that the musical programs of the principal broadcasting stations of the entire country are prepared by scholarly musicians, are

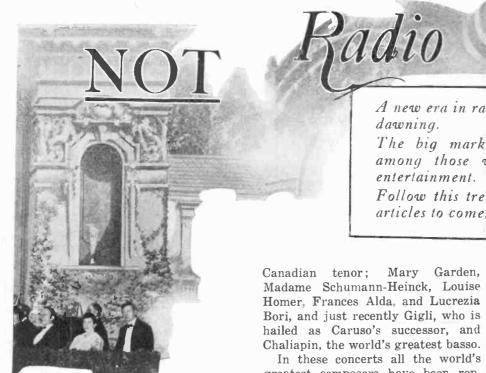
the greatest artists, and that they embrace all that is best in modern and classical music in a wide range from opera and highly orchestrated compositions to the simpler popular ballads and dance music?

Like its predecessor, the phonograph, radio has had to pass through that stage where it was regarded as a curiosity and where anything passed muster. That stage has long since been passed. Today it brings the world's best music, of every radio owner. Entire operas, symphony orchestra concerts, vocal and instrumental recitals are heard in the living room just as clearly and perfectly as if the listener were actually in the opera house or con-

played and sung by cert hall. Splendid dance music is furnished for the dinner and supper hours, and in fact throughout the whole evening, so that it is possible to have a home dance almost any night.

In the operatic field, during the past year, most of the famous musical dramas, complete except for the dialogue, have been heard by radio audiences. In this list vere Faust, Pagliacci, Cavalleria Rusticana, Lohengrin, Forza del Destino, Traviata, Aida, Marta, Trovatore, Der Freischütz, Samson and Delilah; Massenet's Manon, Mignon, Rigoletto, Favorita. These performances were well sung, and had excellent orchestral accompaniment. The singers and the conductor were artists of international reputation.

These operas were enthusiastically received by radio listeners, as the letters of appreciation that poured into the broadcasters give overwhelming proof.



Opera was not the only musical treat prepared for the radio listener. Our magnificient symphony orchestras, of which there are thirteen in this country, broadcast their wonderful programs. The members A new era in radio merchandising is dawning.

The big market of the future is among those who seek primarily entertainment.

Follow this trend in this and other articles to come.

Canadian tenor; Mary Garden, Madame Schumann-Heinck, Louise Homer, Frances Alda, and Lucrezia Bori, and just recently Gigli, who is hailed as Caruso's successor, and

In these concerts all the world's greatest composers have been represented: Verdi, Wagner, Tosti. Gounod, Leoncavallo, Mascagni, Rossini, Donizetti, Chopin, Liszt, Bellini, Boito, Bizet, Mozart, Handel, Haydn, apart from these, on every

Dowell and a host of others. Celebrated concert artists of national and international repute have also appeared before the microphone to bring delight to millions of listeners.

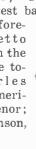
These extraordinary features have been occasional. but not less frequently than once or twice a week. But,

of these organizations are skilled musicians, each one of them being a professor of the instrument he plays, and their leaders are recognized au-

thorities in the musical world. Then there have been concerts by the outstanding stars of the lyric stage, men and women, vocalists and instrumentalists, who draw crowded halls wherever they appear. We need mention only a few: John McCormack, the world's greatest concert tenor; Titta Ruffo, the world's greatest baritone; Giuseppe

de Luca, the foremost Rigoletto and Figaro on the operatic stage today; Charles Hackett, America's leading tenor; Edward Johnson.

Johann Strauss, Meyerbeer, Wolfe-Ferrari, Granados, Gluck, Offenbach, Brahms, Bach, Mendelssohn, Beethoven, Schubert, Fauré, Chaminade, Grieg, Saint-Saens, Debussy, Sullivan, Balfe, Purcell, Mac-







On these pages are some programs that show the wide range of music heard over the radio. The following selections were taken from a single

OLD TIME MELODIES

Ben Bolt Love's Old Sweet Song Listen to the Mocking Bird Alice Where Art Thou? Silver Threads Among the Gold Asleep in the Deep When You and I Were Young,

Maggie The Old Oaken Bucket Drink to Me Only with Thine Eyes

Sally in Our Alley Annie Rooney

When the Harvest Days Are Over, Jessie Dear

night there have been vocal and instrumental recitals of more than ordinary excellence. And not only one concert, but several high-class ones. Variety has been the characteristic of these concerts.

In one evening, through just two large metropolitan stations, the following musical gems were sung or played:

Hansel and Gretel, Humperdinck's fairy opera; Liebestraume, Liszt; The Nocturne-Midsummer Night's Dream, Mendelssohn; Songs My Mother Taught Me, Slavic Dances,

Largo from the New World Symphony, Dvorak; Babes in Toyland, Kiss Me Again, Gypsy Love Song, Victor Herbert; Invitation to the Waltz, von Weber; Blue Danube Waltz, Emperor Waltz,

Voices of Spring, The Gypsy Baron, Johann Strauss; Hymn to the Evening Star-Tannhaüser, Wagner; La Paloma, Yradier; Intermezzo, Cavalleria Rusticana, Mascagni; Airs from Pagliacci, Leoncavallo; The Messiah — Oratorio, Handel; Largo, Handel; Air for G-String, Bach; Marche Militaire, Schubert; Song

Without Words, Chopin.

RELIGIOUS PIECES

Pilgrims' Chorus—Tann-häuser Wagner Onward Christian Soldiers

Abide With Me

Inflammatus Cujus Animan { Stabat Mater Rossini

Lead Kindly Light Newman Rock of Ages

The Messiah—He Shall Feed His Flocks Handel

Nearer My God to Thee The Palms Faure

The Old Hundred My Heart Ever Faithful Bach

Eli, Eli

Jahrzeit

Elijah—If Ye With All Your Hearts Mendelssohn

nograph records of the numbers played would run into hundreds of dollars. To attend personally the opera or a concert every night would entail an expense too heavy for most people's pocketbooks. Standing room at the opera and symphony concerts costs about \$2, and space is very limited. Orchestra seats cost as high as \$7 at the opera and slightly less in the concert hall. But radio has made opera and symphonies accessible to every one at a slight cost.

The broadcasting stations may well be proud of their achievements. Within the short space of a few years they have set up a high

> standard of musical performance. Their programs are selected with expert care by thorough musicians such as Maestro Cesare Sodero of WEAF, Joseph Bonimé of WRNY. The radio public, be it said, has had no small share in this change for the better. Their request have been for the better type of music.

The progress so far made has been noteworthy. But we are still only at the beginning of greater advances.

in concerts.

To attempt to compute the dollars' and cents value of the wonderful

entertainment radio provides every In the course of the same week, two day would be a lengthy task. Pho- Elman, Gigli and De Luca-what a

celebrated orchestras, the What may we not expect when such New York Symphony an authority and leader in the field and the Boston Sym- of music as Walter Damrosch gives phony, were also heard up active directorship of a great orchestra to devote his time to radio? Some idea of future programs may be gathered from the opening presentations of this year. John Mc-Cormack, Rosa Ponselle, Mischa

group of artists, sought by musiclovers the world over! The United States has thirteen great symphony orchestras, maintained at a high standard by societies of music lovers who make up the annual deficit by private contributions. During the coming year, most of these will be heard more frequently on the radio. The New York Philharmonic Orchestra is to broadcast 12 concerts.

Concert stars, too, will appear in greater numbers. For the professional singers, radio opens up a new field with un-

limited possibilities. They will not slight these appearances; rather, spurred on by the vast audiences of unseen listeners, they will give of their best.

All this is certain to react on the musical taste of the whole nation. This reaction will be shown in an increasing number of native vocal and instrumental artists, and in the

rise of more great American composers. That such a result is possible is the firm conviction of Walter Damrosch and other authorities who have followed the fortunes of the radio for the past few years. In fact we seem to have a new operatic composer in Deems Taylor whose 'The King's Henchman" has scored heavily at the Metropolitan Opera, New York.

Music, then, it seems to us, is the

"Radio Retailing" "Radio Retailing" acknowledges the courtesy of the Vitaphone Co. for some of the pictures on these pages.



OPERATIC NUMBERS

OPERATIC NO....
William Tell—Overture
Rossini

The Prize Song—Meister-singer Wagr

Voices of Spring
Johann Strauss

Meditation-Thais Massenet

Verdi

Wagner

Flotow

Mascagni

-Tann-Wagner

Gounod

Celeste Aida—Aida

M'appari-Marta

Intermezzo

Jewel Song

Cavalleria Rusticana

Elizabeth's Prayerhäuser

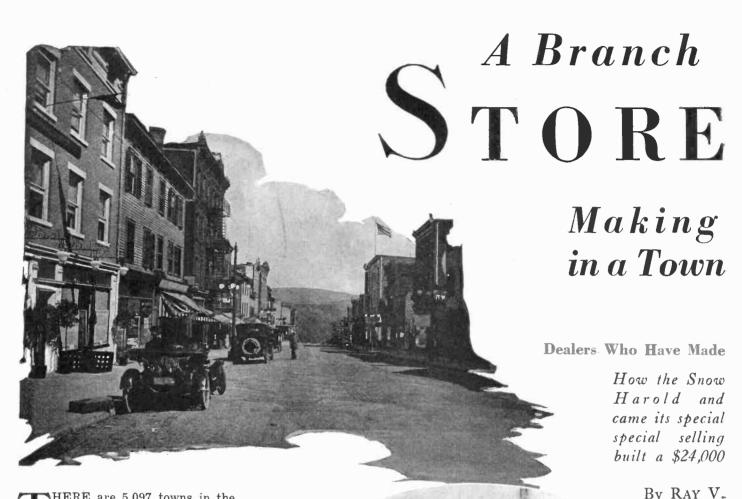
basis of dealers' most effective sales talk. It supplies just what the public is looking for. Speeches, sporting events, educational features, have a certain interest, but it is confined to a definite period or class. It is not universal or permanent. Music, on the other hand. fits in with every mood. It is the universal language which everyone understands. And that applies particularly to prospec-

tive ouyers of radio. They want music and must be shown that radio fills this want. Music supplies the dealer's most convincing argument. But how to get it across?

By capitalizing the musical programs. The dealer should keep in touch with what is being broadcast from his local station, and call the attention of his prospects to the best

features. Such features are announced many days ahead, so that the dealer has plenty of time to tie in his ad-





HERE are 5,097 towns in the United States having a population of between 1.000 and 10,000. Of this number 4,358 range from 1,000 to 5,000. Sheldon, in the heart of the corn belt of Illinois, belongs in the latter classification.

Harold and Gordon Snow are smalltown boys. They were born and raised in Sheldon. They love their little town and intend to make it their home and to build it up. But this has not caused them to fall into the rut of self-contentment so frequently found among rural folk.

Before throwing the analytical searchlight on the reasons why the Snow brothers were able last year to do a business of \$24,000 in radio, at a net clear profit of \$2,640, let's see what manner of men these are that have apparently licked the problem Dempsey fight pictures over an unof the small town.

The Snow boys are, without doubt, two of the most interesting personalities in the retailing field of radio today. First, there's Harold, the older of the two, now in his twentysixth year. An entomologist — a collector and breeder of rare and exquisite butterflies, also a student of adopted by one of the largest printvaluable stamps, a philatelist of no ing shops in the country. Gordon you may say. flyers, who brought the Tunney- stationery, order blanks and sales

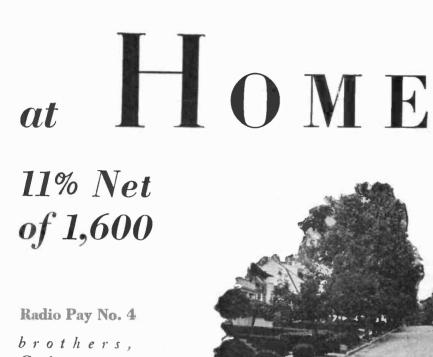
charted route that stormy night in September from Philadelphia to the Herald-Examiner, Chicago, can be so called, then Snow is all of that.

Then there's Gordon, now twentytwo years old. Gordon, at the age of twelve, invented an embossing process for use by job printers since mean ability. Slightly effeminate has a completely equipped little Yes, if a man who printing plant in the basement of owns five aeroplanes and trains stunt his home and prints all the forms,

promotional literature used by his concern, the Sheldon Air Line Company.

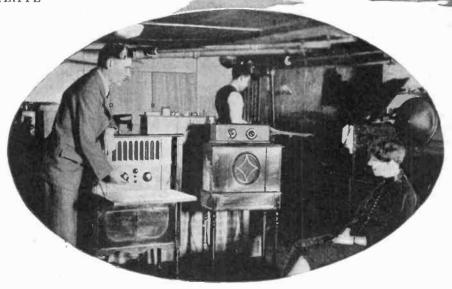
Harold trains the salesmen, sells the big fellows and attends to the buying. Gordon does the printing and promotional work, superintends the servicing, runs the books and

Five years ago these adventurous spirits entered the radio business. Their problem in Sheldon was to make a worthwhile living on the limited gross volume of the small town and its contiguous territory.



Graham, overproblems with policies and yearly business

SUTLIFFE



"There were two things that were immediately necessary," Harold told us. "First, to hold expenses to the minimum; second, to corral every possible bit of radio business from our territory."

Here, in a brief paragraph, is the way these two brothers adapted their business to the small town conditions which they faced.

"Why should we have a full-time store on Main Street in this town and county, where everybody knows us as aviators and radio enthusiasts, when we have a large home with a

splendid basement?" Harold continued

Following this idea they rented a very small, inexpensive store which is open Wednesday and Saturday afternoons and evenings only. This to catch the farmers who come to town on those days. The rent is \$15 a month. The clerical hire is zero. This compromise plan has reduced "occupancy expense" to less than 2 per cent of gross sales. The average occupancy for electrical dealers is between 3.5 and 4 per cent. The townspeople and country folks who

are thinking about radio like to visit the Snow boys' comfortable basement and there talk radio, undisturbed by street noises. They enjoy the hospitality of these interesting fellows whose courteous treatment of salesmen as well as of buyers is a by-word throughout Iroquois County.

Another saving of greater magnitude than that on rent is due to the Snows' policy of combining sales and service. During the four busy months five outside salesmen working on a 10 per cent straight commission basis are expected to service all sets they sell. They are trained to recognize such common and comparatively simple troubles as defective or run down tubes and batteries, faulty contacts, and improper tuning. If they cannot correct the complaint they bring in the set for a shop test or replacement. The field men receive no compensation for this work.

"How do you get away with it, Gordon?" we asked the junior member of the firm.

"It's easy," he replied, "these service calls give the salesman a chance to sell extra supplies and accessories, oversized batteries, chargers. It's a poor man that can't average \$2 in commissions every other service call."

This plan relieves the firm of that

great and costly drain on the average small town radio dealer—personal servicing by the owner of the company. It gives these boys added time for supervision and sales promotional work.

Although the outside men receive a commission of 10 per cent, the total selling expense for 1926 was only 13.5 per cent of gross sales. This included a total drawing account for the two brothers of \$2,000. Because minor servicing does not eat up their time—even though no service man is employed—Harold and Gordon closed over 60 per cent of last year's orders themselves.

The servicing policy of the Sheldon Air Line Company differs from that of most radio dealers in that it does not service sets sold by other radio dealers. As the Snow boys have a well-established reputation as radio experts, people hesitate before buying a set from a smaller and less informed dealer. This firm attributes 20 per cent of its business to this policy. Furthermore, it saves valuable time for selling and servicing

its own sets, which would otherwise be lost trying to satisfy customers of some other dealer.

These salesmen spend much of their time selling radio. They average about \$28 a week in commissions

By their administrative sales and servicing set-up, by their "store and home basement" policy and by their publicity equipment, these two brothers have managed to lop off one or two per cent from these vital expenses. But economies, necessary as they are with a small-town business, will not produce volume net profit in dollars if the gross is not there.

To build up this necessary gross, Harold and Gordon comb their territory for fifty miles around for prospects. They do it with five commission salesmen and publicity. There is no one outstanding idea accountable for this volume, rather it is the composite effect of a number of sales policies.

The salesmen, for example, are local fellows who know a great many people. They are, as a rule, boys not otherwise employed. Some are home from school, boys who are living with their parents and have not yet established themselves in business.

These salesmen spend much of their time selling radio. They average about \$28 a week in commissions during the four busy months. This is not big money, but it is a sufficient incentive to unflagging sales efforts. There are many potential salesmen of this type in every small town. They have the brains and may easily be trained to sell and service.

The Snow brothers make constant use of advertising in boosting their volume of business. They place special confidence in direct mail promotional letters which they tie up with holidays, events, programs of national importance, farm lectures and other occasions of particular interest to people in their district. Three days prior to such events sales letters are mailed to a large list of prospects calling attention to the events. The response is always gratifying.

The following letter, mailed last June to 860 selected prospects produced 18 inquiries and six orders:

Dear Sir:

The gardens are fine now, aren't they? The best thing about it is that we do not have to buy all the food we eat. Long days and no coal worries. Expenses are certainly low at this time of the year.

Have you ever thought of buying a Radio with its thousands of hours of entertainment and that this is the time of year to do it? The money that you would put into radio NOW will not be missed. Thirty cents a day buys a radio set for you and yours. It is very easy to spend that much a day on things that might give you enjoyment and pleasure for the moment only. This same amount spent on radio means hours of the finest entertainment obtainable through the long, cold, dreary hours of the Winter.

In a few months your mind will turn toward Winter preparations, Christmas, with its drain on your pocketbook, for example. The finest thing that you can possibly do is buy a Radio NOW when you will not miss the small amount invested. The 1926-27 new models are in stock and may be installed and paid for in easy payments by Christmas time.

Don't say this Winter, "I want a Radio, but with my coal bills and heavy holiday expenses, I can't buy it." DO IT NOW. Phone 193 and a salesman will call and explain our easy payment offer or stop in at our store or call at our house.

Yours very truly, SHELDON AIR LINE, Per Harold B. Snow.

Here is another little plan that has accounted for \$2,400 worth of business. If a farmer wants a radio but

Please turn to page 40



April 20th, 1927.

Dear Sir

Do you know what great day Sunday, May 8th is, this year? MOTHER'S DAY. Remember Mother. Give her a gift that will be useful and a pleasure every hour. Have you really ever tho't seriously of the trials and tribulations that your Mother went thru in order that you might be what you are today?

MOTHER does not get out to enjoy the pleasures that you do. Give her a Radio so that she may fill in the long hours between Breakfast and Dinner, between non and night, after the supper hour. Recipes for good things to eat, talks by women, great in their line, talking on subjects of interest, Opera Stars, fine music.

Did you ever stop to think that with your line of work you are bro't in contact with other people, activity, a change and when you go home at noon someone has your dinner, when you come home at night some one has your supper. It took time and work to prepare those meals and housework is very confining and hard.

Many Sunday mornings are disagreeable or MOTHER cannot get a nice meal for noon or night and go to Church. Radio offers great Sermons by great men in the comforts of your home.

A constant program of the finest talent of any nature that might be desired is at the finger tip.

 ${\tt MOTHER}$ is always thinking of others. MOTHER gets tired and lonesome.

Remember with Radio. We carry a large complete line with Service. $% \left(1\right) =\left(1\right) +\left(1\right) +$

MOTHER'S DAY, SUNDAY, MAY EIGHTE

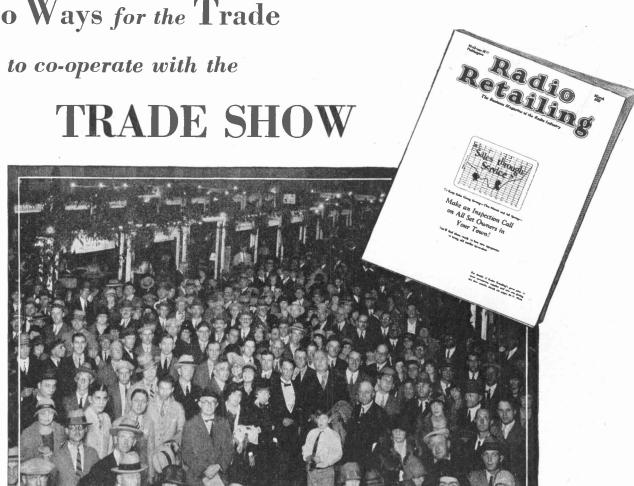
Yours very truly.

HBS-PLO 4

Per Molos Duras

Selling letters are mailed to a large list of prospects three days prior to any event which calls for radio. Mother's Day, programs of national interest, crop harvest or Winter's leisure—all provide rich material for a timely reminder letter. Notice the distinctive letter head. This is a business asset.

Two Ways for the Trade



HE radio industry's first trade show is scheduled June 13 to 17 at the Stevens Hotel, Chicago, during the annual convention of the Radio Manufacturers' Association.

The first and best way for the trade as a whole to co-operate with the show is, of course, for every dealer, jobber and distributor to attend who can possibly do so.

The second way is an idea which may, or may not, be practical but is presented to the trade for what it is worth. It is just this-

Many distributors have, in the past, conducted contests for their dealers, awarding prizes to the ones who sold the greatest amount of merchandise between certain specified dates.

Why not apply the same idea at this time, making the dealers' prizes free trips to the trade show, all expenses paid? If put into practice immediately, and the contest run, say, between April 15 and June 1, it would insure an even greater attendance from all parts of the country than is now expected.

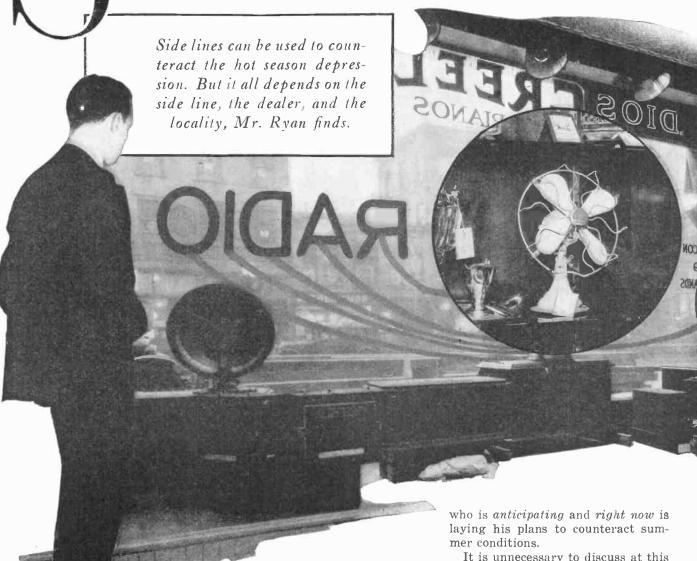
The Trade Show Number of Radio Retailing

O CO-OPERATE with the trade show the June number of Radio Retailing will be designated as the "Trade Show Number," and will present, so far as it is possible to do so on paper, a trade show in miniature for the benefit of the thousands of dealers who will be unable to attend the show at Chicago.

Several unusual editorial features are planned for

this issue and the editors take this means of asking manufacturers to co-operate with us to the fullest extent by filling out and returning to us promptly all blank forms which they may receive asking for information concerning their products, and also by sending us promptly any photographs of their new lines which may be requested. Editorial forms for this issue will close May 10th.

ummer Side Lines



ILL the "side line" produce a profit for the radio retailer? Some certainly should and others just as surely will not. It seems to depend upon the side line—and the dealer—and the local situation.

At times it appears as if there is altogether too much "scare" talk about a "summer slump" in radio. Of course there is a natural lessening of volume during the "dog days," but that is not so utterly foreign to other retail lines as well, always excepting the purely seasonal ones that are at their height during the summer weather

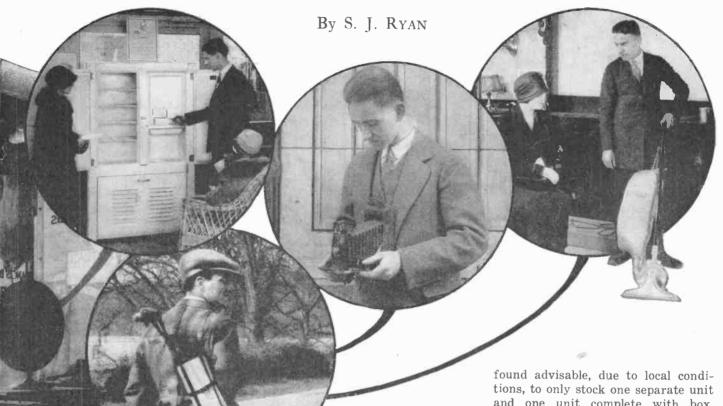
And right in that one sentence seems to lie an advantage peculiar to the radio merchant as distinguished from some of his fellow merchants who also have to face the seasonal drop in retail activity.

We are referring to the fact that in many *specialty* lines there are great undeveloped opportunities awaiting the keen and active dealer It is unnecessary to discuss at this time seasonal slumps in other retail lines. This subject has been treated quite profusely in the past in *Radio Retailing* through means of charts and statistics.

THERE are two things that stand out in successful retail operations: the necessity of offering the public a continuity of service, (thus making impractical the closing of a business and a consequent temporary reduction of certain expense as is sometimes done in a manufacturing line and the undeniable fact that the successful retailer is nearly always the most successful opportunist.

The latter, of course, is not meant in any sense of disparagement—but rather that he is the merchant who most keenly understands and values

as Producers of PROFIT



the element of time and timeliness in retailing which is certainly as important a factor there as it is in finance.

It is evident, therefore, that the side lines which offer high seasonal activity during the summer mobility in the matter of stock investment and are more naturally adapted to the specialized nature of the radio merchant, are the ones which should be preferred.

AMONG such lines, in the importance of their general advisability to the radio dealer, we list electric refrigeration, electric fans, major electrical appliances such as washing machines, vacuum cleaners and ironers, electric fireless cookers and ice cream freezers, cameras including the portable "movie" types and possibly, sporting goods in such sections as summer resorts.

In the opinion of this writer, based on experience and substantiated by inquiry amongst the general trade, electrical refrigeration offers the most promising opportunity as a radio side line for the summer of 1927. One reason is because it is a

specialty lending itself quite perfectly to the present set-up of the radio merchant. Secondly, it requires a very small investment and very frequently today can be secured through his present jobbing connections.

It is, of course, at times difficult to make a generality fit a definite situation, but the radio store of average size could stock a refrigerating unit and one small and one larger unit complete with boxes at a total investment of about seven hundred dollars at cost.

On such an investment he would average a gross retail margin on sales of 30% to $33\frac{1}{3}\%$, in some cases a little more or less, but that would be his total investment and risk in electrical refrigeration! and one unit complete with box.

The undeveloped possibilities in electrical refrigeration are tremendous and well understood. I unhesitatingly recommend it as the "best bet" among the radio side lines for all around desirableness. Your service man should prove competent to handle the service on refrigerators and you should be able to go out and sell refrigeration in summer if you can sell radio in winter.

LECTRIC fans we have placed second in desirability because of their seasonal character, small investment requirements, and low sales expense. The section of the country will, however, have to determine their advisability as a side line for the radio dealer. I have seen summers up in Michigan when we would only have a half dozen "fan days" all summer, but down in the warmer sections they are a big summer item. The dealer will have to consider his territory.

The average radio dealer could secure a sufficient stock of fans for not over two hundred dollars at cost, representing some three hundred dollars in retail value. He should, however, be careful to select a jobber Furthermore it would frequently be or distributor who has the reputation of stocking assortments. Such an investment would give him a small but balanced stock of fans retailing at from around \$3.95 up to \$15 or \$20, and he could feel at his ease if he knew his distributor was backing him up with stock. The average discount to the dealer on fans today will be around 33½% from retail.

Next in order are washing machines, sweepers and ironers. There are a number of objections to this side line. They are not really seasonable summer items but they are at least in more staple demand during that season than radio mer-

chandise. The point of saturation in use is much higher, of course, than in refrigeration and the competition well organized as a rule. They are not store merchandise, not small store merchandise in summer at least, and would have to be sold much like refrigerators.

The investment need not be so great, however, and risk of capital would be in proportion. Your jobber or distributor probably carries this class of goods and your stock need not consist of more than two washers, or possibly three, costing around \$100 each, one ironer costing another \$100 to \$105 and a minimum order of four cleaners costing \$27 to \$33 each. These costs average 331% to 35% of the retail prices. The service man could usually deliver and set up the washers and ironers-there is practically no service on sweepers.

Electric fireless cookers and ice cream freezers are really good items, much more so than is generally recognized and in many places have been very successfully campaigned. An electrical jobber or distributor pretty well covered, however, between know something about!

that would link up a bunch of live the present outlets and as a temwire radio dealers, could put out a porary side line is only recommended large quantity of either of these under exceptional circumstances. devices and the investment to each dealer would not be great. The average discount to the individual dealer would be about 35% to 40%, with some arrangement for handling the paper. Inasmuch as the electric cooker is a splendid load builder, the local central station company might be glad to tie in with the idea. They are readily salable, when properly demonstrated, as the purchase price is not high. The average cost of retail are good, averaging better merchandise to each dealer under than 40% for the whole line, but the

To Keep Business Going During the Summer

THE radio retailer, Mr. Ryan says, might take on as a profitable sideline requiring a very small stock investment any one of the following goods:

Electric refrigerators **Electric fans** Washing machines Ironers Fireless cookers

Ice cream freezers Vacuum cleaners Cameras, including portable "movies" Sporting goods

only \$100 to \$150.

The average run of small electric appliances, if carried only temporarily, is not advocated. The stock at this time of the year is out of proportion to the selling value, otherwise you are out of too many items.

Cameras and camera supplies are not a bad item, if you understand them and have an exceptional location where there is much bathing or picnicking, etc. Arrangements can always be made with a local finisher to take care of developing and printing orders, but the investment, to carry a good range of machines and supplies would run up to about \$2,500 at cost, with a discount from retail prices averaging 33½%. This field is

Much the same as the foregoing is even truer of sporting goods. In these lines you have tennis, golf, baseball, fishing, bathing, boating, etc. Personally I cannot see any success for the radio merchant here. The investment would run into thousands to do a competitive job and it is too general a proposition for a specialist, unless he is a sporting goods specialist. The discount from

result is doubtful.

Portable phonographs lend themselves very splendidly to a radio shop and a stock of a half dozen is ample. The discounts from retail prices are 40% and even a little better than that on some lines. The total investment here in machines would only be \$100,

some such arrangement would be but what about your records? A good many hundreds of dollars there, no matter what they tell you.

> I think that the foregoing paragraph illustrates the whole psychology of summer side lines. You have to be mighty careful or the first thing you know one article leads to a demand for another and you end up with a large inventory-and there The sideline are your profits. choosen should be strictly adhered to.

A good summer program for the live wire radio dealer would be: First, develop my service and inspection department to its limit; Second, only a side line with a very limited stock investment, a good gross margin of profit, a distinctly hot weather appeal and something I

You Are Selling Music (from page 29)

vertising with them. His advertising in the local papers should carry the announcement, with pictures of the artists when possible. And in these advertisements he should not fail to emphasize the music that his line of receivers will reproduce faithfully. His windows should have a well-printed conspicuous sign calling attention to the program, with photographs and facts might obtain permission to demon- continue to make radio popular.

about the artists. To be sure he strate his sets at dances or meetings. reaches all his prospects, he might well notify them by direct mail.

For such gala occasions a loud speaker outside the store will attract large numbers and make many converts to radio. If his store is large enough, he might send invitations to prospects to listen in, at his place

And finally: in season and out of season, talk music. It's the dealer's best argument. But too many dealers do not seem to realize this fact. They describe the power, the beauty, the simplicity, the tone and every other detail of construction. Music made the phonograph popular, and will keep of business. If he is enterprising, he it popular; music is making and will

Advertising RADIO on MAY DAY



radio music, broadcast especially for the eccasion from the local station, WOAW.

THIS is an idea which may profitably be used this year by organizations of dealers, or individual merchants in other localities. May Day is not far away and schools are already preparing their programs. Find out how you can make radio tie in with these plans as indicated by the photos on this page.



city parks where exercises were held and the children denced to the tunes of





ion of the Pickett brothers, owners of the Pickett Service Com-

pany, Terre Haute, Ind., whose entire business has been built up through calls on their local radio set owners.

The Pickett brothers built their radio business from nothing at all, on an idea and enough initiative to carry it out. They established a radio service business and started it off by making personal calls on everyone they knew who owned a radio set.

They found, on making these inspections, or check up calls on set owners, that they could sell accessories. Then they discovered they could get many leads for the sale of sets from these service customers. The natural sequence of events was to establish a full-fledged radio sales business in a regular store.

One day, while in Terre Haute, the writer passed a window with an attractive display of radio sets and accessories. This was not unusual, and I glanced in but casually, until the name caught and held my eye. It read Pickett Service Company. Not a word about radio, just service. I wondered if someone was building up a radio business on service. stepped inside.

The Pickett Service Company, I

found, had yet to celebrate its first conducted from their residence, but birthday but the two brothers who constitute the firm have been connected with radio for some years. The firm was started for just what its name indicates, rendering service to users of radio, and the fact that today, in addition to this portion of their business, they are selling sets, eliminators, speakers, batteries, in fact all sorts of radio equipment, is not due to their own plans, but is a natural sequence to their original business of rendering service to their customers.

HERE are some fourteen thousand homes in the city of Terre Haute. How many of them have radio sets it is impossible to say, but there are several thousand. All radio installations need service at one time or another. Properly handled it is a year-around business and the rapid changes and improvements in radio design and effectiveness, up to date, make this a most attractive field. This was the reasoning that led the Pickett boys to embark on the radio service business.

For a short time the business was and lead to more business.

soon the need for more room required larger quarters, and a store at a reasonable rental was secured in the heart of the business district, just one-half block from the main street. The accessibility of this location was one of the contributing factors that led to their decision to handle sets and parts other than those required in their servicing work.

About one-half the depth of the store is devoted to a display of sets, speakers, eliminators, batteries, etc., and the rear half and the balcony are used for the shop. At the present time five men are employed in the shop and outside service work, and Paul H. Pickett says that he could use two more men if he could secure them. In common with other radio merchants, however, he has found that competent service men, satisfactory in all respects, are difficult to find. He requires men of good habits and appearance who have a thorough grounding in the practice and theory of radio, and possess the sales instinct and tact to offer suggestions that will better reception



The bulk of their revenue is from service. This does not mean they do not sell radio merchandise, however, During the months of November and December last they sold a carload and a half of one make of loud speaker. But a significant thing is that the revenue from service takes care of all their expenses including the drawing accounts of the firm. The profit on retail sales is, therefore, "all gravy."

Paul Pickett is firmly of the opinion that the firm could keep going on nothing but service revenue, and that a sufficient business can be secured the year around to make it highly profitable. By this, of course, he does not mean merely the revenue from service calls, rebuilding sets, etc., but, in addition, the profit secured from selling speakers,

sories, the need of which develops naturally in a service job.

When the men go on a service call they are instructed to test the various parts of the installation and if any are faulty, or obsolete, to point out tactfully where the reception, and consequently the enjoyment from use of the set, can be improved through the installation of a speaker, power unit, etc. This, of course, must be done in a manner that will not only not be offensive but rather as a sort of "professional advice" to the customer. Properly handled these suggestions are received with interest and sooner or later result in sales.

T WAS not very long after the T WAS not very long was that establishment of the business that the Picketts began to receive calls from customers for parts and even entire installations. Naturally in many cases these involved a trading in of the old set. This called for a decision as to policy, and it was decided that only one model of a cer- fifty dollars and over. The terms

However, the Pickett company does agree to accept the customer's old installation and endeavor to sell it. For this service he charges a fee of from 20 per cent to 30 per cent of the selling price, depending upon the make, age and condition of the old set.

Up to date this has been found to be an arrangement satisfactory alike to the customer and the firm, and at the present time the firm has only two second hand sets in stock and these are of the model and make which is accepted in trade. This is one solution of the vexing "trade-in" problem which is rapidly becoming more perplexing in the radio business.

As long as the business was confined to a service basis it was handled in the usual manner, but when they began to sell sets, speakers, etc., that ran into more money, they were confronted with the time-payment problem. They handle their own time payment paper and this privilege is extended on sales of power units, batteries and accestain make would be accepted in trade. are 25 per cent down and the balance in ten equal monthly payments on the larger items and five months on the smaller ones. They use a typical time payment contract form and charge the usual carrying charge for the accommodation. Fully fifty per cent of their volume on sets, speakers and power units is on the deferred payment basis.

In the matter of accounts and records the Pickett company employs the services of a local accountant who works in a similar capacity for other firms in the business section. This man spends two hours a day on the books, and renders a trial balance each month.

One of the most interesting features of the Pickett success is the amount of business that develops through the voluntary tips and recommendations of old customers. An instance of this occurred while the writer was in the store. A gentleman came in to purchase a tube for his set. During a general conversation regarding his set, which took some fifteen or twenty minutes, he not only purchased the tube but a power unit also, and gave the salesman the names and addresses of two friends who were very much interested in securing sets." The Pickett Service Co. employs no exclusively outside salesmen. Much business comes from the suggestions of their service men when on service calls. Not less than fifty per cent of their new business on sets and major items originates through tips of this nature.

New business is followed up on dyed-in-the-wool radio the outside, of course, usually by a postcard is mailed earne of the firm. Another interesting feature of Pickett's selling course, Excellent resumethods is the extensive use of the from these postcards.

"A Branch Store at Home"

From Page 32

cannot afford to pay the average price of \$120, Sheldon Air Line sells him a second hand set as low as \$35. "Frequently within three days or a week from the time of the sale, he will be back again for a larger and better outfit and has managed somehow to arrange the funds for financing it."

In keeping with their policy of dominating their territory as radio dealers, the Snow brothers have donated aerial installations to every school, church and meeting hall in Sheldon and to many in surrounding towns. This aerial installation costs approximately \$8 to erect. At the lead-in binding post, they post a small metal sign which reads "Donated by the Sheldon Air Line Company." When a good program is on or when an organization desires the loan of a set, all that is necessary is to deliver the outfit and make the necessary connections. This is but the work of a moment. The advertising value and the opportunities for genuine leads from such a "stunt" are considerable.

telephone in soliciting orders. Loud speakers, power units, and even sets have been sold in this manner.

Advertising consists of an "ad" in the local Sunday paper, and another in a weekly appearing every Friday. They also have a list of some 500 dyed-in-the-wool radio fans to whom a postcard is mailed each month. The message is changed each time, of course. Excellent results are obtained from these postcards.

Another opportunity, frequently overlooked by most dealers, is capitalized by these boys. Traveling salesmen are received cordially. Their acquaintance is cultivated. Frequently, these salesmen buy minor electric appliances, which this concern also sells. "It is surprising," says Harold Snow, "the number of leads that these traveling salesmen will pick up for you if you treat them in a friendly way."

The Snow brothers have a low wave sending and receiving set and cultivate the "hams." Here is another source of prospects. These amateur radio operators have a wide acquaintance, both in their own town and at distant points. While it is true that most of these fans build their own sets, they frequently buy factory-made outfits. The Sheldon company sold a dozen sets last year to prospects whose names were suggested by brother radio operators.

The parting tip given us by Harold and Gordon was in effect as follows: "Always appear to be busy. If you receive a telephone call for service or from someone who desires information about radio, imply that there are a number of calls ahead but that you will try and give the party in question the quickest and most personal service possible. The doctor. just starting in business, finds this one of his best cards. The same is true of a retailer. 'Nothing succeeds like success' has been well said. We find that creating this atmosphere of activity at once leads everyone to conclude that we are 'it' when it comes to radio. The result is that we generally are very busy and seldom find it necessary to 'make believe.' "

Make Friends with the Boatyard Keeper

The opportunity for selling radio sets to motorboat and yacht owners is not restricted to those fortunate few who can fit up their own boats as radio stores. A dealer whose place of business is near a water front should find it profitable to get in touch with boatyard keepers and to find out just what boat owners are the best prospects for sets. Boatyard keepers are usually old-timers along the water front and can give dealers valuable tips. Workers on repair docks also can be developed as valuable sources of information.

The new styles in loud-speakers are a revelation in tone quality. Try one for a night free.

Also tubes, batteries and battery eliminators

If your set is not working properly, call Wabash 529 for expert service

PICKETT SERVICE COMPANY, 24 So. 8th Street
Cash D. Pickett Paul H. Pickett

A sample of the postcards the Pickett Company sends to set-owners to sell the new type speakers



Regular inspection calls on set owners, Richter of Fordham, New York City, says,

Sell accessories—Keep customers satisfied—Establish dealer's reputation—Get leads from new sales—Imbue set owners with confidence in dealer and in radio generally

HE success that may be obtained through systematic check-up calls on set owners is clearly indicated by the experience of Robert M. Richter, of Fordham, one of the outlying residential districts of New York City.

Richter has long made a profitable practice of calling regularly on set owners, particularly those to whom he has sold receivers, in order to sell them new supplies and accessories.

Through these check-up calls, Richter has built a reputation for service that has made him the outstanding radio merchant of his community.

It doesn't take long to get acquainted with Richter. I told him that I wished to write an article about his service. Without any further preliminaries, he explained his conception of service.

"I Am the Radio Doctor"— Says Richter

"I don't regard myself as a salesman. In fact, my business isn't selling radio sets. That is incidental. My relation to the customer is exactly that of a lawyer or a doctor to his clients. Selling the set is simply delivering the prescription which the customer needs. I am just the doc-

tor who advises. I study each case and recommend to the best of my ability the receiving set which the customer's desires and natural aptitude and financial means permit.

"I assume the customer knows nothing about radio and that it is my business to know all about it that I possibly can so as to be qualified to advise. I have no more right to take advantage of the customer's confidence than a doctor has to boost a patent medicine. My job does not cease when the major operation of getting the set installed is finished. I have to keep the customer until he is brought to convalescence, that is, complete radio satisfaction."

Richter's system is the simplest

Richter Says-

"My relation to the customer is exactly that of lawyer or doctor to his clients. Selling the set is simply delivering the prescription which the customer needs.

"I have no more right to take advantage of the customer's confidence than a doctor has to boost a patent medicine." in the world. Let us follow him through one sale. It usually begins with a ring of the telephone.

"Richter speaking. What can I do for you?"

"This is Mr. Smith of Tuckahoe. You sold my friend, Jones, a radio and he tells me you can help me out. I don't know just what I want but he says I can rely on your advice."

Richter then asks a series of questions about the prospect's location, what he expects to hear with his radio set, how much money he is willing to spend. Then he installs a set, fitting the customer's needs as far as he is able to judge them. After a few days, he closes the sale or replaces the receiver with one better suited to his customer's receiving conditions and natural skill. Then follows a preliminary lesson in tuning. The dial settings for two or three local stations are noted on a pad. About two evenings later, an appointment is made and the lesson is given all over again.

They Really Learn Something the Second Evening

"Usually, I find that the first instructions are forgotten. New enthusiasts fool away one evening without complaint, but, usually by the time the second evening comes

around, they are really ready to learn. We not only show them how to tune a set but tell them something about the importance of keeping the filament brilliancy low to preserve tubes and batteries and explain the causes of the various disturbing noises which we frankly admit exist.

"I consider the radio dealer who belittles static and inductive noises as foolish as an automobile salesman who assures you that rain will never mar the pleasure of motoring if you buy his brand of car."

The second call reveals whether the set is suiting the customer's needs. If it is not going to satisfy, in Richter's judgment, he does not hesitate to replace it with another. Then and only then is the order signed, usually on a monthly-payment plan, at the full list price of the set, together with a fixed charge for installation. A month or two later, satisfaction is confirmed, either by a visit or a telephone call. Again. three or four months later, the customer is followed up with a form letter, suggesting the measurement of B battery voltage and one or two other essentials necessary to the maintenance of the set.

Taking Care of Repair Calls

Repair calls are handled in this systematic way. On each installation and repair call, a card is filled out, recording full data on tubes, batteries, and the kind of set. After that, no call is ever made on that customer without a full quota of batteries and tubes of the correct type for his set. There is no loss of time in making the usual replacements. Only minor adjustments are gunwales with baggage and camping made at the customer's home. Otherwise the receiving set is taken to the driveway of a trim gasoline station shop, properly repaired, and returned. in southern California. Four uni-

Richter's Service Men-

Keep appointments:

Work without conversation:

Wash their hands before touching woodwork or furniture;

Match wiring and tacks to color of decorations:

Hold commercial licenses as evidence of skill;

Uphold a policy of helpful. neighborly service which makes friends, confidants and clients, not wary buyers.

The word "service" has no general meaning to Richter. He has worked out a specialized, practical, form of service which forces trade upon him not only from his own neighborhood, but from any town you may care to name within thirty miles of New York. His customers look for him and keep him busy solving their radio problems because all you have to do is to "give Richter a ring." He does the rest, promptly and thoroughly.

Three methods of attracting trade -elaborate and luxurious "service," low-price appeal, and brotherly, helpful service-exist in every line appealing to the public for support. Radio is no exception to this rule in Richter's opinion.

The following incident illustrates what he means by the three methods of attracting trade:

A dusty automobile, loaded to the equipment, rolled noisily up the

formed attendants, without a word, jumped to their respective tasks, as if Aladdin had rubbed his magic lamp; one wiped the heavy layer of dust from the windshield, polishing the glass until it shone; a second plied a duster on the body; the third filled the radiator with water; while the fourth opened the gasoline tank and filled it.

Intense competition has made such elaborate, free, "no-tip" service necessary in southern California. At each of the other three corners are rival gasoline stations, vying with each other in discovering new frills with which to attract trade. A few blocks down is a less elaborate stand which sells gasoline four cents cheaper, attracting a bargain-hunting trade.

But none of these does a larger business than smiling, greasy Jim. He handles a large array of brands and he gets a cent or two a gallon more than the rest of them.

Friendly Neighborly Service

Jim has made a study of gasoline. He knows what brand is best suited to every kind of engine and every kind of carburetor. He can tell from the sound of the engine whether the mixture is correctly adjusted for the prevailing temperature. He is glad to readjust your carburetor without charge. His knowledge of an automobile engine is almost psychic and he remembers every one of his regular customers. They buy gasoline from him, but that is incidental. They go to him for the expert and practical service which solves their motoring troubles for them.

Richter is the "Jim" of his local radio public.

With practical, helpful service, Richter has met the competition of the luxury appeal and of the expensive, super-service which makes little impression because it is impersonal. He has met the competition of price cutters with confidence. And his selling force now numbers thousands, for a customer, once familiar with Richter's service, can't help but talk about it to all his neighbors.

The Largest Radio Business Within Five Miles

Richter's shop is near my home and I passed it twice a day for nearly two years without ever being attracted to it. He shares part of the space with an automobile ignition service station. He holds no sales, and he makes no price appeal. He almost never closes a sale in his

RADIO 3.E.T.S	RADIO
	REPAIRS
Robert M. Richter	
Dependable Radio Equipment	
81 DEST FORDHAM ROAD	
Kellogg 7aoc	
You may recall that on	one of my
representatives serviced your Radio Set. If you have been	neink font set tebn-
larly. I think that your B batteries are getting low. It is alw	ays better to change
them when they read 35 volts or less for very often howling	, crackling and dis-
tortion is traceable to low voltage Better test them with a	roll meter for while
your volume may seem the same you are probably putting other, equipment for which it was not designed	a drain upon the
Very truly you	

ROBERT M RICHTER

Two ways Richter shows that he keeps in touch with customers to whom he has sold sets. Above is a follow-up on servicing, and at the right the card on which he keeps a record of each service call.



store. But it is the largest radio us on the phone business within five miles in the most populous city in the western hemisphere.

Not far from Richter's modest establishment is an elaborate radio store with a carpeted floor, making the luxury appeal as does the California gasoline service station. On all sides are the price cutters for which New York is famous, but Richter's customers will have nothing to do with these.

A neighbor told me about Richter. The shipshape way in which his antenna had been installed on the same roof where mine was stretched had attracted my eye. There was nothing slipshod or temporary about the whole arrangement. It was the only one of more than twenty antennas on the roof which looked as if it would stay up through a hard winter.

Evidences of Painstaking Care

Within the apartment, I also noted some unusual features. The lead-in wire, tacked along the moulding, matched the woodwork. Even the tacks were of the same shade of brown. The batteries were concealed by a table and the wires ran up one of the legs so that they could not be seen anywhere in the room.

"Richter made me try three different sets before he let me buy one," said my neighbor. "He wanted to be sure, he said, that I was getting quality, range and the volume that I wanted, at a price I could afford. His explanations on tuning, when he installed the set, were as clear and

simple as any I have heard, but two days later, he was back again to give us another tuning lesson. A month later, he called

and asked how things were go-I would ing. no more think o f spending money for radio without Richter's advice than I would consider starting a lawsuit without consulting my lawyer. All my friends are buying their sets from Richter."

Installation and follow-up are made by appointment. It is not an appointment for "some day next

that there is no waiting or inconvenience.

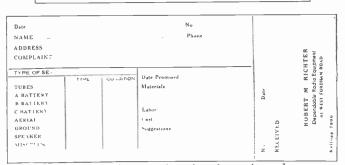
It would be possible to discuss at some length the shipshape manner in which every Richter installation is made, but it's the spirit of Richter's service that is far more important than mere details of routine. That is the thing which makes the lasting impression on the customer.

Consider just one "detail," When the installer has finished his work on the roof and the lead-in is finally dangling near the window into which it is to go, he re-enters the apart-

R A DI & RADIO SETS ROBERT M. RICHTER Dependable Radio Equipment

SI DEST FORDHAM ROAD

****Ilload 7800 I want to thank you for the order to service your Radio Set and I hope the work was done to your entire satisfaction. Very truly yours, ROBERT M. RICHTER

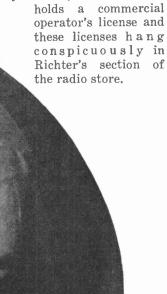


Richter acknowledges receipt of each service order on the card shown at the top. On the card below this he keeps a record of every set brought in for repairs.

week." It is for an exact time so ment, hands blackened with soot and grime But he does not distribute this upon the woodwork of milady's apartment. Instead he asks permission of the lady of the house to wash his hands. This is an inflexible rule and there isn't a housewife who does not mention it when she gets talking about radio to her friends.

The installer continues his work quietly and considerately until the set is in working order.

Richter's installers work on precise schedules. They go about their work scientifically, systematically Every one of them and silently.



Richter uses painstaking care in explaining the operation of each set to prospects and customers. When he sells a set he instructs the purchaser thoroughly in its use.



Rear Admiral W. H. G. Bullard, U. S. N. retired, was born Dec. 6, 1866, at Media, Pa., where he makes his home. He was graduated from the U. S. Naval Academy, Annapolis, in 1886, and saw service in the Spanish-American war. He commanded the battleship Arkansas during the World War, and was a member of the Interallied Radio Conference in Paris from January to August, 1919. He retired in 1922.



Eugene O. Sykes, of Jackson, Miss., was born at Aberdeen, Miss., July 16, 1876. He attended St. John's College, Annapolis, and the U. S. Naval Academy. He studied law at the University of Mississippi where he received the degree of L.L.B. After being graduated, he practiced law in his native town. He was a justice of the supreme court of Mississippi for two terms from 1916 to 1924, when he returned to private practice

The Five Men
Appointed by
the President
to Carry Out
Provisions of
New Radio Law

By WILLIAM C. ALLEY

Acting Managing Editor

"Radio Retailing"

Entire Nation Voices Approval

HE entire nation has approved the Radio Commission as appointed by President Coolidge. Newspapers throughout the country have endorsed the Commission editorially and have complimented the President on the non-political aspect of his appointees.

The President has been repeatedly commended because of his refusal to play politics and his earnest desire to create what he believed to be an able, efficient commission of practical radio men.

The whole sub-current of the fight over radio legislation has been to prevent domination of the radio listeners by politics or any other selfish interests in control of broadcasting.

The limited number of wavelengths requires that only a limited number of stations may broadcast. The limitation on stations, it was thought, would result directly in a privilege and that therefore the public interest was involved. The matter of judging who shall be permitted to broadcast, and who shall not, it was conceded from the first, should rest in a group of men, and not in any one individual or in any one political or commercial group.

LEGISLATION was framed with this end in view, and to guarantee to the listening public a just and impartial authority over the issuance of broadcasting licenses. All this has at last been accomplished by the Radio Law of 1927 and is sealed through the appointment by the President of a commission of five absolutely independent men, owing allegiance to no individual, or company, or interests, having no political activities, and each one of whom contributes essential expert skill and experience to the work of the Commission.

Hundreds of commendatory letters and newspaper editorials have reached the offices of this publication.

The following extracts clearly indicate the nation's satisfaction with the appointments:

"The Federal Radio Commission is a practical combination with a wealth of experience that should stand the members in good stead for the work in hand. They have the support and well wishes of the entire country—with the exception, of course, of a few politicians."—New York Evening World.

The New York Telegram says, "President Coolidge's ideas of what should constitute the ideal radio commission, as exemplified in his appointments, find more than a favorable reaction from expert observers. Many are hailing the new commissioners with enthusiasm. They find that balance that could be obtained only after long concentrated study."

The New York Sunday World stated, "The commission is an excellent one, made up of men of high caliber, great efficiency and integrity. Thank heaven the President had the power of interim appointments."

"The President sought citizens who possess considerable knowledge of radio technique and the peculiar problems which attend broadcasting, who know public service regulations and have had some administrative experience.

"Each appointee has a background of special knowledge which should prove highly valuable. There is every reason to believe the new commission will render able, disinterested service."—San Antonio, Tex., Express.

"The President has given his customary punctilious concern to selection of the membership of the new Radio Commission which will have supervision over broadcasting. Two of the appointees are technical experts in radio. One is the editor of a radio magazine, another is a former Mississippi Supreme Court Justice, and another is a former Admiral of the United States Navy. The technical men may be expected to understand and in some measure reflect the viewpoint of the broadcasters, who have a large stake in the proposition. Admiral Bullard and Judge Sykes will be spokesmen for the listening-in public, while Editor Caldwell represents both the owners of receiving sets and the radio trade.

"The organization has been provided, and the personnel



Col. John F. Dillon, radio inspector of the San Francisco district since 1915, was born in Belleville, Ohio, March 6, 1866. He enlisted in the U. S. Signal Corps in 1894 and served as telegraph operator and electrician until 1899 when he left the service. In 1917 he rejoined the Signal Corps for the World War and served in France, attaining the rank of major. He is now a colonel in the Reserve Corps.



O. H. Caldwell, of Bronxville, N. Y., was born in Lexington, Ky., in 1883, and was graduated with the degree of E.E. from Purdue University, Indiana. In 1907 he succeeded Dr. Lee De Forest as technical editor of the Western Electrician, Chicago, and has for many years been identified with the McGraw-Hill electrical publications, as editor of Electrical Merchandising and of Radio Retailing. He is a member of many scientific bodies.



Henry A. Bellows, of Minneapolis, Minn., is a native of Portland, Maine, where he was born Sept. 22, 1885. He was graduated from Harvard University, and taught there for some years after his graduation. He was managing editor of the Bellman, Minneapolis, from 1912 to 1919, and of the Northwestern Miller in 1924 and 1925. He has been director of the Gold Medal radio broadcasting station WCCO, Minneapolis, since 1925.

of Federal Radio Commission

of the commission inspires confidence that what is done will be for the best interests of both the public and the broadcasters."—Grand Rapids, Mich., Herald.

"The President's selections for the newly-created radio commission make an auspicious beginning for the new system of control. All the appointees save Mr. Sykes are men of technical engineering knowledge and experience in the radio field and Mr. Sykes will provide the necessary expert advice on the legal problems with which the commission will have to deal.

"The commission will need much tact and good sense, besides its technical knowledge, and also it will need to back sound judgment with the courage to withstand pressure and attack. We think the President's selections justify public confidence."—Chicago Tribune.

"As representatives of the little fellows in the radio business and the broadcasting business—Caldwell is editor of Radio Retailing, and Bellows is manager of a Minneapolis radio station—these two men are the best appointments on the Commission. The Senate was afraid of radio monopoly and unfair discrimination. O. H. Caldwell and Henry A. Bellows, on the basis of their past records, are just the men who would stand against that.

"The President has created a commission that will at once command public confidence."—Brooklyn, N. Y., Daily Eagle.

"The five men named by President Coolidge for places on the new Federal Radio Commission are admirably qualified for the service they will be required to render during the coming year. They are of high character and by experience are considered to have the requisite acquaintance with the problems that will have to be settled.

"There is no reason why the Interstate Commerce Committee of the Senate should not recommend confirmation."

—Providence, R. I., Journal.

"The President surprised nearly everyone by naming five men who are not politicians, at least to the naked eye.

"Good. Radio is becoming as big an affair as the air itself. That means it is too big to be handled by the swapping and back-scratching methods of politics.

"General Bullard, Caldwell, Sykes, Bellows, Dillon—all know something about radio. Here's hoping they know little about politics and that the Senate sees its way clear

to confirm the Coolidge nominations."-N. Y. Daily News.

"The public interest requires the concentrating of radio broadcasting with the stations that are giving the service that is of the most value to the largest number of people.

"The interests behind the nuisance stations are dissatisfied with President Coolidge's nominations to the radio board just established by Congress. They are attempting to block the confirmation of a high-class board so as to get special consideration for the broadcasters who are cluttering the air with junk.

"Every owner of a receiving set has a stake in the outcome of this contest. Is there any question on which side the public interest lies?"—Kansas City Star.

"In naming the members of the first radio control commission, President Coolidge appears to have passed up the lame ducks and picked men who may be presumed to be qualified by special knowledge of their subject. With one exception, the appointees are or have been intimately associated with some form of radio enterprise."—Omaha World-Herald.

"In choosing his commission, President Coolidge carried out his intention of selecting men experienced in radio communication or familiar with the legal and business conditions surrounding the industry."—Paterson, N. J., Press-Guardian.

"President Coolidge is to be sincerely congratulated for taking the newly created radio control board out of politics at the outset of its activities and for appointing on that board men who are at the forefront in the profession of radio. There is not a politician on the board. Every member has been chosen because of his particular qualifications for the work at hand. We may be assured that the new board will tackle the problem energetically and fairly."—West Palm Beach, Fla., Post.

"Presidential appointments to the new radio board come as a complete surprise to Washington. This indicates above all else that the new commission is entirely free from politics, a board of technicians chosen because of their practical experience in radio matters.

"The public in general will back the new commission with all the moral support at its command and with active co-operation whenever possible."—Flint, Mich., Journal.

What This Industry Needs

Readers of "Radio Retailing" this month tell what in their opinion will stabilize and improve radio trade conditions

Standardization Will Bring About Stabilization of the Industry

Editor, Radio Retailing:

THERE has been recently a great deal in the press regarding the need for standardization in the radio industry. The radio public does not, apparently, realize the strides already made.

The Radio Manufacturer's Association, composed of representative manufacturers of the radio industry, and having the support and co-operation of their engineering departments, is actively engaged in this work of standardization through sub-committees of engineers and manufacturers' representatives. The opinion of the public and of manufacturers is solicited by questionnaires. The information thus obtained, supplemented by the experience of engineers, forms the basis of every recommended standard specification which is submitted at a regular meeting for final acceptance. Many such recommendations have already been adopted.

Sub-committees have been formed to investigate wiring devices (cords, colors, cord tips, etc.); variable condensers and dials; rheostats; transformers; plugs, jacks and switches; sockets; receiving sets; vacuum tubes; test instruments; arresters and aerials; panels; resistance units; fixed condensers; and radio wiring for buildings.

New committees are being formed

from time to time, and this work will be carried on indefinitely. It is the aim of the R. M. A. eventually to standardize the entire industry.

The co-operation of the Institute of Radio Engineers and the excellent support of the industry as a whole have resulted in bringing about, in two years, a degree of standardization that required from six to ten years in the automobile and other industries.

It would be too lengthy to give details regarding the benefits already derived from this work. The raw material supplier is benefited because there is a greater demand for standard material, and he can anticipate demands, carry a larger stock, and give better deliveries at a reduced cost. The manufacturer having a ready

source of raw material can keep his plant running constantly, make prompt deliveries, preventing cancellation of

Radio misfits have practically ceased to exist. Parts are interchangeable, therefore the dealer and jobber are not required to carry duplicate stocks of parts. The manufacturer has, in this way, earned the confidence of the trade. In view of this, the jobber and dealer

are likely to order in advance of the consumer demand.

Standardization has already enabled manufacturers to furnish the consumer with a better product at a lower cost.

A. J. CARTER, Pres., Carter Radio Co.; Chairman, Standards Committee R. M. A.

A Plan for Naming Tubes

Editor, Radio Retailing:

AS A member of the R.M.A., I would like to bring up in this letter the matter of adopting a general scheme for the identification of various tube This plan we believe will be both sufficiently flexible to allow differentiation between the same types of different manufacturers and simple and sound enough to make the identification of any tube an easy matter regardless of the manufacturer or type.

The nomenclature of all tubes might be based upon two factors, i.e., filament voltage and filament current. Tubes of the 201-A type would be termed type 5.25, the first 5 indicating the voltage and the last two figures the current consumption of the filament. The present type 199 would be termed type 3.06, type 112 type 5.50, etc. In order to identify the manufacturer a prefix would be used. Our company would, for instance, use VH as a prefix.

In those cases where there are two different types taking the same voltage and consuming the same current, a suffix to mark the special tube might be used. Our present 201-A type would be termed VH 5.25, our soft detector tube equivalent to the 200-A would be called VH5.25D.

The independent manufacturer does not wish to imitate the type markings of what is accepted as standard brands. It is, therefore, very important that some common method of marking all tubes be adopted.

J. S. VAN HORNE,

President, The Van Horne Company.

Why a Public Demand for **Enclosed Speakers Exists**

Editor, Radio Retailing:

T SEEMS to me that it is easy to trace to its source the current trend of public demand for an enclosed loudspeaker. In the early days of radio, nearly all loudspeakers were of the horn type unsightly, cumbersome, homely, heavy, easily tipped over. They took up a lot of space and it is no wonder that owners had a subconscious objection to them, although before the advent of the cone type of loudspeaker their only

answer to the problem was to enclose it in a cabinet or console.

There arose, therefore, a widespread demand for an enclosed loudspeaker, and that demand probably still exists, but it may be a holdover from the desire to get away from the old horn type and is very apt to change when the public realizes the advantages of the present cone type.

The advantages are so many that I believe the public will come to realize them within the next year or two, and although there will probably always be a demand for an entirely self-contained radio set-including loudspeaker, power units, etc.—the public will want separate loudspeakers, even where they have sets which have one enclosed.

The cone type of speaker, which is most popular today, is light, compact, takes up little space and may be kept away from the set, giving better reproduction. It can be hung on the wall completely out of the way from all possibility of interference, tipping over, damage from the dust cloth, etc. It is easy to use this type of speaker on a long cord in another room away from the set. Sometimes when people are ill in bed this is a great convenience.

For these reasons-if for no other-I believe the public demand will shortly turn towards the separate speaker and for a receiving set not to be equipped with an enclosed loudspeaker will not be considered a disadvantage, as it fre-

quently is today.

MORRIS METCALF, Vice-president, American Bosch Magneto Corp.

The Big Problems of the Industry

Editor, Radio Retailing:

E VERY January for the past three years we have been told: "Radio has passed the period of growing pains and uncertainty and is now settled down as a staple industry."

Well-maybe; but there is still much to be done before radio reaches the position of other industries. There are still many rough and weak spots.
But this makes no difference in the

soundness of the radio industry as a

But progress is not helped by de-claiming that everything is lovely now.

Radio is undoubtedly headed for greater and better things. The present year will be one of prosperity—for the radio man who makes aggressive, planned sales efforts, but not for the man who expects profits to jump into his lap.

The industry has passed through a period of chaos. Much of the unhealthy growth of boom time has died away. There is some left, but it cannot survive.

The number of radio dealers has diminished practically 33½ per cent since the height of the boom in 1924. This means progress, sounder mer-

chandising and much better business. For the consumer, it means better service, greater satisfaction, more confidence, and a better appreciation of what radio really is. You can't blame the purchaser when he buys the cheap-

est goods he can find-and then condemns all radio. Cut price, "gyp," poor quality merchandise is the greatest enemy radio ever had.

For the dealer, the tightening lines mean more permanent trade, more real business, more profits and fewer losses.

For the manufacturer, it means a higher class of dealers, better credits, definite distribution system, and ability to plan ahead.

Of course, there are both engineering and merchandising changes to be

considered.

It would be idle to venture a forecast of what engineering changes the future may bring forth. Revolutionary changes may come at any time. But there are none in sight at present. Engineering development is proceeding along the lines of improving present systems rather than trying radical new methods. In brief, engineering and production ingenuity may be counted upon to keep abreast of radio progress. The big problems are in the fields of distribution and merchandising. The big rewards for the current year will go to the leaders in these branches of the business.

R. H. VAN DUSEN. Advertising Manager Gold Seal Electrical Co.

A Gratifying Trade Development

Editor, Radio Retailing:

THE 1927-28 season reveals one tremendously important and highly gratifying factor. This factor is the fast-growing tendency of radio dealers to establish themselves in their communities as permanent retailers of the products of one or two set manufacturers.

Certainly there is no more reason why a dealer should have to decide annually what lines he is going to handle than for the automobile dealer to wait until the annual show before deciding what car he will sell the following

Spring and Summer.

Progressive, desirable retailers throughout the country are beginning to appreciate this and are showing themselves unwilling to bear any longer the loss they suffered in the past by discarding the previous season's sales effort, advertising, etc., to merchandise a new line. The folly of the old policy will be better realized The folly if we try to picture the situation of an automobile dealer who sold and serviced the Cadillac line one year, the Buick the next, and then the Packard or the Ford.

The new policy means that dealers will select their lines with extreme care, will choose manufacturers who can be depended upon to offer each season the best obtainable apparatus in its price class. More consideration will be given a manufacturer's past record, his policies, and his financial and industrial stability.

This new policy may result in fewer manufacturers, but it will permit better production scheduling and less temptation to "unload." It will also bring about a marked straightening of the yearly sales curve. The dealer who knows he is going to retail the same line the following season can devote his time, effort and money to selling during the late spring and summer. He won't hesitate to carry an ample stock at all times.

DOUGLAS RIGNEY, Vice-president, A. H. Grebe Co. New York.

Some Ideas That Mean Extra Profits

Editor, Radio Retailing:

URING the year 1926 our radio business showed a good margin of net profit, and I am taking the liberty of submitting the policy we are now endeavoring to put into effect.

Our past experience has proved the value of many points of this year's policy, and we feel assured the few new ideas we are putting into effect

will mean more added profit.

We have found that the demonstration of sets has been a big expense and unless a sale is large enough to warrant the additional expense of a home demonstration, it is better to let the merchandise stay on the shelf. By handling nationally advertised sets, demonstrations are not always necessary. Whenever it is possible, I have the customer sign a contract before the set is sent to his home. Our past records show that not one set has been returned that was sold under these con-

Following are some ways we have found to ensure success in retailing radio:

radio:

Handle only first-class sets and do not cut prices;

Watch your stock—try not to have a set longer than thirty days, and only a fifteen days' supply of tubes;
Sets retailing for less than \$125.00, no home demonstration;
Leave set at customer's home for three days. Dealer should be present the first night of demonstration;
Thirty days free service;
After thirty days \$1.50 an hour for labor. No holiday or Sunday work;
Payment plan—25 per cent down, balance in eight months—eight per cent on balance due;

in eight months—eight per cent on darance due;

No trade-in except when customer wants a set which is a great deal more expensive than the trade-in;

After three-day demonstration if customer decides he requires further time, a charge of fifty cents a day, provided he does not buy the set;

A flat charge of \$10.00 for installing set and aerial if customer keeps the set or not;

On battery eliminators, tubes, radios, chargers, etc., only give the same guarantee as the manufacturer. Make a satisfied customer, but keep your overhead down.

L. H. PETTERSON,

L. H. PETTERSON. The Red River Lumber Co. Westwood, Calif.

Says Loudspeaker Need Not Be Separate

Editor, Radio Retailing:

UST the loudspeaker be com-VI pletely separated from the receiving set to get the best results, in spite of the apparent public demand for a complete unit?

Emphatically no! Our research department has found, as the result of a great deal of experimenting, that when the set and speaker are properly designed, and the speaker is mounted correctly, there is no difficulty in placing both in the same cabinet and get-ting as good results as are possible when entirely separating the two. We are doing this, and we have the added advantage of compactness.

The preferred radio set is entirely self-contained. Any other scheme is a compromise, often made necessary through improper designing of the different parts. The public's idea of a perfect radio set is one completely housed, a single separate piece of fur-When it is possible to build niture. sets that way without sacrificing anything, why not give it to them?

D. S. SPECTOR, General Manager, Merchandising Division, Federal-Brandes, Inc.

Says Serlin Has Not Reformed

Editor, Radio Retailing:

SOME comment is due on the wonderful advertising you gave Serlin Company in your recent issue of Radio Retailing.

This in my opinion, as well as that of all other retail dealers here, is the biggest joke you could have come out with, and in fact makes us feel that Radio Retailing is not just the paper it should be.

You can buy anything you want at Serlin's at any price you want to pay. He cuts the price on everything sells for less than the retailer can buy at wholesale. \$2.50 Marco dials he sells for 69 cents. Eveready layerbuilt batteries he sells for \$3.75, just a few cents over cost. How can a man do business with this competition? That is just what has killed the small dealer in radio, and that is just the reason the small music stores that gave up music to sell radio are giving up radio to go back into music. These so-called to go back into music. These so-called "cut rate" stores kill business, and this Serlin Company surely has a lot of nerve giving you this write-up, when everyone in Detroit knows better.

We test customers' batteries, tubes, etc. They tell us they will be back later. But they go to Serlin's to buy batteries that we sell for \$3.75 for for that price. In fact we are disgusted with radio. We sell "B" batteries that do not stand up, we have to replace them, and then we can try to get replacement from our wholesaler.

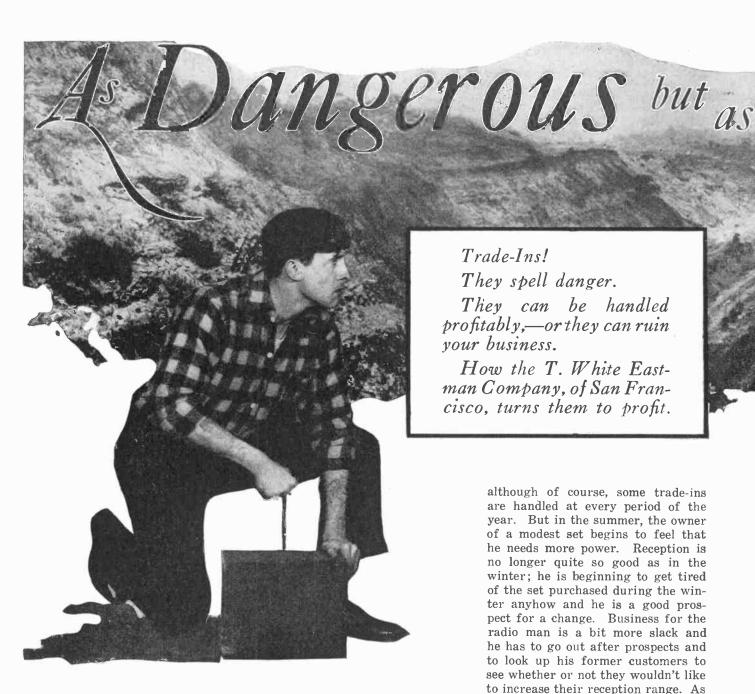
CAHILL'S RADIO & ELECTRIC SHOP.

Detroit, Mich.

How Solomon Felt

Editor, Radio Retailing:

ITH some six or seven hundred broadcasters on the air, the radio listener must be getting some idea of what Solomon was up against when his thousand wives engaged in a household dispute. H. J. MEEDER. Girard, Pa.



YNAMITE is a dangerous material to have lying around the farm, but properly used it is an indispensable aid to farming by blowing up the stumps in an otherwise tillable field. Trade-ins, like dynamite, are, as most dealers will attest, dangerous when left lying around.

Unless they are promptly resold and the money which they represent again made liquid, they easily absorb all the profits on a sale. They also present a temptation to the salesman to shave the price of his set by allowing a little more than is justified on the old set to be turned in. They tend to take up too much time in the store's workshop which is not later paid for when they are sold, and they represent tied-up capital so long as they remain in the store.

"But," says Mr. Eastman of the T. White Eastman Company, San Francisco, "there is no reason why all or any of these calamities should be anticipated. Use your trade-ins with discretion, pay less than their value, spend no time in remodelling them, dispose of them quickly and at a profit—and they will prove useful in removing obstacles and most valuable in building up trade."

That they have so proved is shown by the record of \$50,000 in radio sets sold last year from the modest headquarters in "the Mission," one of San Francisco's subsidiary residence and business districts.

"The time for trade-ins," says Mr. Eastman, "is essentially the summer,

although of course, some trade-ins are handled at every period of the year. But in the summer, the owner of a modest set begins to feel that he needs more power. Reception is no longer quite so good as in the winter; he is beginning to get tired of the set purchased during the winter anyhow and he is a good prospect for a change. Business for the radio man is a bit more slack and he has to go out after prospects and to look up his former customers to see whether or not they wouldn't like to increase their reception range. As a result almost every other sale during the summer months involves an old set traded in for some part of the purchase price.

Trade-Ins!

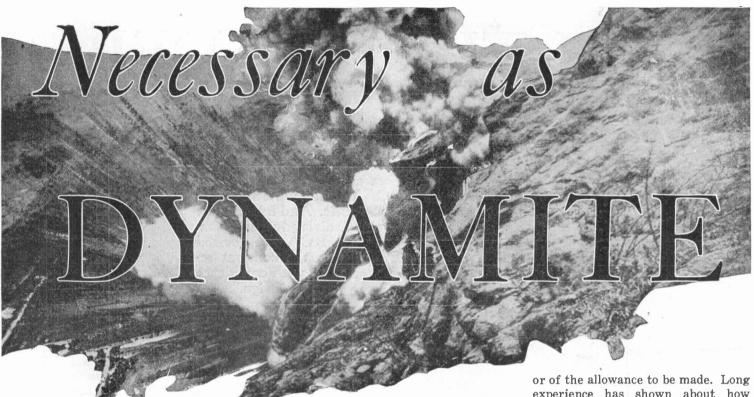
They spell danger.

They can be handled

How the T. White East-

"In the winter, on the contrary, the number of sets offered for sale drops off markedly, with the result that five sales out of six are cash transactions."

No trade-in is taken except at a figure that would allow a reasonable profit when resold. The principal factor to be considered in Mr. Eastman's opinion is quick turnover. Sets which lie around the store for a long time, while perhaps just as good as those which come in later, are always harder to sell. Every dealer is familiar with the "white elephant" article in his stock which for some reason or other, not apparent or log-



ical, will not sell. It is entirely too easy to allow trade-ins to become white elephants by putting them on the shelves and forgetting them. Nothing is more discouraging than a large stock of second-hand sets which have been in the store so long they look like fixtures. The salesman doesn't put the proper energy into disposing of them, perhapsat any rate they do not sell. Looked at from another standpoint, it is important to make a quick turnover so that the cash they represent may be released for further investment in the business.

In spite of the large business in second-hand sets which has been an inevitable consequence of its volume of sales, the T. White Eastman Company never has more than three or four trade-ins on its shelves at one time and these are always just about to be sold. In an entire year's experience not more than one or two sets will fail to find a ready purchaser.

The reason for this is, primarily, because the sum allowed for them in the first place is not too large. This means that they can be resold at an attractive price. The store charges overhead and profit on second-hand material just the same as on new sets. This is figured in

the estimating, so that a set which will later bring, say, \$35 in the market will be rated at from \$20 to \$25 in making an allowance. By maintaining this policy consistently, it is possible to show a profit on this class of business.

In the second place, no time is wasted in remodelling the sets in the store. They are gone over and repaired if necessary, so that they are in good operating condition, but otherwise, they are sold "as is." Usually the customer does not ask for an allowance on a set which is not operating, so that the repair work in actual practice does not amount to much. No limit is fixed arbitrarily, however, either in the matter of the type of set accepted,

TRADING in old sets as part payment for new ones is a practice on which dealers do not agree. Some are absolutely opposed to them. Others accept them as aids to sales. But nearly every dealer is eager to learn how they can be handled with profit. This article explains how a San Francisco dealer has used them to build up his business and to earn a substantial profit.

or of the allowance to be made. Long experience has shown about how much can be obtained for what is offered, and this is in every case the basis for the transaction. Homemade sets or sets really out of order are sometimes sold purely for the parts they represent to some amateur who wishes to take them apart. The amount obtained for them is, of course, not large, but neither is the amount the customer is allowed.

One rule of the company is never to give an estimate of what will be allowed on a set without seeing it. This is a safeguard in two ways. First of all, it avoids having to withdraw the offer later when the set does not correspond to the customer's eloquent description of it; and secondly, it gives a line on the prospect. It necessitates the giving of name and address. If the salesman has an opportunity to call and look over the old set, he also has an opportunity to make his sale. And usually the amount to be allowed on the old equipment is the last topic taken up.

It may be said that the trade-in is always the last thing to be brought up by the salesman. No trade-ins are taken unless they are essential to the sale. In the opinion of the company's salesmen, almost one-half of the summer sales and about one-fifth of the winter ones would never be consummated were the old set not to be accepted in part payment. This is no mean estimate to place upon the powers of a trade-in as a business builder.

Please turn to Page 56

EACH THE LEADER

each with its own distinct

THE RADIOLA has outsold other sets because it is built by the engineers responsible for the development and simplification of broadcasting. Because it combines the research and skill of 200 eminent scientists and radio engineers of RCA, Westinghouse and General Electric. And because year 'round Radiola advertising features the RCA Authorized Dealer, with the constant reminder: "Buy with confidence where you see this sign."





The portable super-heterodyne

For the living room, or for camp, shack or beach. A self-contained six-tube superheterodyne, finely made, with handsome walnut cabinet. Greatly in demand with the increasing number of those who want a fine home set that is also portable.

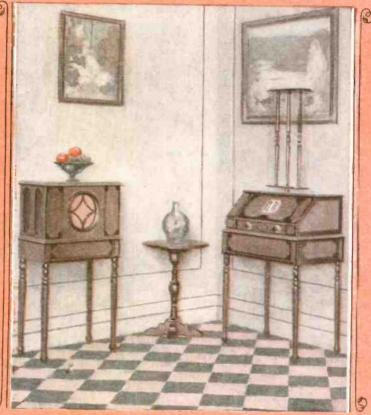
Radiola 26, with 6 Radiotrons, \$225 list

RCA Radiola

IN ITS FIFID & & appeal to a class of buyers

At E.ght Radiola 28, with 8 Radiotrons, \$260 list RCA Loudspeaker 104, complete, \$275 list A.C.Package, for adapting Radiols 28 for use with RCA Loudspeaker 104 on 50-60 cycle, 110-volt A.C. lighting circuit, \$35

Antenna coapler, for adapting Radiola 28 with outdoor antenna, \$4.25 list







Radiola 20, less equipment, \$78 list The outstanding value in radio today regardless of price

Compactly built and many times as selective as the average antenna set. Never before has so fine a set been sold at so moderate a price.

Your distributor will furnish an A. C. Drive Radiola 28, ready for connection to the RCA Loudspeaker 104, which reduces cost and time in installation.

The finest radio for finest homes

The supreme achievement of 1927 radio in every electrical, acoustical and musical characteristic. Far in advance of anything on the radio market. One sale of this combination yields more profit than sales of a half dozen cheaper sets. And takes less time and labor if the right prospects are selected.



most exacting listener

A six-tube super-heterodyne with the delicate parts sealed against dust and moisture in the "catacomb". Ra-diotron UX-120 in the output g ves volume far in excess of the average storage battery operated receiver.

Radiola 25, with 6 Radiotrons, \$165 list

Meets the demands of the

RADIO CORPORATION OF AMERICA NEW YORK CHICAGO SAN FRANCISCO



Properly Arranged Testing Board Brings Increased Profits

Little Rock, Arkansas, jobber's equipment cost \$220 to build—Should be used by dealers as well

THE elaborate service test board of 555, Inc., Little Rock, Ark., as shown above, will accommodate two operators. The mystic numerals 555 stand for the name of the company. Its telephone number in the Little Rock, Ark., directory, is 555, hence its name. Harry Tschumi, radio service manager, who designed and built this equipment, describes it as follows:

"The accessibility of this switch and meter board with respect to the work bench and the workman saves a great deal of time and lost motion. It is suspended 12 inches from the back wall, hence that much nearer the service man. The top of the board serves as a shelf for the speakers.

"This is a complete testing board, not only for radio sets and speakers, but for all other radio equipment and accessories. Two sets may be hooked up at a time, for making comparison tests. There are two antennae and grounds of balanced capacity.

"In the center of the main panel board are four high-grade meters and a test lamp. A feature of this board is that any of the meters or the test lamp can be cut in by simply moving the rotary switch to the proper position. This permits the use of one set of test leads instead of five.

"Suitable connections have been provided on the main board where the test leads from the meters can be cut in while a set is on test in

order to determine if the filament drain, as well as the B battery drain, is normal.

"Convenient a.c. outlet plugs are arranged for connecting A and B battery chargers, socket power units and so forth. Any one of these can be checked for correct voltage and output. Transformers, loud speaker units, condensers—in fact any of the smaller parts—can be readily tested.

"Under, and to the left of the clock, is located a single-pole, double-throw switch, which is used to change from one C battery voltage to another. Directly under the clock is a four-pole, double-throw switch for changing quickly from wet B batteries to a socket power B supply unit. A tube rejuvenator and a tube tester

end of the bench.

"At the extreme left a glimpse may be obtained of the small parts closet. These parts are placed in result. dust-proof, labeled bottles.

"Due to poor daylight reception in Little Rock it was necessary to construct a 'howler.' This broadcasts a very strong signal. It will be noticed right over the four meters and is used for testing sets during the day.

"This entire testing equipment cost approximately \$220 to build. I am confident that it has paid for itself four or five times over in the sixteen months it has been in operation."

Home-made High Resistance **Voltmeter Inaccurate**

Articles have appeared recently in the radio press in which it is stated that a high resistance voltmeter may be made by connecting in series a low reading milliammeter and a high resistance of the proper value.

"If such a combination is used," J. H. Miller of the Jewell Electrical Instrument Co., Chicago, tells us, "it should at least be done with a knowledge of the possible errors and not with the expectation of securing a high-grade and accurate high resistance voltmeter.

"For instance—a milliammeter reading one milliamp, full scale used in conjunction with a .2-megohm resistance, will make a legitimate voltmeter, reading 200 volts full scale.

"It is, however, very difficult to obtain on the open market a high resistance of the proper accuracy and made of the proper material for such a purpose. The average man will go to a radio store and purchase a grid leak or other high resistance which is entirely unsuitable for the work on hand.

"That is, a .2-megohm grid leak rarely has a resistance of .2 megohm. Grid leaks are usually adjusted by the large manufacturers to come within 10 per cent, and many on the market are far from being this accurate. The voltage readings will be no better than the accuracy of the grid leak.

"Further, every grid leak has a material temperature coefficient, those of carbon or inked paper having a negative coefficient and some others being positive. They will vary as much as ½ per cent per degree Fahrenheit. Even though compensation be made for room temper-

leak will usually heat it so that its temperature is considerably above that of the room and more errors

Grid Leaks Vary

"It should be understood, of course. that for their purpose grid leaks are entirely satisfactory, since a variation of 10 per cent in the value of the grid leak or high resistance in a receiving set or resistance coupled amplifier, makes very little difference. Such an error in the reading of a voltmeter is, however, a very different matter.

"High-resistance voltmeters are expensive because their resistance is made of wire properly insulated and of the proper alloy to have a zero change of resistance with tempera-. ture. Being made of such material, they will read accurately under all ordinary conditions.

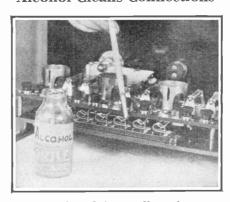
"Such wire-wound resistances for several hundred volts usually contain several thousand feet of wire, and are consequently expensive to make.

"In view of these facts a voltmeter made with a commercial resistance can rarely be relied on to be better than 10 per cent. In many cases the error will be greater."

Dirty Condensers Cause Troubles and Noise

In many cases of trouble with radio receiving sets, the cause is some trivial thing that escapes the eye, and on account of its minuteness is hard to believe responsible for disrupting the orderly scheme of things. It is a well-known fact among radio engineers, for example, that sets in service will become noisy and lack selectivity and volume from one

Alcohol Cleans Connections



Wood alcohol is excellent for removing grease and solder paste which would otherwise short circuit radio frequency currents. Use either a rag or small brush

are conveniently located on the right ature, the current through the grid cause alone-the accumulation of dust and dirt particles on the plates of variable condensers.

> Radio currents do not like to make quick turns or go around corners and will always attempt to escape from sharp points on the surface of conductors. Particles of dust on condenser plates provide these points for the energy to leak across to the other plate and cause the set to become noisy.

> The use of a shield made of celluloid will prevent this from happening. In the older type of condensers it will be found that careful cleaning with a pipe cleaner at frequent intervals will be a great aid in preventing this trouble.

Re-wiring the Set for Power Tubes

The most important thing in a broadcast receiver is the quality of reproduction. While quality is given a great deal of space by radio writers, little has been said about the improvement of quality of the relatively low price class of receivers. The customer is usually willing and often pleased to spend additional money for the improvement of quality especially if a clean cut demonstration of such improvement can be given.

This was shown by the recent experience of a certain New York dealer. A customer, who had had several Atwater Kent receivers. wanted a model 35 but with the improved quality, if possible. High plate voltage and a power tube of the 171 type with an output filter, the latest thing in the high quality line. were tried and gave remarkable results. The difference between the set with the normal hook up, and the same set "powerized" seemed hardly possible. The change meant the sale of a 180 volts of B battery, or a good B socket power unit, a 171 power tube, an output filter, and a high grade speaker.

Such a change in an Atwater Kent 35 is remarkably easy, since no changes have to be made in the set wiring. Other types of sets may need changes in wiring.

On the Atwater Kent first connect up the set as usual with 90 volts of B battery with the exception of the speaker posts and the C minus wire. Now connect the C minus wire to one of the arms of a double-pole doublethrow switch. The negative of a 4½ volt C battery goes to one contact

in the circuit of this arm, and the negative of a 40 volt C battery to the other contact. The plus connections of both batteries tie together and go to C plus of the cable.

Next add 90 volts of B battery making a total of 180 volts. The tap at 90 goes to the set cable, of course. and also to the contact of the switch alongside the $4\frac{1}{2}$ volt C connection. The other contact goes to the 180 volt tap next to the 40 volt C connection. The arm on the B side goes to one of the terminals on a speaker filter marked "set." The other terminal goes to the post in the set marked, "black lead speaker." The "red lead speaker" post is left blank. Last of all connect the speaker to the filter terminals marked "speaker" or output. Using a 201-A on the 90 volt B, 4½ volt C side of the switch; and a 171 on the 180 volt B, 40 volt C side. Then the set is ready for register. demonstration.

The B voltage may of course be obtained from a high grade B socket power unit. Where direct current is available 105 volts may be obtained with an eliminator necessitating the use of only two extra B batteries. The switch is left out of course when a sale is made, the 180 volt wiring with the 40 volt negative C connection being used.

For other receivers, where the wiring is not certain, the first problem is to isolate the plate of the last audio stage. Connect up the B battery according to the manufacturer's instructions. Insert a plug in the jack of the last stage. Connect a voltmeter to B minus and test to both sides of the plug. No speaker should be connected and no tube in the socket. One side will give a B battery reading and the other will give zero reading. The zero reading side of the plug is the plate to which we connect one side of the filter. The other side of the filter goes to the 180 volts as in the example given. The other side of the plug is left blank. If speaker posts are provided the same procedure is followed.

Next examine the C battery circuits. If separate C minus leads are brought out, the one marked for the highest value of C battery is the last stage bias, to which the 40 volts bias is connected. Where one C connection is provided another simple voltmeter test is made. Connect up the C battery as specified; from C plus measure to the grid connections on the tube sockets of both audio stages with the voltmeter. In the Atwater Kent 35 no bias is used on the first grid and no voltage is advocates a standard size service noted. If a reading is obtained on the first stage, the common C lead must be broken and an extra lead brought out. The first stage is biased with 4½ volt C battery with 90 volts B battery, and the last with 40 volt C with 180 volt B battery.

At the store of the New York dealer doing this stunt an Atwater Kent is connected as described with the switch, so the direct comparison can be shown to the customer. The increased sales are remarkable and no sales resistance is encountered. Only a short explanation as to why it is such a great improvement, is needed. Dealers who try this will have a pleasant surprise for their customers, both new and old, as they do not expect such a demonstration. And what is more important it will add to the merry tinkle of the cash

N.E.M.A. Service Sheet Standard

The Radio Division of the National Electric Manufacturers Association manual sheet of 8½ in. x 11 in. with three hole punching, the holes 41 in. apart to be issued by all radio companies for servicing purposes. Many service men carry instruction diagrams and information from the various sets and accessory manufacturers, and where these are not of a uniform size and easily kept in order. the service man is handicapped, and the device less likely to be correctly

Carry A Tube-Tester

A small inexpensive tube-tester is a mighty handy thing to have in the repair kit. Tubes ionize quite rapidly inasmuch as some radio sets are going all day and part of the night.

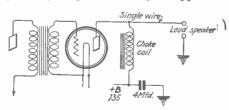
The customer can see for himself which of his tubes are good and which are bad. The tester saves the service man a good deal of unnecessary trouble - shooting. and as the customer is always willing to be "shown," helps the dealer's tube sales along.

Service Questions and Answers

Introducing a new department where all questions of general interest to the radio trade will be answered. Address inquiries to the Q & A Editor

QUESTION-A year or so ago we saw published a hook-up for using a loud speaker at quite a distance from the radio set. Only one wire was used between the set and the speaker, the other being grounded in some way. So far we have been unable to find this hook-up again and would appreciate it it you can help us.

Answer-Below is a circuit which will do what you wish, although there will probably be quite a loss of energy.



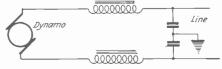
QUESTION—I am a subscriber to Radio Retailing and have a 220-volt brush a.c. type motor on my furnace. Every time I want to use the radio I am compelled to shut off the motor. have been unable to secure from any agents that call here the 1 to 8 mfd. condenser as specified. Where can I get such a condenser?

Answer-The condenser to be used for this purpose is of the fixed, paper type. The capacity will vary acording to the

intensity of the disturbance, the greater the disturbance there is, the more sparking, the larger the capacity needed to absorb this. This type of condenser can be obtained from any of the large condenser manufacturers. Use the same circuit as given for the dynamos in the item below.

QUESTION-I have been called on a job where they have a Fairbanks-Morse dynamo, 12.5 kw., 115 volts, 525 r.p.m. This is bothering the radio sets nearby, as the generator furnishes light for six buildings. The distance between buildings is about 300 feet. The feed wires are up on poles. Can you give me any pointers on what size choke coils and condensers to use in checking this interference? The largest load on the generator is about 95 amp.

Answer—The size of wire used for the choke coils should be large and of the same size as your feeders. The coils should consist of from 150 to 200 turns. The condensers will range in size from 4 to 8 mfds. for this circuit which is given below.



Audio Transformer Specifications

Included in this list are 1:1 ratio output units

Name and Address of Manufacturer	Trade Name and Model Number	List Price	Turn Ratio	Plate Current Limit in	Dimensions in Inches	Weight	Frequ	proximate uency Range ed in Cycles	Totally Shielded, Partially, Shielded or Unshielded
				Milliamp.	H-W-L	Lb.—O:			or onshired
Acme Apparatus Co. 37 Osborn St. Cambridge, Mass.	A-2 MA-2	\$3.00 6.00	4.25-1 6.00-1	25 25	3x2\frac{3}{2}x2\frac{3}{2} 2\frac{3}{2}x3\frac{3}{2}3\frac{1}{2}	2 0		ire musical scale	Unshielded Totally shielded
Alden Mfg. Co. 52 Willow St., Springfield, Mass.	Truphonic Audio Coupler—301 Truphonic Audio Coupler—1st stage	5.00	1.00-1	25	2½ x 2½ x 1½	12	90	10,000	Totally shielded
	only—30 lR Na-ald Output unit—300 *and Condenser	5.00 5.00	1.00-1 1 choke*	25 25	2½x2½x1½ 2½x2½x1½	12	90	10,000	Totally shielded
All-American Radio Corp. 4201 Belmont Avenue Chicago, Ill.	Type R-15 Type R-14 Type R-500 Rauland Lyric	4.50 4.50 9.00	5.00-1 3.00-1 2.8 -1	12 12 15	3x23x21 3x23x21 4x21x21	1 1 1 1 2 7	100 75 25	10,000 10,000 10,000	Totally shielded Totally shielded Totally shielded
Ambassador Sales Co., Inc. 108 Greenwich St., N. Y. C.	Perfect Ratio Big Boy		3.5 -1 4.00-1	10 10	3½x1½x2½ 2½x2½x2	12	50 100	5,000 6,000	Totally shielded Totally shielded
American Specialty Co. 165 Holland Ave. Bridgeport, Conn.	Kelford 62-A 64-A 72-A 74-A	3.50 3.50 4.50 4.50	3.5 -1 5.00-1 3.5 -1 5.00-1	19 19 19	3x2x2 3x2x2 3 16x2 2 16x2 3 16x2 16x2	12 12 14			
American Transformer Co. 178 Emmet St. Newark, N. J.	AmerTran AF-6 AmerTran AF-7 AmerTran DeLuxe 1st stage AmerTran DeLuxe 2nd stage	5.00 5.00 10.00 10.00	5.00-1 3.5-1 3.00-1 4.00-1	12 10 3 7	3x2x3 3x2x3 3x2x3 3x2x3 3x2x3	1 1 1 6	150 150 30 30	6,000 6,000 8,000 8,000	Partially shielded Partially shielded Totally shielded Totally shielded
Anylite Electric Co. Fort Wayne, Ind.	King Cole F- 1 F- 6 F- 7 F- 8 F- 9 F-10 F-11	2.50 2.50 2.50 3.50 3.50 4.50 7.00	3.7 -1 2.00-1 1.00-1 1.00-1 3.00-1 4.00-1 4.00-1	15 15 30 30 15 15	2½x2x2 2½x2x2 2½x2x2 3x2½x2 3x2½x2 3x2½x2 3x2½x2 4x3x3	13 13 14 1 4 1 4 1 4 2 6	100 80 70 50 50 50 20	10,000 8,000 8,000 8,000 7,000 10,000	Totally shielded Totally shielded Totally shielded Totally shielded Totally shielded Totally shielded Totally shielded
Bremer-Tully Mfg. Co. Chicago, Ill.	B—T Euphonic Output transformer B—T Euphonic	5.00 5.50 5.75	2.2 -1 1.00-1 4.7 -1	20 50 20	2x2x3 2x2x3 2x2x3	1 4 1 4 1 5	30 30 50	15,000 15,000 15,000	Totally shielded Totally shielded Total.y shielded
Conn. Tel. & Elec. Co. Meriden, Conn.	Connecticut J-121 Connecticut J-121-9	4.00 4.00	4.25-1 3.00-1		2½ x 2x 2½ 2½ x 2x 2½	1 1			Totally shielded Totally shielded
Dongan Electric Mfg. Co. 2987 Franklin St. Detroit, Mich.	Type K Unmounted Type Type S Type H	1.75 2.50 3.00 4.50	3.5 -1 5.00-1 2.00-1 3.5 -1 5.00-1 2.0 -1 5.00-1 1.00-1 2.00-1 3.5 -1 5.00-1	10 10 10 10 10 10 10 10 10 15 15	3x2x2 3x2x2 2x2x2 2x2x2 2x2x2 2x2x3 2x2x3 2x2x3 3x2x3 3x2x3 3x2x3 3x2x3 3x2x3	10 10 11 11 11 11 11 12 22 22 2			Unshielded Unshielded Unshielded Unshielded Unshielded Unshielded Totally shielded
Electrical Research Labs. Chicago, Ill.	Erla Audio Concert Grand	4.00 6.50	3.5 -1 3.00-1	50 50	3x2x3 3x4x4	1 2 2	125	6,000 8,000	Totally shielded Totally shielded
Ferranti Limited 130 W. 42 St., N. Y. C.	Ferranti AF-4 AF	8.50 12.00	3.5 -1 3.5 -1	10 10	3½x2½x3 3¾x2½x3	1 8 1 12	25 25	8,000 8,000	Totally shielded Totally shielded
Ford Radio & Mica Corp. 111 Bleecker St., N. Y. C.	F. M. C. Supertran	5.00 *6.00	{ 5.00-1 } { 3.00-1 }		3½x1½x2 2¾x2x2	12 13			Unshielded Totally shielded
General Radio Co. 30 State St. Cambridge, Mass. *Without affecting characteristics, n	285H 285D 367 ot burnout current.	6.00 6.00 6.00	6.00-1 2.7 -1 1.2 -1	*10 *10 *30	3½x3½x2½ 3½x3½x2½ 3½x3½x2½	1 8 1 8			Totally shielded inclosed
Gilfillan Bros., Inc. Los Angeles, Cal.	R 1125 R 1125 A R 1100 R 1100 A R 1100 B	4.00 4.00 5.00 5.00 5.00	6.00-1 3.5 -1 3.5 -1 2.00-1 3.00-1						Totally shielded Totally shielded Unshielded Unshielded Unshielded Unshielded
Halidorson Co. Chicago, Ill.	Type A Type B	4.00 5.00	4.00-1 2.00-1		2½x1½x2½ 2½x1½x2½	1 3	150 50	12,000 12,000	Totally shielded Totally shielded
Jefferson Electric Mfg. Co. 501-511 S. Green St. Chicago, Ill.	Star Star Star No. 395 Concertone	2.75 2.75 3.00 6.00 6.00	1.5 -1 3.00-1 6.00-1 1.00-1 2.00-1	10 10 10 250 10	2¼x25x28 2½x25x28 2¼x25x28 2¼x25x28 2¼x3½x3½ 2¾x3½x3½	15 15 15 2	50 50 50 30 30	10,000 10,000 10,000 10,000 10,000	Totally shielded Totally shielded Totally shielded Totally shielded Totally shielded and sealed
Karas Electric Co., Chicago, Ill.	Karas Harmonik	7.00	4.00-1	50	23x21x31	1 4	5	8,000	Totally shielded
Kellogg Switchboard & Supply Co. 1066 W. Adams St., Chicago, Ill.	509 508	4.00 5.00	1.00-1 3.00-1	40 30	$\begin{array}{c} 3\frac{8}{16} \times 2\frac{1}{8} \times 3\frac{5}{16} \\ 3\frac{8}{16} \times 2\frac{1}{8} \times 3\frac{5}{16} \end{array}$	2 2	50 50	6,000 6.000	Unshielded Unshielded
Kenyon Transformer Co. 2344 Amsterdam Ave. New York City	31 31 A 31 AB 41 41 A 41 AB 600	1.50 1.75 2.00 2.00 2.25 2.50 5.00	3.00-1 3.00-1 3.00-1 3.00-1 3.00-1 3.00-1 1.00-1	10 10 10 25 25 25 26 60	1	1 1 1 1 4 1 4 4 2	35 35 35 35 35 35 35	10,000 10,000 10,000 10,000 10,000 10,000	Unshielded Totally shielded Totally shielded Unshielded Totally shielded Totally shielded Totally shielded
Muter Co., Leslie F. 76th and Greenwood Ave. Chicago, Ill. *Dual chokes	Muter 1500 Muter 1550 Muter Clarifier 2700	2.25 2.50 5.00	3.00-1 5.00-1 1.00-1*	10 10 30	28x28x28 28x28x28 23x23x3	14 16 1 4	30 30 20	6,000 8,000 10,000	Totally shielded Totally shielded Partially shielded

Audio Transformers (concluded)

Name and Address of Manufacturer	Trade Name and Model Number	List Price	Turn Ratio	Plate Current Limit in Milliamp.	Dimensions in Inches	Weight in Lb.—Oz.	Covered	oximate ncy Range l in Cycles —Max.	Totally Shielded, Partially, Shielded or Unshielded
National Radio Co. Saint Paul, Minn.	Milleradio Milleradio Milleradio	6.00 6.00 6.00	4.00-1 2.5-1 1.5-1	40 40 40	2 8 x 2x 3 ½ 2 8 x 2x 3 ½ 2 8 x 2x 3 ½ 2 8 x 2x 3 ½	1 7 1 7 1 7	30 30 30	8,000 8,000 8,000	Either shielded or unshielded*
*Shielded type weighs 5 oz. more.									
Pacent Electric Co., Inc. 91-7th Ave., N. Y. C. *Shielded type weighs 4 oz. more.	Pacent Superaudioformer 27 A Pacent 27 B	7.50 7.50	3.00-1 1.00-1	7 45	3 ½ x 2½ x 3 ½ 3 ½ x 2½ x 3 ½	2 4 2	80 80	5,500 6,000	Either shielded or unshielded*
Radio Receptor Co., Inc. 106 Seventh Ave. New York City.	Mfgrs. Type Mfgrs. Type Receptrad Silvertone Receptrad Silvertone Receptrad AT3 Receptrad ATX Receptrad T. C. (output) Receptrad Type B	Special Special 5.00 5.00 5.75 5.75 6.00 6.00	3.00-1 5.00-1 3.00-1 4.5-1 3.00-1 5.00-1 6.00-5 4.00-1		2½ x 2½ x 2 2½ x 2½ x 2 2½ x 2½ x 2 2½ x 2½ x 2 2½ x 2½ x 2 3½ x 2½ x 2	10 10 14 14 1 1 2 8 1 6			Unshielded Unshielded Totally shielded
Ranger Coil Co. West Davenport, N. Y.	Ranger	4.00	2.00-1 up to 10.00-1	15–300	2½x2½x2½	1 1	400	5,000	Totally shielded
Reichmann Co., Chicago, Ill.		3.50	3.5 -1	40	1 2 x 2 x 2 ½	12	60	6,000	Totally shielded
Robertson-Davis Co., Inc. Chicago, Ill.	Multistage Meloformer	5.00	4,00-1	15	21x2x2	10	25	10,000	Totally shielded
Samson Electric Co. Canton, Mass.	HWA 2 HWA 3 HWA 3 Symphonic Push pull input type X †Symphonic push pull combination (2 units) Microphone input Tube to line output	4.00 5.00 5.00 5.00 9.00 5.50 19.50pt	3.00-1 6.00-1 3.00-1 2.00-1 3.00-1 1.5-1	25 90 60 50 60 60 60 for input 775 100	3 x 2 x 2 x 2 x 3 x 2 x 3 x 2 x 3 x 2 x 3 x 2 x 3 x 2 x 3 x 3	1 6 1 5 1 5 1 6 1 5 2 12	50 25 25 25 12 25 12 25 12	6,000 8,000 10,000 10,000 10,000 10,000 10,000	Partially shielded Totally shielded and hermetically sealed
Silver-Marshall, Inc.	S-M 220	6.00	3.00-1	10	3½x2½x2½ 3½x2½x3¾	4 4	30	6,000	Totally shielded
846 W. Jackson Blvd., Chicago, Ill.	S-M 221	6.00	1.00-1	50	3 x 2 x 3 x 3 x 3 x 6	4 4		0,000	Totally shielded
Sterling Mfg. Co., Cleveland, Ohio	R 356	6.00	4.00-1	20	21x11x21	12	50	5,000	Totally shielded
Wagner Radio Co. 643 Washington Blvd.	Panel Type A	6.00	$\left\{ \begin{array}{ccc} 2 & 4 & -1 \\ 1 & 4 & -1 \end{array} \right.$	80 80	3x2x3 3x2x3	2	30	12,000	Brass shielded
Chicago, Ill.	Sub Panel Type E Mfgs.	6.00	1.4-1 1.4-1	80 80	3x2x3 3x2x3	2	30	12,000	Brass shielded
	Type 13 Wilgs.	1	2.4 -1	80	3×2×2	2	30	12,000	Unshielded

†For output

Three New Books

"Practical Radio Construction and Repairing" by James A. Moyer and John F. Wostrel, 313 pages, 5 in. x 7½ in., published by the McGraw-Hill Book Company, 370 Seventh Ave., New York City. Price \$2. This first edition is intended for the amateur radio enthusiast who wants to make his own receiver; for those who have purchased manufactured broadcast receivers and want to know how they work, and how to make adjustments and repairs; and also for the dealer and service man who are called upon to test and repair standard radio sets. It is intended as a companion volume to the authors' "Practical Radio"—and no attempt has been made to define in all cases the terms which occur commonly in radio literature.

"Caravans of Commerce" is the title of a new book published by Harper and Brothers, New York, dealing with the activities, in foreign lands, of the U. S. Department of Commerce. Written by Isaac F. Marcosson, it tells interestingly of the work performed by Department of Commerce representatives in almost every land under the sun. It is a graphic picture of the far-flung trade service of this Government department and should prove of value to anyone interested in foreign commerce.

"Principles of Modern Radio Receiving" by L. G. Hector, 305 pages, 5½

in. x 8\forall in., published by Burton Publishing Co., Buffalo, New York, is written for the non-technical man, but also gives definite information to designers, builders, and dealers. The subjects covered are not treated with too great technical detail, but at the end of each chapter are found references for those who wish to go further into the subject. This is an excellent book for the novice as the subjects are explained in simple language. Price \$5.

Trade-ins Are Dangerous

From Page 49

The second-hand set is also a developer of business in another sense. It is an educator. Any dealer will testify to the number of people who show sufficient interest in radio to make some inquiry in regard to it and who yet are not ready to pay for a first-class set. These are the logical prospects for second-hand sets. It must be remembered, however, that not every man who says he wants something cheap in radio means what he says. It is worth while sounding out the prospect thoroughly before giving up the hope of the sale of a new set. But when he does mean it, sell him a trade-in. And then later on, when experience in radio has shown him that it is worth more to him than he supposed, sell him a first-class set.

The policy of the Eastman Company is to follow up all radio sets sold. In the case of new sets it often leads to the sale of sets to neighbors or friends; in the case of a tradein it frequently means the sale of another set to the man himself. So persistently is this policy carried out, that some of the sets have been back to the store six and seven times, their successive owners in each case trading them in on a new And each of the seven sales. it is safe to say, would never have been made, if the initial step had not been taken through the second-hand equipment.

The utmost caution is used in every transaction in which a trade-in figures; indeed, it may be said they are handled as carefully as dynamite, for Mr. Eastman regards them as dangerous. But he also regards them as one of the most useful business builders in his scheme of merchandising.

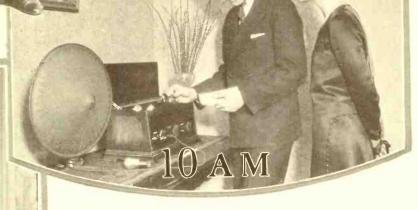
Around the lock with a Radio Salesman

9 A M

At 9 a.m., bright and early, he left the store, jumped into his car and started on his roundsBLUE Monday in the Dog Days! What a temptation to sit in the store and do nothing this warm, sunshing Spring weather.

But nary a radio man ever got rich that way.

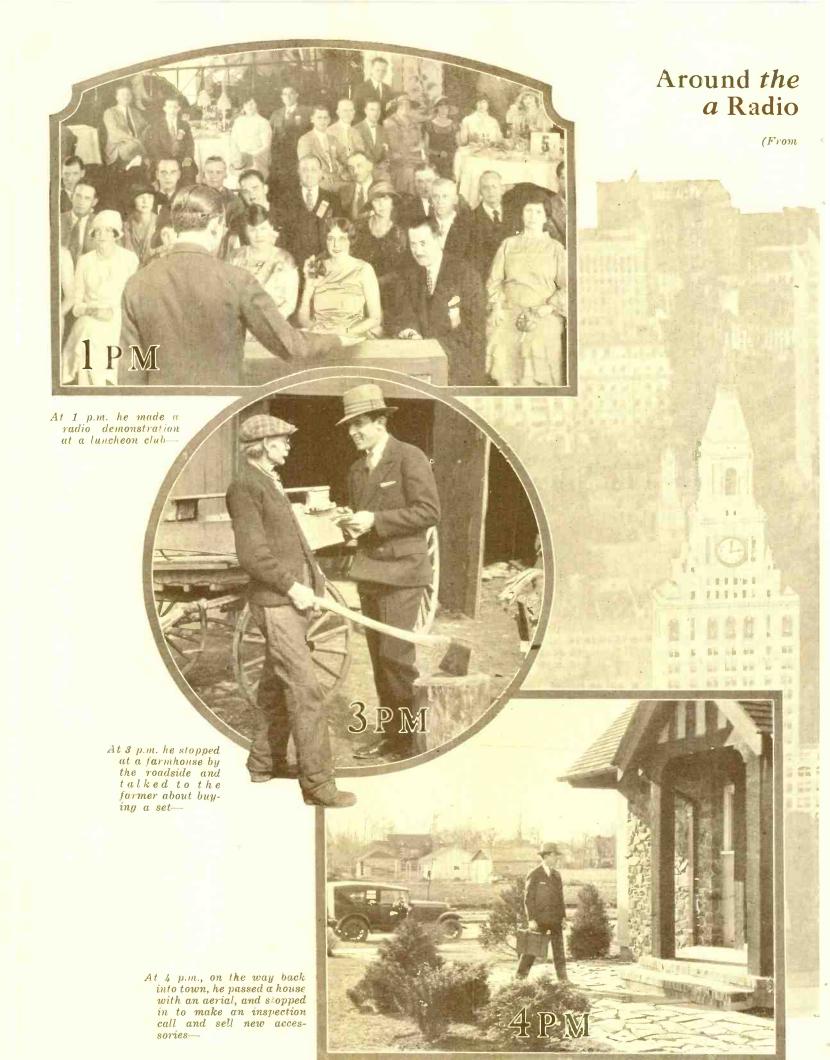
Your editor has a friend—one of many, we hope—in the radio business, who is something of a snappy salesman. We asked permission to spend a day with him, to see how he went about the business of selling radio.

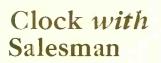


At 10 a.m., he passed the home of a regular customer and stepped in to see if new accessories were needed —also to get the name of a friend who might be interested in a set—

At 11 a.m., he stopped in at the home of the friend his customer recommended, and made arrangements for a demonstration—



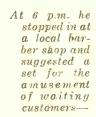




preceding page)



At 5 p.m. he made a demonstration at the store—





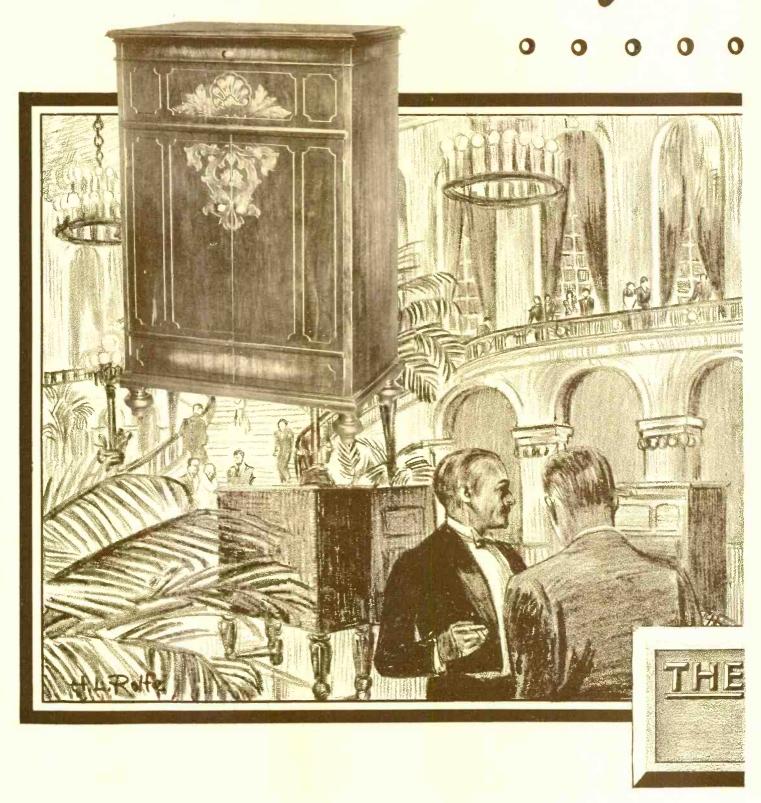
At 8 p.m. he made a home demcustration—

And at 9 p.m. he resurred to the store completely contented with the day's sales.

23 24 27

M CO CO

Early to Buy ..



Early to Sell Fattens Profits

The Radio Trade Show, Chicago, June 13th

Real and burdensome is the difficulty the radio industry faces each season through the fact that

there is no set time for the announcement of new sets by manufacturers. In the past, each manufacturer has made his announcement at as late a date as possible—competition obliged him to.

As a result dealers have found it impossible to place their orders early, or to begin their selling early. They could not take the chance of stocking up on sets which later announcements might completely outclass.

This has placed a gigantic overload on the whole industry in the fall and early winter. Manufacturing has had to be rushed desperately—craftsmanship and inspection necessarily suffered—shipments were poor—costs were held up, in turn keeping down dealer profits.

In short, it has been an advantage to nobody—a serious handicap to everybody in the business.

The Radio Trade Show, to be held in Chicago, June 13, is a golden opportunity to entirely cure this evil. All important manufacturers plan to announce and display their 1927-28 models at that time.

Dealers will have plenty of time to see, discuss, and analyze with a view of placing orders. Manufacturing can be done without fire alarm rush—inspection will be sure—quality will be held up and costs down—and there will be plenty of time for shipments.

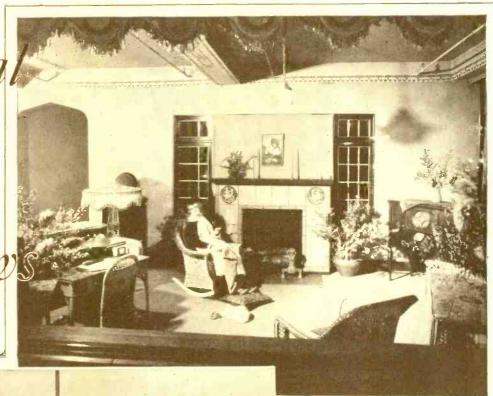
It is one of the most important steps ever taken, and merits the support of the entire industry.

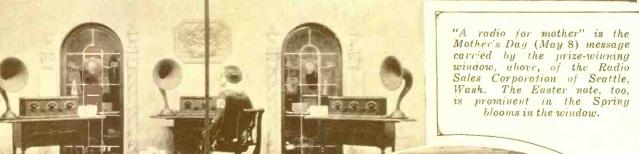
RADIO MASTER CORPORATION

BAY CITY OF MICHIGAN

ONE OF THE WARD INDUSTRI

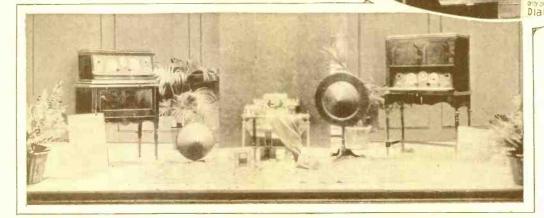
Seasonal
Ideas
In
Radio
Windows





The first prize in a recent Stewart-Warner dealers' contest was awarded to Yowell-Drew, Orlando, Fla., for the rindow shown above which concentrates on one set.

Easter palms give a seasonal Easter note to this radio window, below, of the Rochester. N. Y., Gas & Electric Company.



Radio as an Easter remembrance is impressed
on the shopper by the
window, above, of Steger & Sons, Chicago.
Attention is focussed
on one set, and the
Easter note is brought
out in flowers and
leaves.

Radio Markets South of the Equator

South America, South Africa, Australia and New Zealand offer big opportunities for the export of American apparatus

THE export market for radio apparatus is no longer a dumping ground for excess domestic merchandise but requires the same careful, intelligent planning used by successful companies in the domestic field. Nearly all countries to which we export have emerged from the radio boom period and future developments will be more gradual and in proportion to the sales efforts put forth by radio manufacturers.

In the export market manufacturers of radio apparatus will find not only a means of increasing their volume of sales but an opportunity to develop the southern hemisphere markets in which the radio season comes in the period of minimum domestic sales. The development of these markets will tend to flatten out the manufacturing peak and bring beneficial results.

RADIO apparatus in 1926 accounted for 9.08 per cent of our total electrical exports, including wire, and 10.35 per cent of our total electrical exports, excluding wire. Radio exports fell off from over \$9,900,000 in 1925, to about \$8,800,000 in 1926, a loss of \$1,100,000 or 11 per cent. This does not indicate a declining market, but rather compensation for abnormalities in 1925.

Canada, which is always our best customer, took only about \$2,900,000 in 1926, as compared with \$3,700,000 in 1925, a drop of \$800,000 or 22 per cent. This accounts for 73 per cent of the total decline, though Canada purchased only 33 per cent of the 1925, and 37 per cent of the 1926 total exports of radio apparatus.

The forty countries which took 99 per cent of our radio exports in 1925 took 90 per cent in 1926. The fifteen countries which are expected to lead in importing American radio apparatus in 1927 are, in order of importance, Canada, Australia, Japan, United Kingdom, Argentina, Brazil, New Zealand, Netherlands, Spain, Mexico, Cuba, Uruguay, Denmark, the Philippines and Italy.

Our radio exports during 1925 and 1926 were as follows:

THIS is the third and final article of a series on the world radio market prepared by experts of the electrical division of the Department of Commerce in co-operation with the editors of "Radio Retailing."

	1925	1926
Europe	\$1,497,532	\$1,269,087
North America	4,189,062	3,344,087
South America	999,223	1,260,043
Asia	2,415,521	935,168
Oceania	777,499	1,950,296
Africa	25,271	35,677

Europe showed \$288,445 decrease in 1926, or 15 per cent less than 1925. North America imported \$844,975, or 20 per cent less in 1926 than 1925. Asia dropped \$1,480,353, or 61 per cent in 1926. These continents followed the trend of world trade, but the loss in Japan alone was greater than for all Asia. Increases were

small and widely scattered, the most important being in China, where \$56,591 worth of apparatus was purchased, an increase of \$30,000 over 1925. Oceania gained \$1,172,797, or 151 per cent, in 1926, and Africa gained \$10,406, or 41 per cent. In Oceania, the reopening of the New Zealand market brought a large gain, and in Australia radio imports from the United States were more than doubled. In Africa, the increase was almost totally in British South Africa.

SOUTH AMERICA showed an increase, Venezuela, Argentina and Uruguay largely accounting for it. Venezuela's imports included a broadcasting station and receiving apparatus to be sold by the monopoly in force. In Argentina and Uruguay no new broadcasting stations have been erected, and the increase was due to excellent reception throughout the past season. In other South American countries there has been no increase, and in several, decreases.

Radio Exports from the United States in 1926

Austria	3 \$3,927	Trinidad and Tobago	2,103
Belgium	25,284	Other British West Indies	\$5,467
Czechoslovakia	26,561	Cuba	100,341
Denmark	113,375	Dominican Republic	20,840
Estonia	1.033	Haiti	28,298
Finland	8,500	Virgin Island (U.S.)	489
France	32,770	Argentina	756,524
Germany.	36,683	Bolivia	1.650
Greece	2,374	Brazil	290,731
Hungary	1,120	Chile	54.088
Iceland	364	Colombia	9.726
Irish Free State	4,482	Ecuador	3.062
Italy	116,343	British Guiana.	207
Latvia	1.161	Paraguay.	604
Malta, Gozo and Cyprus Islands.	832	Peru.	
Netherlands	155,107		8,100
	27,377	Uruguay	71,566
Norway			63,785
Poland and Danzig	3,103	British India	12,021
Portugal	8,043	Ceylon.	1,209
Rumania	8,636	Other British East Indies	1,092
Russia in Europe	10,635	China	56,591
Spain	155,323	Dutch East Indies	7,274
Sweden	56,478	Hongkong.	7,460
Switzerland	7,687	Japan	716,841
Turkey in Europe	127	Kwangtung	2,019
United Kingdom	461,479	Palestine and Syria	410
Yugoslavia and Albania	158	Philippine Islands	68,879
Canada	2,888,112	Russia in Asia	61,157
Br. Honduras	1,708	Turkey in Asia	164
Costa Rica	4,194	Australia	1,304,585
Guatemala	10.622	British Oceania	17.599
Honduras	30,673	French Oceania	890
Nicaragua.	3.845	New Zealand	627,222
Panama.	18,404	British South Africa	30,367
Salvador.	27,140	Canary Islands.	2,353
Mexico.	179,624	Egypt	2,538
Newfoundland and Labrador	13,315	Liberia	2,330
Bermuda.	4.099	Other countries.	415
Barbados	523	Other countries	(41)
	4.040	Totals.	\$8,793,411
Jamaica	7,040	I Utasb	30,773,411

Radio Retailing

Your Editors Have

April, 1927

Tell Your Customers—Broadcasting Ills Will Soon Be Cured

THE radio law is in effect and the Radio Commission is already functioning to clear up all confusion between broadcasting stations. It will not be long before the air will be just as clear and reception just as good as it was several years ago when the Government exercised jurisdiction over radio licenses.

Here is the best possible news for you to spread broadside throughout your community—the radio bill is *law* and "ether confusion" will soon be a thing of the past. No more heterodyne squeals and howls! No more chaos! Tell it to your local trade in every way at your command.

Selling in Fresh Fields

WE FIND some sound philosophy in a letter just received from a Western dealer who advances the theory that there are today everywhere plenty of people who would buy a radio set if the matter were brought to their attention in the proper manner. They just haven't "sold themselves" on radio, that's all. Yet they are frequently the easiest to convince.

Our dealer friend points out that a prospect of this kind has an "open mind," he has not been subjected to or affected by the extravagant claims or "special inducements" of other dealers. For these reasons it is often less costly to sell such a customer—in spite of the time it takes to locate him—than the fussier store shopper, with his exacting demands.

Now is an excellent time to test out this theory that business comes to the man who goes out after it.

No Magic Formula for Retail Success

Like that explorer of by-gone days, Ponce de Leon, who searched in vain for the fountain of eternal youth, too many radio retailers are searching for a magic formula to success—a "cure-all" for their ills in the form of some method employed by one of their

number who has reached the pinnacle of success. Unfortunately, retail successes cannot be turned out like so many collar-buttons. Although a knowledge of the methods of successful merchants is of inestimable value to every retailer, it is seldom possible to seize them bodily and transfer them to any other store. The ability to recognize and segregate and apply those which are applicable, coupled with sound business practice, is the nearest to the "magic formula" that we shall probably ever reach.

Hand-to-Mouth Buying—Requirement Buying—Current Buying

EVERYWHERE in American retailing today there is reflected the growing influence of "hand-to-mouth" buying—the limiting of dealers' and distributors' purchases to current requirements. Such "requirement buying" or "current buying," represents a condition that is distinctly here in general business—whatever one's own views or theories may be as to its desirability. Hand-to-mouth buying has inexorably followed as the economic consequence of adequate and rapid deliveries, and a commodity market that is no longer rising.

For the retailer "current buying" involves certain advantages. Stocks on hand are diminished; invested capital is less; overhead charges are reduced, stock turnover is increased, the risks of obsoleted merchandise are diminished, and net earnings are increased.

The manufacturer, too, feels the stabilizing influence or current day-to-day buying. Factory output is better regulated. Commitments are secured. Business is increased. Quality of product can be improved. Dealer and manufacturer are brought into closer contact. The influence of new goods quickens the dealer and his people. The distribution of new articles is made quicker and easier. The manufacturer's salesmen are freed from order-taking; they can sell sales ideas to the dealer, and help the dealer move his goods.

Hand-to-mouth buying means "repeat buying"—frequent buying in smaller quantities, but along a carefully planned schedule. Hand-to-mouth buying of this kind is sound—sound for the manufacturer, the jobber, the dealer, and the public.

Saturation Still Far Distant

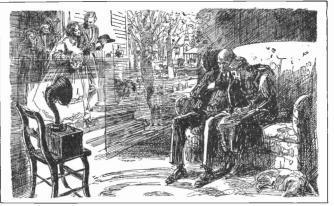
THE radio saturation point, even among well-to do families throughout the country, is still far distant. A recent survey, based upon questionnaires sent to 25,000 substantial families in 25 cities by the New York University Bureau of Business Research, reveals that only 36 per cent of the well-to-do families—97 per cent

of whom own automobiles—have radio receivers.

These figures plainly indicate that selling pressure has been unevenly applied; that 64 per cent of these families are prospects for high-priced radio receivers. To quote the bureau, "It is quite evident that well to-do urban d wellers in the United States are far from being 'sold' on radio apparatus." How much of this business are you going to get?

Why not check up on your district and go out after this business as other energetic dealers are doing?

Sunday, May 8, is Mother's Day
—Has She a Radio?



-N. Y. Sunday American

This to Say—

Radio Retailing

Vol. 5, No. 4

The Real Function of Advertising

THE first function of advertising is not to make direct sales. Its major function is to create markets. It is the follow-up that makes the sales, after advertising has created the demand.

Quoting a well-known retailer, a recent article in this publication said, "Advertising itself is valuable, but the dealer who relies on it alone to make sales is deliberately throwing away its principal benefits."

Depending entirely upon it is like driving your car three-quarters of the way up a steep hill, then calmly

shutting your eyes and killing the engine.

To reap the full benefit of advertising it is necessary to go farther—to reach the top of the hill and make the sale. If the advertiser is a manufacturer or jobber, plenty of salesmen equipped with samples and willingness to prove the assertions of the advertising copy by actual demonstration, will do it. If the advertiser is a retailer, direct-mail circularization and personal calls at the homes of prospects are necessary if 50 per cent of the benefits of advertising is not to be thrown to the four winds.

All Interference Not "Power Line" Trouble

THE power company asks a certain degree of co-operation from radio men, particularly in regard to eliminating from the minds of the public the idea that all radio "interference" is due to power lines. Investigations conducted at considerable expense in all parts of the country have shown that the power company is in reality responsible for but a small part of the trouble,-faulty sets, natural causes and other disturbances causing a large share of the difficulty. Such trouble as legitimately lies at its door, the power company is making every effort to eradicate and radio trouble departments with trained staffs ready to trace down any complaint and eliminate the cause wherever possible, are now a regular part of almost every power company force. All the power company asks is that the radio dealer shall not explain the defective operation of a set to his customers by the careless phrase, "It must be the power lines." Let him suggest rather the thorough examination of the set itself and a few elementary tests of neighborhood conditions before such a possibility is considered at all. Co-operation should work both ways.

One Way to Avoid "On-Trial" Grief

HENDERSON and Parker, Warsaw, Ind., sold 114 radio outfits this last winter and spring. "And not one went out 'on trial,'" declares Henderson. "To those who requested free use of our sets we put the justice of our refusal like this:

"'Yes, we'll be very glad to leave this set at your home if you will let us have the use of your money while you are trying out our radio.'

"Putting it up to a prospect in this light sells the set nine times out of ten."

Why Not a

National Radio Week

to tie in with the Trade Show?

SINCE the demise of the international tests, the radio industry has had no mid-season feature to stir up public interest in radio. The Radio Industries Banquet every fall gets the season off to a hundred per cent start, and the interest is continued by good reception weather and fine broadcasting features right up to the first of May.

Then, from Spring until Fall, nothing happens. The trade permits that dear public to go sound asleep during the summer months, so far as radio is concerned.

SO WHY not a National Radio Week, in the off-season, to re-awaken the public's waning interest? And what more logical time than the week of the Trade Show, June 13th, or thereabouts?

It is the beginning of the decline, a time when the public needs to be sharply reminded about radio; it has a natural publicity tie-up with the Trade Show, and it will create enough of a public demand for radio to give dealers an opportunity to clear their shelves for the new lines.

The Music Industries have done it successfully with their Music Week in May. The Radio Industry can do it with a Radio Week in June—provided—all trade organizations will get together and make plans for mutual co-operation and benefit.

These Time Payment Terms for Radio Are in Line With Accepted Practices

A CERTAIN large manufacturer of radio sets has just announced its plan for helping its dealers finance their installment sales. In order to avail himself of this opportunity, the dealer must obtain at least 25 per cent of the total amount of the sale from the customer at the time the purchase is made. Eight months is the limit that the paper is permitted to run.

It is worthy of note that these conservative terms closely parallel the recommendations of radio trade associations and the practices of the better class of radio dealers.

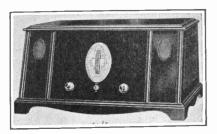
Interest is charged at the rate of 7 per cent per annum. The dealer must act as the collection agency for the installment payments.

Thus does a leader in the industry set its official seal of approval on the "time payment" plan of merchandising radio. The insistent pressure of public opinion and practice has made any other course practically impossible.



What's New in Radio and

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



Six-Tube Shielded Receiver

Radio Retailing, April, 1927

Radio Retailing, April, 1927

The Langbein-Kaufman Radio Company, 62 Franklin St., New Haven, Conn., has just placed the illustrated "Elkay Junior Six" on the market. This is a six tube tuned radio frequency receiver, with shielded coils, cushioned detector, and simplified dual thumb dial tuning. The circuit is two stages of radio frequency amplification, detector, one transformer and two resistance coupled audio stages. The cabinet is of mahogany and the internal construction is steel, aluminum and Bakelite. Intended retail price, \$80.

Three-Dial Five-Tube Receiver

Radio Retailing, April, 1927

The Imperial Radio Corporation of Grand Rapids, Michigan, makes a five-tube, three-dial control receiver known as "Michigan Five." This is a tuned radio frequency set to be operated on either long or short antenna and may be used with either dry or wet batteries. The intended retail price, less accessories, is \$55.



Cabinet Cone Speaker

Radio Retailing, April, 1927

Radio Retailing, April, 1927

The Progressive Musical Instrument Corporation, 319 Sixth Avenue, New York, is now in production on the illustrated LB cabinet speaker. This incorporates a cone speaker operated with fourteen inches of surface drive and eight cubic feet of tone chamber. The cabinet is finished in two tone brown mahogany and 20 foot of cord is supplied. The cabinet is 34\frac{3}{2}\text{ in. high and 18 in. wide and 18 in. deep. The intended retail price is \$65.

Combination Soundboard, Air-Column and Cone Loud Speaker

Radio Retailing, April. 1927

Radio Retailing, April. 1927
The Amplion Corporation of America, 280 Madison Ave., New York City, has recently developed the "Amplion Grand," model AC-15. This reproducer is a combination of air-column, cone and sound-board, resulting, according to the manufacturer, in depth of note, resonance and fine natural tone. This reproducer does not need a power amplifier but functions perfectly when used with one. The handsome walnut cabinet is sturdily built and richly finished. The over-all dimensions are 34 in. high, 33 in. wide, and 18½ in. deep. The intended retail price is \$135, and production is limited.

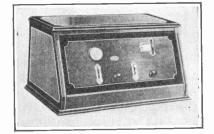


Six-Tube Socket Power Receiver

Radio Retailing, April, 1927

Radio Retailing, April, 1927

The illustrated six-tube one control receiver is made by the Crosley Radio Corporation, 341 Colerain Ave., Cincinnati, O. This model AC-7 has a sloping panel solid mahogany, two-tone cabinet. Operates directly from the electric light circuit, when used with the socket power supply made by this company; 199 type tubes are used in all but the last audio stage, where a 112 type is used. Over-all dimensions are 10½ in. high, 20½ in. long and 12½ in. deep. Intended retail price, less accessories, \$70.



Hi-Mu Receiving Tube

Radio Retailing, April, 1927

Radio Retailing, April, 1927

E. P. Cunningham, Inc., New York City, announces the CX-340 Hi-mu amplifying tube. This tube is designed especially to be used with resistance-coupled amplifiers and has a mu of 30. It is a 5-volt, \(\frac{1}{4}\) amp tube similar in size and appearance to the ordinary tube. It is recommended to be used with a B battery voltage of from 135 to 180. When used with resistance-coupled amplifiers, a negative grid bias should be used, and due to the extremely high voltage amplification, this tube should prove very valuable to users of resistance-coupled amplification. The intended retail price is \(\frac{\$2}{2}.25.\)



Six-Tube Receiver

Radio Retailing, April, 1927

Radio Retailing, April. 1927

The illustrated receiving set is the newest model to be added to the extensive line manufactured by Showers Brothers Co., with executive offices at 914 S. Michigan Blvd., Chicago, Ill. This model contains the regular 1927 chassis—one dial control, six-tube tuned radio frequency, one detector and three stages of audio frequency—and is manufactured under the license granted by the U. S. Navy Department. The walnut cabinet is modeled around the phonographic style and an attractive grill of gold-cloth shields a Utah cone. It is fitted with a drop-leaf and when desired the chassis may be completely enclosed. Spacious compartments have been allowed for batteries, chargers, etc. This model will retail for less than \$100.

Where to Buy It

For More Information on New Parts See Page 87

All announcements appearing on these pages are published without advertising considerations of any kind whatsoever.





Cone Loud Speaker

Radio Retailing, April, 1927

Radio Retailing, April, 1927

The Rola Company, Oakland, Cal., is making the illustrated improved cone speaker said to have richness of tone and excellent reproduction, due chiefly to the patented laminated armature and exclusive cone material of excellent acoustic properties. The unit cone housing assembly is supported behind a gold cloth grill in a walnut disk which is mounted on a base or pedestal. The function of this hardwood disk is to cause the cone to radiate the lower sound frequencies effectively. According to the manufacturer this cone responds to frequencies from 70 to 15,000 cycles. The attaching cord on the pedestal type is 20 ft. long. The intended retail price of the pedestal type is \$32.50; that of the table type, \$28.50.



Complete Line of Receiving Tubes

Radio Retailing, April, 1927

Radio Retailing, April, 1927

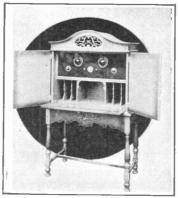
The Zetka Laboratories, Inc., 73
Winthrop St., Newark, N. J., is making a complete line of "Zetka Process' tubes. These tubes are solidly constructed so that they are non-microphonic, and are very uniform, having a minimum B battery consumption. The yare of clear glass construction. The standard 201-A type draws \(\frac{1}{4}\) amp. at 5 volts, and takes a plate voltage of from 45 to 250 volts. The retail price is \(\frac{1}{4}\)1. The 200-A type, a super-sensitive detector tube also draws \(\frac{1}{4}\) amp. at 5 volts and has a retail price of \(\frac{5}{4}\)4. This tube is instantaneous in operation and besides being extremely sensitive is very quiet. The 112 type draws \(\frac{1}{4}\) amp. at 5 volts and takes a plate voltage of from 90 to 135. The retail price is \(\frac{5}{4}\)4.50. Type 171 takes \(\frac{1}{2}\) amp. at 5 volts, a plate voltage of from 90 to 180 and has a retail price of \(\frac{5}{4}\)4.50. Type 199 with either a small or UX standard base, a 3-volt tube which takes a plate voltage of from 22 to 90, and has a retail price of \(\frac{5}{2}\)2.5. Types 210 and 216-B are also made.

Seven-Tube Lamp Socket Receiver

Radio Retailing, April, 1927

Radio Retailing, April, 1927

The illustrated 2-dial, 7-tube receiver is made by the Sovereign Electric & Mfg. Co., 1744 So. Ogden Ave., Chicago, Ill. It is completely shielded and operates directly from the house current using the "Sovereign" a.c. tube. The chassis measures 9½ in. x 12½ in. X 12½ in. The cabinet is of walnut and decorated and finished either in walnut or red or green lacquer. Intended retail price in walnut complete and ready to operate is \$325. The intended retail price in either color lacquer complete and ready to operate is \$360.



Electric Reproducer for Phonograph

Phonograph

Radio Retailing, April. 1927

The American Bosch Magneto Corporation, Springfield, Mass., has just put on the market the Bosch "Recreator." This is used instead of the ordinary phonograph tone arm, carrying the reproduction electrically from the phonograph record to the detector tube socket where a dummy tube base is inserted and from there the impulses are carried through the audio amplifiers of the set to be reproduced later on the loud speaker. A volume control is provided to give any desired volume. The device is complete in itself and needs no extra batteries, the current being supplied from the receiving set through the dummy tube base. This device is attractively finished in statuary art bronze and is offered in a handsome velvet lined case. The intended retail price is \$20.



General Purpose Receiving Tube

Radio Retailing, April, 1927

The De Forest Radio Company, Central Avenue and Franklin St., Jersey City, N. J., is now in production on Type D-01A Tube. This is a 5-volt tube drawing 1 amp., designed as a general purpose tube. It will take up the 45 volts when used as a detector and 135 when used as an amplifier. Also when used as a detector the grid return should be to the positive filament, as an amplifier, to the negative filament. The intended retail price, \$1.65.



Console with Built-in Horn

Radio Retailing, April, 1927

Radio Retailing, April, 1927

The American Apparatus Company, Phonograph Throat Division, Richmond, Ind., is now manufacturing the illustrated "Baby Grand" console. Over-all dimensions are 32 in. wide and 40 in. high. Ample room is provided for any style of battery equipment and 7 in. by 28 in. front panels, or smaller, may be used. All facings are genuine walnut and are finished in lacquer. This console also incorporates a new patented construction speaker horn. Intended retail price is \$24.

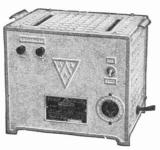
What's New in Radio and Where to Buy It-

Socket Power A Supply Unit

Radio Retailing, April. 1927

Radio Retailing, April. 1927

A new product will be marketed by the Triple-A-Specialty Company, 312 S. Hamilton Ave., Chicago, Ill., in the "Silver Beauty" A power unit. This unit replaces the standard acid storage battery and charger, but is not a combination of these two parts, according to the maker. The filter consists of two new type large capacity choke coils. This filter is not a battery, does not create or store any power. The unit is complete in a housing of aluminum like the other line of Silver Beauty battery chargers. The aluminum is non-magnetic and does not absorb any magnetism from the magnetic field of the transformer. Consequently it does not vibrate, and reduces the noise to a minimum, which will at no time interfere with reception. The unit has a socket for the insertion of the plug of the B eliminator when such is used, and both items are then controlled from an "on and off" switch on the A power unit. There are standard binding posts for the positive and negative wires of the set. Two sizes will be manufactured, one to accept radio sets of 1-8 tube capacity and one 6-12 tube capacity.



Radio Furniture

Radio Retailing, April, 1927

The Knoxville Table & Chair Co., Knoxville, Tenn., is making a complete line of radio furniture. Tables are made to fit the various sizes of radio sets, and range in price from \$23 to

B Socket Power Unit

Radio Retailing, April, 1927

Radio Retailing, April, 1927

The "Perfex" B socket power unit is made by the Rollaway Motor Company, Toledo, O. This will supply 40 milliamp, at 150 volts and has a 280 volt tap for use with a special purpose "power" tube used in the last audio frequency stage. The detector voltage is adjustable from 0 to 60 and the amplifier from 60 to 150. The intended retail price, complete, is \$45.



Hi-Mu Tube

Radio Retailing, April, 1927

Radio Retailing, April, 1927

The UX-240 Radiotron is the latest receiving tube to be made by the Radio ('orporation of America, 233 Broadway, New York City. This has a mu of 30 and is designed especially for resistance-coupled amplifiers. It is similar in size and appearance to the ordinary tube. With 5-volts on the flament it draws 3 amp. and is recommended to be used with a B battery voltage of from 135 to 180. The plate resistance is 150,000 ohms and the plate current at rated voltage .2 milliamp. When employed in resistance-coupled amplification, a negative grid bias should be used. Due to its high voltage amplification factor this tube should find favor among users of resistance-coupled amplifiers. The intended retail price is \$2.25.

Special Radio Frequency Tube

Radio Retailing, April, 1927

Radio Retailing, April, 1927

The C. E. Manufacturing Co., 702
Eddy St., Providence, R. I., announce
the latest addition to the CeCo family
in type K special radio frequency tube.
This draws \(\frac{1}{4}\) amp. at 5 volts, and should
be used with some 67 to 140 volts on the
plate. While this tube will make a
marked improvement when used in the
radio frequency stages of an average
receiver, it is not recommended for
Neutrodynes unless a competent radio
man is available to reset the neutralizing control. The internal capacity of
this tube being different from the ordinary tube necessitates this. Intended
retail price \(\frac{3}{3}\).



Electric Phonograph Pick-up

Radio Retailing, April, 1927

Radio Retailing, April, 1927

The "Elec-Tru-Tone," a device in three units for electrical pick-up of phonograph reproduction, is made by the Elec-True-Tone Corporation, Hibernian Building, Los Angeles, Cal. The electro-magnetic reproducer is connected with the phonograph tone arm and a plug is inserted in the detector tube socket. In between is a volume control. The phonograph is played in the usual way, the radio set turned on and the audio frequency system together with the loudspeaker of the radio set is used for reproduction. The intended retail price is \$35.

Dry Trickle Charger

Pry Trickle Charger

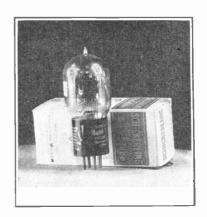
Radio Retailing, April, 1927

"Rectox" is the name of the new trickle charger made by the Westinghous? Electric & Manufacturing Company, East Pittsburgh, Pa. The rectifying element of the new charger consists of stacks of alternate disks, or rather washers, of copper, with one side oxidized, and lead, which elements freely pass current in one direction only, forming a rectifying device. The copper washers, or disks, are oxidized on one side in furnaces under very high temperature and when separated from each other by a soft metal, it is explained, give the desired results.

New Receiving Tubes

Radio Retailing, April, 1927

The Schickerling Products Corporation, Mulberry Street, Newark, N. J., has recently brought out several new types of receiving tubes. The P. S. 10 type illustrated is a precision amplifier, drawing ½ amp. at 5 volts and having a retail price of \$4. The P. S. 15 is a precision type power tube, drawing ½ amp. at 5 volts, having a retail price of \$6. SX 100-A is a new alkaline super-detector tube drawing ¼ amp. at 5 volts. This tube has a retail price of \$4. Certified type SX 500 is a radio frequency tube drawing ¼ amp. at 5 volts. The characteristics of this tube are certified and the retail price is \$2.50. Type SX 4000 is the ordinary detector amplifier tube, drawing ¼ amp. at 5 volts and has a retail price of \$1.75. Type SX 112 is a power amplifier, drawing ½ amp. at 5 volts, having a retail price of \$4.50. Type SX 171 is a power amplifier designed for use in the last audio stage only, drawing ½ amp. at 5 volts and having a retail price of \$4.50.



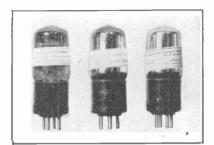
News of Latest Products Gathered by the Editors

Special Purpose Vacuum Tubes

Radio Retailing, April, 1927

Radio Retailing, April, 1927

The Magnavox Company, Oakland, Cal., has added three new special purpose tubes to its line, namely types 171, 200-A and 150-D. Type 171, for use in the last audio stage, provides amplification with a minimum of distortion. It draws ½ amp. at 5 volts. Plate voltages from 90 to 180 may be used with grid bias voltages varying from 16 to 45 volts depending upon applied plate voltage. Type 200-A is a super-sensitive detector designed especially for the reception of weak signals. Recommended plate voltage 45, filament voltage 5, with a grid-leak from 2 to 5 megohms. The tube's filament current is ½ amp. Type 150-D is a special purpose tube for use where quality reception is paramount to the user. It is a ½ amp. 5-volt tube similar to the 200-A and may be used with plate voltages ranging from 20 to 80. Its use is not recommended for extreme distance but it is



capable of giving satisfactory sensitivity with an entire absence of tube noises common to the sensitive detector type tube. Especially recommended when one or more stages of radio frequency are used before the detector. All tubes are equipped with standard bases which fit either navy standard or UX type sockets.

Battery Testing Meter

Radio Retailing, April, 1927

Radio Retailing, April, 1927

The Lundquist Tool and Manufacturing Company, Worcester, Mass., has brought out the illustrated "Yankee HiDro" meter for use in testing 6-volt storage batteries. The readings indicated in the meter are high, low and full. These meters are carefully adjusted with a known standard at the factory and give a very accurate reading of the condition of the battery. For home use a meter of this type is much better than a hydrometer, The instrument should not be held on a battery any longer than is necessary to note the reading.

Trickle Charger

RAO LOW 6000 FULL

Radio Retailing, April, 1927

Radio Retailing, April, 1927

A compact trickle charger is being made by the Johnson Motor Products Company, 308 North Sheldon Street, Chicago, Ill. It charges at a .6 amprate and has special alloy electrodes which, according to the manufacturer never corrode or crust. Specially molded rubber covers thoroughly the transformer. It is also said that there is no hum when the charger is being used and that it will not interfere in any way with the reception. It is designed for operation on 110-volt, 60 cycle current and has an intended retail price of \$8.75. For 25 cycle operation the intended retail price is \$9.75.

Transformer-Choke Unit for **B** Socket Power

Radio Retailing, April, 1927

Radio Retailing, April, 1927
One of the latest developments in the radio field is the B-eliminator unit No. 3516 announced by the Dongan Electric Manufacturing Company of Detroit, Mich. It consists of one transformer and two chokes in one case and is designed for use with Raytheon B-H tube to provide enough B power to permit power amplification in receiving sets using 171 or 112 UX tubes for power amplification. In addition, No. 3516 has a 5-volt winding which furnishes A current, also, of sufficient strength to operate 171 or 112 UX tubes.

Socket Power A Unit

Radio Retailing, April, 1927

Radio Retailing, April, 1927

The Acme Automatic A power unit consists of a 6 volt 40 ampere-hr. battery, two rate bulk type trickle charger, which delivers a charging rate of ½ and 1½ amp. These rates may be obtained by simply throwing a toggle switch, which is mounted on the outside of case. There is also an automatic control switch and a B power supply attachment plug incorporated in the design of this unit. The steel case, in which the above products are placed is furnished in crystaline lacquer, mounted on rubber feet, and presents a neat and attractive appearance. This unit will serve radio receivers from one to ten tubes and can be supplied by the manufacturer minus the battery, making it possible for the dealer to place a battery of his own choice within the space provided for same in steel container. Intended retail price of type A PU-6 complete \$35. Made by the Acme Electric & Mfg. Co., Cleveland, O.

Battery Tester

Radio Retailing, April, 1927

Radio Retailing, April, 1927

A battery tester which may be permanently attached to any storage battery and is always ready for immediate action by simply pressing a button has just been placed on the market by the Beede Instrument Company, Penacook, N. H. This is known as the "Test-A-Bat." It consists of a high resistance meter 2 in. in diameter, built in a nickel case and finished with two attachments which have universal polarities, either one of which may be attached to either pole of the battery. One of these attachments is fixed to the top of the meter with a swivel joint permitting the meter to be placed at any angle for convenient reading. The other terminal is attached to a rubber coyered cord sufficiently long to reach the other connection on the battery. The terminals, which are of non-corrosive metal, are finished with set screws. There are three divisions, reading from left to right, red white and green. Intended retail price \$1.75.



Loud Speaker Tone Filter

Radio Retailing, April, 1927

Radio Retailing, April, 1927

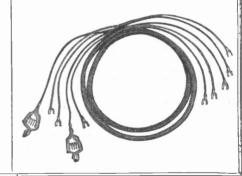
The "Sprague Tone Control" is made by the Sprague Specialties Company, Quincy, Mass. It consists of a variable, high capacity condenser, of a range of from 0 to .035 mfd., which is designed in a compact unit, so that it may be attached between the radio set and the loud speaker. A small knob on the top of the unit allows for variation so that the impedance of the set and the speaker may be matched. This results in better tone quality. Intended retail price, \$3.50.

A and B Battery Cable

Radio Retailing, April, 1927

Radio Retailing, April, 1927

A five-wire, acid-proof, non-inflammable cable is being made by the De Jur Products Co., 199 Lafayette St., New York, N. Y. It is made of 41 strands of No. 30 wire in each conductor, this being equivalent to No. 14 wire. Each conductor is of a very distinctive everlasting color for easy identification, and the covering is a patented process "Flexostrand." It is made in 5, 6, 7, 8 and 9 conductors with or without clamps.





What's New in Radio and Where to Buy It

Heavy Duty Full Wave Rectifying Tube

Radio Retailing, April, 1927

Radio Retailing, April, 1927
The "Schickerling Corona" filamentless rectifying tube is the latest development of the Schickerling Products Corporation, 401 Mulberry Street, Newark, N. J., for use with B socket power units. The tube is designed to stand any load up to 250 volts, and an output of 90 milliamp. This tube will operate in any standard socket power B unit with an increase of voltage and current output. Intended retail price is \$6.



Insulating Tubing

Radio Retailing, April, 1927

Radio Retailing, April, 1927

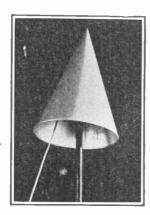
"Turbo" oil tubing is made by William Brand & Company, 27 East 22nd Street, New York City. This is used in connection with the insulation of bus wires in the manufacture of radio sets, rectifiers and eliminators, etc. It is a very high grade tubing having excellent insulating qualities and can be bent or twisted in any shape without cracking or splitting.



Compact Crystal Receiving Set

Radio Retailing, April, 1927

Radio Retailing, April, 1927
The Brooklyn Metal Stamping Corporation, 718 Atlantic Avenue, Brooklyn, N. Y., is making a small crystal receiving set known as "Pandora." No battery is needed to operate this receiver and after connecting a pair of head phones, the antenna and ground, it is ready to be operated. Stations are received by varying a small sliding contact arranged on the side of the coil. The receiver measures 3\frac{3}{3} in. in diameter at the base and is approximately 5 in. high. All metal parts are made of brass and finished in russet bronze. Intended retail price, \\$1.75.



Copper Cone Antenna

Radio Retailing, April, 1927

Radio Retailing, April, 1927
A cone-shaped antenna of sheet copper, coated with aluminized enamel, manufacturing Company, 809 Fifth Place, Tulsa, Okla., contains an insulating joint protected from the elements. It is claimed that this feature prevents electrical leakage around the insulation and that equally satisfactory results are obtained, therefore, regardless of the weather. This cone aerial is non-directional according to the manufacturer. It measures 11 in. at its widest point, and is 16 in. high.

Small Wet Battery for 3 and 1.1 Volt Tubes

Radio Retailing, April, 1927

Radio Retailing, April, 1927

The "Telecell" has a capacity of 75 amp.-hr. and is made by the Waterbury Battery Co., 1036 South Main St., Waterbury, Conn. All the elements are sealed in an air-tight glass jar, which is 2\(\frac{1}{2}\) in in diameter and 9 in. high. For light intermittent discharge work the voltage per cell is 8/10 volt while in continuous closed circuit operation it is about \(\frac{3}{2}\) volt per cell. It will handle continuous discharges up to 1\(\frac{1}{2}\) amp. These cells are shipped dry and do not become operative until filled with ordinary cool water when the cakes of caustic soda at the top of the cell dissolve, forming the electrolyte and generating enough heat to release a special oil which covers the electrolyte and prevents it from evaporating.



Automatic Safety Switch

For use with B socket power supply units, washing machines, home appliances, etc., the Precise Manufacturing Company, Rochester, N. Y., is making what is known as No. 1600 Protector. This is entirely automatic in its operation and takes the place of an ordinary switch and provides protection for the apparatus. It is constructed on a bakelite base and encased in a finished metal cover. When the red button with which this is equipped, is pressed in, a trigger mechanism automatically releases the electrical contact in the switch the instant an overload is put upon the line. Over-all dimensions are 3 % in. by 21 in. by 11 in. It is made for various voltages and overload values.

Sulphation Reacting Powder for Storage Batteries

Radio Retailing, April, 1927

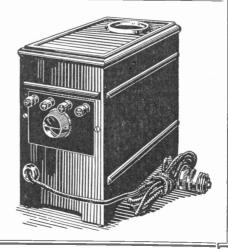
The International Radiolite Company, 120 W. 42nd St., New York City, has placed on the market a non-acid powder called "Radiolite." This powder is designed to be used with lead plate storage batteries changing the hard crystalline form of sulphation to a porous condition. This powder is put up in a small box containing three tubes, each tube having enough powder for one cell of the battery. The intended retail price for a box containing three packets is \$1.50.

Socket Power Unit

Radio Retailing, April, 1927

Radio Retailing, April, 1927

The illustrated B battery eliminator known as "Electron Universal," using a Raytheon tube, is made by the King Electric Manufacturing Co., Inc., 1681 Fillmore Ave., Buffalo, N. Y. The detector voltage is fixed at 45 volts, while voltage for radio frequency and audio frequency tubes is variable, controlled by a small dial. The finish is Royal Blue with a gold name plate and gold silk cord. Several models are made as follows: "Universal" for use with 50-60 cycle current, \$42.50 complete with tube; "80 mil., Giant" for use with 50-60 cycle current, complete with 80 milliamps. Raytheon tube, \$50; "Universal" for use with 25-40 cycle current, \$47.50 complete with tube; "80 mil., Giant" for use with 25-40 cycle current, \$50.50, complete with an 80 milliampere Raytheon tube.



What the Trade is Talking About

St. Louis Radio Ass'n Elects Officers

Robert W. Bennett, president of the R. W. Bennett Company was elected president of the St. Louis Radio Trades Association at its annual election of officers at the American Annex in that city. The other newly-elected officers are Julian E. Sampson, George H. Niekamp, and Gus H. Cohn, vice presidents; Samuel B. Singer, secretary, and W. A. Ward, treasurer. Wm. P. Mackle was re-elected Executive Secretary.

The board of directors for the ensuing year consists of Robert W. Bennett, Gus H. Cohn, Walter H. Dyer, Loren M. Wood, Melville B. Hall, Harold J. Wrape, George H. Niekamp, W. A. Ward, Samuel B. Singer, Julian E. Sampson, A. C. Brandt and Robert Kissel.

Pacific Trade Association Meets in San Francisco

The Pacific Radio Trade Association held a well-attended meeting in San Francisco on March 3. Over 250 radio men were present. Ernest Ingold, the president, presided. Among the speakers and guests were Brother Leo, noted English scholar, St. Mary's College; George McClelland, general manager, National Broadcasting Co.; G. Harold Porter, Pacific Coast manager, Radio Corporation; Margaret Jarman Cheeseman, opera singer; George Podeyn, Coast manager, National Broadcasting Co.; Colonel J. H. Dillon, the new radio commissioner; Charles Holman, KFI, Los Angeles; Jim Laughlin, and Mrs. Frederick Crowe, KPO, San Francisco; Ada Morgan O'Brien, KTAB, Oakland; William Cross, president, Alameda County Radio Trade Association; and Ellas Marx, president, Sacramento Music and Radio Trade Association.

Reports were made by the Radio Show Committee and the Interference Committee. The treasurer's report showed a balance of \$16,000.

Hazeltine Shows Earnings of \$297,031.86 for 1926

The annual report of the Hazeltine Corporation, owner of the patents covering neutrodyne radio receivers, shows net earnings for 1926 of \$297,031.86, or \$1.69 per share on 175,000 shares of outstanding stock.

The total royalties for 1926 were \$432,616.04; interest was \$9,715.87; and profit from sale of securities, \$377.50, making the gross earnings \$442,709.41. Expenses and Federal taxes were \$145,-

In 1926 dividends amounting to \$218,750, or \$1.25 a share were paid to stockholders.

In the past two years the company paid \$310,000 cash out of earnings for 80 per cent of the capital stock of the Latour Corporation, and for the entire

capital stock of the Carloyd Electric & Radio Company. Its total investment in these two companies is \$361,432.69. Other assets include railroad and public utility bonds in the total amount of \$113,278.75. There are no funded debts.

Wisconsin Dealers Guests of Trades Association

Wisconsin radio dealers were dinner guests of the Wisconsin Radio Trades Association recently at the Elks Club, Milwaukee, for the inauguration of a large sales campaign. Walter Kluge, chairman of the banquet committee, was toastmaster. R. R. Cunningham, La Salle Extension University, Chicago; George L. Willman, Dartnell Sales Corporation, Chicago, and V. H. Maurer, Badger Radio Corp., Milwaukee, made addresses. Cash prizes for salesmen selling the largest number of receiving sets before April 15, it was announced, will be awarded by the association and leading jobbers.

Zenith First Licensee Under R.C.A. Patents

As the result of negotiations between E. F. MacDonald, Jr., president of the Zenith Radio Corporation, Chicago, and David Sarnoff, vice-president and general manager of the Radio Corporation of America, the latter company has licensed Zenith to manufacture radio receivers under basic patents which it controls.

which it controls.

The signing of this agreemnt by Zenith, the first of the so called "independents" to be so licensed, marks the end of a 5 year period of litigation for alleged patent infringement and

embodies the payment to R.C.A. of a lump sum which will probably exceed \$500,000 for back royalties, as well as a 7½ per cent royalty on all machines hereafter manufactured and sold by the Chicago company.

The Radio Corporation, according to Mr. MacDonald, holds basic patents issued to Alexanderson, Armstrong, Langmuir, Hull, Rice, White, Chubb, Lowenstein and Mathes, one or more of which is infringed by many American manufacturers of radio apparatus. Numerous suits are pending against other manufacturers for alleged infringement of patents which are said to represent an investment of \$12,500,000 to R.C.A.

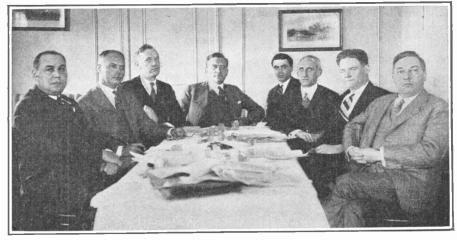
First Midwest Radio Congress Held in Des Moines

The first Midwest Radio Congress was held at the Savery Hotel, Des Moines, Iowa, Feb. 23-24, under the joint auspices of the Iowa Radio Listeners' League, and the Des Moines Radio Merchants' Association. The general sessions were devoted to an attempt, by frank discussions, to ascertain just what the listeners of Iowa wanted. Ray V. Sutliffe, western editor of Radio Retailing, addressed the wholesale group on the subject of overstocking dealers.

Positions for Assistant Radio Inspectors Open

Applications for assistant radio inspector must be on file with the Civil Service Commission at Washington, D. C., not later than April 16. The date for the examination will be stated

A Good Job Well Done



Now that the Co-ordinating Committee of the Radio Industry has accomplished its fine job of shaping and securing radio legislation, its members were able to find time to have their picture taken. Here they are. From left to right: M. C. Rypinski of Kolster-Brandes, Inc.; Louis B. F. Raycroft, vice president of the N.E.M.A.; Arthur T. Haugh, president of the Radio Manufacturers' Associa-

tion; Walter A. Strong, Chairman of the American Newspaper Publishers' Committee; L. S. Baker, executive secretary of the National Assn. of Broadcasters; Charles Stewart, vice president of the American Radio Relay League; Harold Wrape, president of the Federated Radio Trades Association, and Paul Klugh, chairman of the National Association of Broadcasters.

on the admission cards, and will be about ten days after the close of receipt of applications.

The examination is to fill vacancies

in the Department of Commerce, for duty in the field, at \$2,100 a year, and in positions requiring similar qualifications, at about the same pay.

The duties will be to assist the radio inspector in the enforcement of the Radio Act, to inspect radio equipment on vessels and in land stations, and to assist in the examination of radio

operators.

Competitors will be rated on theoretical and practical radio questions, education, training, and experience. Full information and application blanks may be obtained from the United States Civil Service Commission, Washington, D. C., or the secretary of the Board of U. S. Civil Service Examiners at the Post Office or Customhouse in any city.

The Wisconsin Radio Trade Association held its annual meeting March 2, at the Republican hotel, Milwaukee, Wisconsin. Michael Ert was re-elected president and director. Sidney Neu and Eric Pfleger were also elected directors for three years. Mr. Neu was reelected secretary while Mr. Pfleger was named treasurer, and Clarence Bates vice-president. The association plans a downtown office for the convenience of dealers in all parts of the city, state and suburbs. At the meeting arrangements for the 1927 radio show and exposition at the Auditorium were also discussed.

L. S. Baker, executive secretary of the National Association of Broadcasters, has been elected executive vice-president of the Radio Manufacturers Association. This move was made in accordance with a plan approved by the boards of directors of the two associations to secure permanent coordination between the broadcasting and the manufacturing ends of the industry. The Radio Manufacturers Association will maintain offices in conjunction with the Broadcasters in New York and Chicago, and a permanent office in Washington. Mr. Baker will supervise the work of the three offices. No merger of the two associations however, is contemplated.

K. E. Reed has been assigned to a position on the special representative staff maintained by the Federal Radio Corporation of Buffalo, N. Y. Mr. Reed is advanced from the position of territorial representative of the company in the New York City district and will contact with all Ortho-sonic distributors in his new position.

The Sparks-Withington Co., of Jackson, Mich., has made a number of additions to its sales personnel. They include D. W. Murray, formerly of the Michelin Tire Company; C. J. Hayes, formerly with Osburn, of Cleveland; R. S. Williams, former Dallas representative of the American Hammer & Piston Ring Co., and I. H. "Ike" Tusing, formerly with Fulton and Kingley-Miller. Hayes is assigned to Middle Western territory and Tusing to the Southwest.



Fathers of the Radio Bill Listen In

Senator C. C. Dill, of Washington, (left) and Congressman Wallace H. White, Jr., of Maine, are the two members of Congress who are responsible for shaping and securing the passage of the compromise radio bill under which radio broadcasting is now functioning. Both are intensely interested in radio. They are shown on the steps of the Capitol at Washington, listening in, just after President Coolidge signed the bill which made their compromise measure the radio law of the land.

The Operadio Corporation, 700 East 40th St., Chicago, has been reorganized with J. M. Stone as president. Its main item will be the new Model 7 Operadio Portable, which it will sell direct to selected dealers.

J. J. Schratwieser, formerly with the Sonora Phonograph Company, is now with Grigsby-Grunow-Hinds Co., Chicago manufacturer of Majestic power units.

The Stromberg-Carlson Telephone Manufacturing Company, Rochester, New York, was recently the recipient of two medals from the Sesqui-Centennial Exposition held last year in Philadelphia. It was awarded a gold medal for its development and manufacture of a totally shielded radio receiving set, and a silver medal for its improved reproducer.

Edward Eagle, vice-president and general sales manager of the Gold Seal Electrical Co., left March 19 on the Leviathan for an extended European trip to complete distribution arrangements in England, France, Germany, Holland and the Scandinavian countries.

The King Manufacturing Corporation of Buffalo, N. Y., announces the election of Burt G. Close, as vice-president in charge of sales and merchandising, and H. W. Stickle, as vice-president in charge of production.

Stockholders' Meeting Broadcast

A new use was found for radio recently when the annual meeting of the Commonwealth Edison Company of Chicago was broadcast through station KYW. This broadcast enabled the company's stockholders and customers to listen in on the business transactions of the meeting and the address of the president Samuel Insull.

Resale Price Enforcement Upheld by Supreme Court

The Federal Trade Commission was defeated in another effort to restrict enforcement of resale prices by manufacturers, when the United States Supreme Court, March 14, declined to review a decision of the Circuit Court of Appeals enjoining an order of the Commission against Harriet Hubbard Ayer, Inc.

The Commission had ordered the Ayer company to desist from certain practices to maintain observance of retail prices. The Circuit Court, which the company appealed, held that in order to establish unlawful price maintenance, there must be a tendency to monopolize a line of commodities or an unreasonable restraint of trade; that there must be proved a general system of contracts between the manufacturer and all dealers; and that the practices must be characterized by The proof showed that the fraud. Ayer company refused to sell to only a few dealers because of price cutting, and that most of its dealers maintained the company's resale price voluntarily.

N.B.C.'s Executive Staff

The executive staff of the National Broadcasting Company, according to a recent announcement of M. H. Aylesworth, president, consists of: M. H. Aylesworth, president; George F. McClelland, vice-president and general manager; H. W. Angus, assistant vicepresident and general manager; Charles B. Popenoe, treasurer; Mark J. Woods, assistant treasurer; L. MacConnach, secretary; Donald Withycomb, assistant secretary; Harry F. McKeon, auditor. Frank A. Arnold, director of development; George J. Podeyn, Pacific Coast manager; Gerard Chatfield, supervisor of programs; Nicholas de Vore, manmusical and literary research; O. B. Hanson, manager of operations and engineering; G. W. Johnstone, publicity manager; Samuel L. Ross, manager of Artists' Bureau; H. A. Woodman, traffic manager. Miss Bertha Brainard, manager of WJZ; Phillips Carlin, manager of WEAF; Ralph Edmunds, manager of WRC; Frank E. Mullen, manager of KFKX; Carl Dreher, staff engineer; E. F. Grossman, supervising engineer; W. H. Ensign and D. S. Tuthill, assistant sales managers; Herbert B. Glover, WJZ publicity representative; and R. W. McAdam, WEAF publicity representative.

Major James E. Hahn, president of the DeForest Radio Corporation, Ltd.. Toronto, Canada, was recently elected president of the Amrad Corporation, Medford Hillside, Mass., to succeed Harold J. Power who resigned to engage in an independent radio business.

Showers Brothers, with headquarters at 914 South Michigan Avenue, Chicago, has devoted its entire plant No. 4 in Bloomington, Ill., to the manufacture of radio cabinets. The plant is the largest of the manufacturer's string and is 1,700 ft. long, 90 ft. wide and two stories high.

Bakelite Caravan Making A Mid-West Trip

The Bakelite Corporation, 247 Park Avenue, is sponsoring an exhibition tour in the central states which it calls a "Traveling Exhibition of Bakelite in Industry." The exposition includes the products of about 200 manufacturers employing Bakelite. The itinerary of the tour is as follows:

April 11, Hotel Olds, Lansing, Mich.; April 13-14, Hotel Pantlind, Grand Rapids, Mich.; April 18-19, Hotel Keenan, Fort Wayne, Ind.; April 21, Hotel Grand, Anderson, Ind.; April 25-26, Hotel Lincoln, Indianapolis, Ind.; April 28, Purdue University, West Lafayette, Ind.; May 2-3, Hotel Seelbach, Louisville, Ky.; May 6-7, Hotel Sinton, Cincinnati, Ohio.

Robert W. Porter, general sales manager of the Splitdorf Bethlehem Electrical Company, has been elected vice-president in charge of sales. At a recent meeting of the board of directors, Mr. Rautenstrauch, president of the company, reported that a canvas of 10,000 Splitdorf dealers shows that commitments on 1927 business are already in advance of 1926. He announced an annual saving of \$200,000 through improved manufacturing methods.

The Hazeltine Corporation has elected the following officers for the year 1927: R. T. Pierson, president; Edgar Rickard, vice president; Paul Armitage, secretary; Jack Binns, treasurer. Directors are Paul Armitage, I. M. Day, L. A. Hazeltine, Fred Hellman, W. L. Honnold, Thomas H. Leggett, R. E. McConnell, Harvay S. Mudd, R. T. Pierson, Edgar Rickard and W. H. Taylor, Jr.

The National Better Business Bureau, Inc., 383 in Bulletin, 0002, issued March 21, entitled "Selling Socket Power," comes out strongly against the present methods used in advertising Socket Power Units. It urges an informative, accurate and constructive type of copy instead of the disparagement of competitors and lack of explanation of what these units actually accomplish. It explains clearly and concisely the three principal kinds of "A" power units and recommends that manufacturers tell how their power units operate.

The Wolf Manufacturing Industries, makers of radio and phonograph equipment, has purchased the plant formerly occupied by the Apperson Brothers Motor Car Company of Kokomo, Indiana. Two hundred thousand square feet is available in the company's new location.

The Sparks - Withington Company, Jackson, Mich., manufacturer of radio receivers, has recently purchased Group No. 1 Earl Motor plants, adding 140,000 sq.ft. to Sparton facilities. The entire site of six acres was included in the purchase. The factories will be occupied by the Sparton Radio division.

'Leon L. Adelman, formerly with the Chas. Freshman Co., has joined forces with Melvin Freud of the Advertisers' Service Co., with offices at 220 West 42nd Street, New York City.

Fred D. Williams, formerly with the Grigsby-Grunow-Hinds Co., manufacturer of Majestic "B" current supply, was recently elected president and director of sales of the Dubilier Condenser Corporation. William Dubilier, who has been president of the company since its foundation, is now technical director, and will devote all his time to the development work. Another newcomer to the Dubilier Company is C. H. Alvord, formerly with the American Bosch Magneto Company, who is now factory superintendent.

C. D. Boyd, formerly sales promotion manager for the Reichmann Company, is now associated with the Apex Electric Manufacturing Company, 1410-20 West 59th Street, Chicago, as vice-president in charge of merchandising. Mr. Boyd is first vice-president and a director of the Radio Manufacturer's Association

Duane Wanamaker, former western manager of the Talking Machine Journal, New York, was recently appointed director of advertising and sales promotion of the Grigsby-Grunow-Hinds Co., manufacturer of Majestic "B" Current Supply, 4540 Armitage Avenue, Chicago.

The Alexander Hamilton Institute inaugurated in March a new retail course and service called the "Modern Merchandising Course and Service." The course is designed to aid retail merchants in solving their problems and in establishing sound, economic policies.

The Crosley Radio Corporation, Cincinnati, has recently placed five new salesmen on the road. They are E. L. Shephard, formerly of the Crosley servicing department, who will cover the mid-west; W. L. Sayre and Thomas L. De Lime, for the New York territory; O. T. Thorsen for Chicago, and W. R. Perkins for Detroit.

New Bulletin Issued by Commerce Department

The Domestic Commerce Division of the U. S. Department of Commerce has just published a bulletin entitled "Retail Store Problems," which contains information of special value to retail dealers. It is a collection of eight studies, previously issued separately, based on interviews, trade contacts, and questionnaires. Copies of this bulletin, Commerce Series No. 9, may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C., or from the principal branch offices of the Department of Commerce. The price is 20 cents.

Grigsby-Grunow-Hinds Co., Chicago, announces R. F. Grady of 212 Center St., Oldtown, Me., was the winner of the thousand dollars offered for a name and slogan to describe Majestic B Current Supply. The winning title was "Elimatron—The Perfect Radio Power." Over 50,000 answers were received in the contest from every state in the Union, as well as from many foreign countries.

The Schickerling Products Corporation of Newark, New Jersey, makers of Four Element Radio Tubes, has established branch sales offices in Boston and Chicago. The Boston sales office, at 176 Federal Street, is managed by W. E. Nourse. A. E. Simon is manager of the Chicago sales office, located at 45 South Wells Street.

The Van Horne Company, Franklin, Ohio, manufacturer of vacuum tubes, has increased its capital stock 6,000 shares which is an increase of 20 per cent over the original capitalization.

R. C. Ackerman has just been appointed export manager for Fada Radio, succeeding J. F. Meyer who resigned to follow export work in another field.

The R.M.A. Standards Committee Meets



Three hundred members of the radio industry gathered in Chicago in February for the annual meeting of the Standards Committee of the Radio Manufacturers' Association, under the chairmanship of A. J. Car-

ter, the well-known parts manufacturer, and adopted many measures for the standardization of the trade. The picture above shows a committee group taken between the executive sessions.

Langley Joins Crosley



Powel Crosley, Jr., left, is evidently showing Ralph H. Langley, newly appointed executive, the big Cincinnati plant to the last transformer. Langley designed the first airplane transmitter some years ago and formerly was in charge of receiving set development for the General Electric Company.

New Orleans Market Strong, Survey Shows

More than \$3,661,934 worth of radio merchandise was sold in 1926 in the New Orleans territory by distributors, according to a survey recently completed by the *Times-Picayune* of that city. These jobbers estimate their volume for 1927 at \$3,767,500. According to the same report total sales of batteries were in excess of \$4,000,000. The New Orleans territory, the report states, is one of the country's best

markets for high-grade sets, which are necessary to bring in the super-power stations of the north, and is still far from the saturation point.

2XAI to Make Short Wave Tests

The Westinghouse experimental station 2XAI, at Newark, N. J., will make a series of tests from April 18 to April 30 inclusive, every evening from 8 to 9 p.m., eastern standard time. These tests, in which a crystal-controlled transmitter is to be used, are for the purpose of ascertaining the audibility, fading, and keying of short wave transmission. The keying from 8 to 8:30 p.m. will consist of ABC's de 2XAI sent by the station's automatic transmitter. From 8:30 to 9 p.m. amateurs will be worked and tests made.

Scott Appointed

Ex-Congressman Frank D. Scott has been appointed Washington legal representative of the Radio Manufacturers' Association and the National Association of Broadcasters. Mr. Scott retired from Congress March 4 after serving 12 years as Congressman from Indiana and recently was chairman of the House of Representatives Committee of Merchant Marine and Fisheries, which handled radio legislation for the House. Mr. Scott will represent the two radio associations in Washington.

The Utah Radio Products Company, maker of Utah loud speakers and units, has moved to new quarters at 1615 S. Michigan Avenue, Chicago, where they will occupy the entire building.

Cold?—Well, Maybe



Clayton Irwin was given a "bubbling" welcome when he returned to New York from Cuba after a two weeks vacation. He came back cold, but fully rested to take up his duties at the Chicago Radio Trade Show.

Sees Great Benefits from New Radio Law

Enactment of the measures just approved by Congress for guiding radio broadcasting is the best news which could come to the radio industry at this time, according to M. C. Rypinski, vice-president of Federal-Brandes.

"This legislation embodies many of the suggestions of the National Radio Coordinating Committee, and is therefore representative of the entire industry. This committee has been active, and happily successful in helping to bring the present situation to an end

"The radio industry and the public are distinctly benefited. We believe that this legislation will drive from the public mind the uncertainty as to what will happen in broadcasting. What actually will happen is that this activity will more quickly become stable, people's confidence will be renewed, the present scramble for wavelengths ended, and the existing interference speedily cleared up."

The New Official Browning-Drake has been designed to incorporate several improvements which greatly increase the selectivity of this receiver. The "Official" design is symmetrical in appearance and standardizes on one form of Browning-Drake so that dealers may concentrate on one set of parts hereafter for this receiver. Many Browning-Drake designs in the past have not carried the approval of either Professor Browning or Dr. Drake, who wish to mark the new assembly as "Official."

Harry E. Sherwin, former sales executive and advertising manager of the Garod Corporation, has assumed his duties as general sales manager of the Crosley Radio Corporation, succeeding Walter B. Fulghum.

Radio Shows and Conventions

May 2-7: Electrical Supply Jobbers Association, Summer Convention, Greenbriar Hotel, White Sulphur Springs, W. Va.

June 6-11: Music Industries Chamber of Commerce Convention, Hotel Stevens, Chicago, Ill.

June 13-18: N.E.M.A. Convention, Homestead Hotel, Hot Springs, Va.

June 13-18: R.M.A. Convention and Trade Show, Hotel Stevens, Chicago.

August 20-27: Fourth Annual Pacific Radio Exposition, Civic Auditorium, San Francisco, Cal.

September 4-10: Fifth Annual National Radio Exposition, Ambassador Auditorium, Los Angeles, Cal.

September 10 - 16: Buffalo Radio Show, Broadway Auditorium, Buffalo, N. Y.

*September 18-24: Third Annual Southwest National Radio Show, Coliseum, St. Louis, Mo.

September 19 - 24: Radio World's Fair, New Madison Square Garden, New York City. *Tentative September 26-October 1: Seventh Annual Boston Exposition, Boston, Mass.

September 26-October 1: Sixth Annual Northwest Radio Show, Minneapolis Auditorium, Minneapolis, Minn.

*October 3-8: Salt Lake City Radio Show, Salt Lake City, Utah

*October 3-8: Third Annual Indianapolis Radio Exposition, State Fair Grounds, Indianapolis, Ind.

October 3-8: Pittsburgh Radio Show, Duquesne Gardens, Pittsburgh, Pa.

October 4-9: Fifth Wisconsin Radio Exposition, Auditorium, Milwaukee, Wis.

*October 24-29: New Orleans Radio Show. New Orleans "States" Building, New Orleans,

*October 24-29: Dayton Radio Show, Dayton, Ohio.

*October 26-29: Third Annual Houston Radio Exposition, City Auditorium, Houston, Texas.

News of Jobbers and Distributors

Progressive Stages Retail Radio Show

Between 450 and 500 retailers attended a radio exhibition in the offices of the Progressive Musical Instrument Corporation, 319 Sixth Avenue, New York City, on Washington's Birthday, February 22, when the company held open house. The company's showrooms were filled to overflowing from 10 a.m. to 10 p.m. with visiting dealers from the metropolitan district, Long Island, New Jersey and the lower Hudson valley. According to Edward J. Biel, sales manager, three waiters, serving a buffet lunch, dispensed more than 1,500 sandwiches and fully 1,000 bottles of "pop," to visiting retailers. The company staged the show on a

The company staged the show on a legal holiday more or less as an experiment on the assumption that most local retailers find it impossible to give new radio products a thorough examination because of the pressure of business on regular working days. The company intends to stage these private exhibitions semi-annually henceforward, one exhibition each fall and another in

the spring.

The "Seven Point" Sales System

The major problem of the radio jobber may be summed up in a few words, according to the Zinke Company's latest sales releases, namely, "Service to the retailer while protecting its own interests."

One of the most successful jobbers on this Chicago company's list has successfully solved the problem by organizing his sales department on the "seven point" sales system. This wholesaler's hard and fast rule in conducting business is:

- 1. List the dealers in each territory.
- 2. Select those of best credit—the most aggressive. Prepare a "first" and "second" list as to their credit rating and size.
- 3. Bulletin the men to spend time in proportion to these ratings.
- 4. Send weekly letters to the entire list of retailers and give them one merchandising thought in each letter—such as service, the futility of poor merchandise, the necessity of not changing lines every year, their advertising.
- Dictate personal letters upon leads by salesmen, using sales photographs and dealer-helps.
- Get manufacturers to circularize all dealers, mentioning the firm name.
- 7. Secure from manufacturers the probable outline of their plans and merchandise for the next year.

The Paragon Electric Sales Company, Inc., 215 South 5th Street, Philadelphia, Pa., is the new address of this company effective immediately.

The R. E. Block Brothers sales force of Norristown, Pa., was entertained at a banquet at the Valley Forge Hotel recently by C. B. Hendricks, district sales representative of the Rumsey Electric Company, Philadelphia, Fada distributors. Among the speakers were: C. M. Sherwood, district Fada sales manager; L. W. Louer, Rumsey Electric Company radio sales manager, and J. Beideman, superintendent of R. E. Block Brothers' store.

D'Elia Electric Co., Atwater Kent distributor of Bridgeport, Conn., acted as host to its dealers at a convention in the Hotel Stratfield, in that city, in the latter part of February. A business session in the afternoon was followed by a dinner and entertainment in the evening.

The Electrical Supply Jobbers Association will hold its summer convention the week of May 2, at the Greenbriar Hotel, White Sulphur Springs, West Virginia.

The Brown & Hall Supply Company, Atwater Kent jobber of St. Louis, recently held a convention and banquet for its dealers at Hotel Chase, that city. About 150 retailers attended. Addresses were made by Norman S. Brown, president of the company, Fred

A. Wiebe, vice-president, H. T. Stockholm, district sales manager for Atwater Kent, Roger Pigeon. Atwater Kent factory representative H. L. Doty, Pooley Company representative, and C. F. Crane, Briggs-Stratton Manufacturing Company representative.

The Esenbe Company, Pittsburgh, Pa., western Pennsylvania Atwater Kent jobber, sponsored a convention of its dealers recently at the William Penn Hotel in that city. The assembly was addressed by H. M. Swartz, Esenbe sales manager, George Jaud, Atwater Kent district sales manager, and Dale Brown of the Cleveland office of the Better Business Bureau. A dinner, tendered by the Esenbe Company, followed in the Crystal Room of the hotel.

The Harry Alter Company, Michigan Avenue and 18th Street, Chicago, Ill., has been recently appointed distributors of the Federal Ortho-sonic radio receivers. The company will serve dealers located in Western Michigan, Northern Indiana and Illinois.

Gross-Brennan, Inc., New York representative of the Stromberg-Carlson Telephone Manufacturing Company, has launched a new house organ, the "Salestructor," for the dissemination of merchandising ideas to its customers.

Des Moines Dealers Hear Sales Talk



Atwater Kent dealers of Des Moines, Iowa, met recently in that city under the auspices of Harger & Blish, distributors and listened to a sales talk by Vernon W. Collamore, sales man-

ager of the Atwater Kent Mfg. Co. The picture at the top shows the dealers assembled to hear Mr. Collamore, Below is a group of Atwater Kent and Harger & Blish executives.

New Dealer Help Material

Aids to greater profits provided by radio manufacturers for their dealers

Featuring Lightning Arresters



Lightning arresters, particularly seasonable at this time of the year, are featured in an attractive counter display by the M. Fleron & Son, Inc. This display consists of an artistic metal stand holding Sentinel lightning arresters manufactured bythe Fleron Company.

The Rola Company, Oakland, California, manufacturer of loud speakers, to assist radio dealers to capitalize on their windows, has issued a brochure entitled "Trimming Radio Windows." This booklet contains a series of eight radio windows arranged by A. G. Rohl, window display expert of San Francisco. The designs of these windows were arranged to involve only the minimum of expense and to be easily followed by even the most inexperienced dealer. The booklet also includes an introductory article on window trimming and its sales importance. A copy will be mailed free to any dealer writing to the Rola Company.

The Gould Storage Battery, Inc., 250 Park Ave., New York City, has just brought out two mailing pieces for its jobbers. One is intended for authorized RCA jobbers; the other for Brunswick jobbers. The company will supply either of these pieces with the imprint of the jobber's name, address, and telephone, free of charge, express postpaid.

The International Resistance Company, Philadelphia, Pa., offers as a dealer help a small leaflet entitled, "Design and Manufacture of Resistance Units," written by Joseph Morgan of the company's engineering department. The leaflet describes the process of the manufacture of Durham metallized resistances for radio use.

The Stromberg-Carlson 1927 Catalogue, just off the press, contains 260 pages, many of which are devoted to a description and price list of telephone equipment and switchboards manufactured by the company. Another section

is given over to the entire Stromberg-Carlson radio receivers and accessories.

Ferranti, English manufacturer of transformers, with an American office at 130 West 42d St., New York, has just published a 24-page booklet entitled "The Way to True Radio Reproduction," as aid to home-builders of sets. It describes various hook-ups and gives hints for wiring and the selection of parts and accessories.

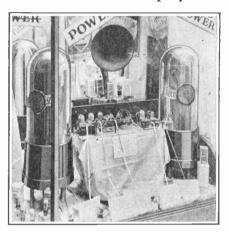
Tube Tester Furnished With First Order of Tubes

The Zetka Laboratories, Inc., 67 Winthrop Street, Newark, N. J., is furnishing to its dealers a counter display standing 22 inches high, which contains a tube tester in the base. The tester is equipped with Weston instruments mounted on a bakelite panel. In the back of the display is space for a stock cabinet for tubes. This space will hold half a gross of tubes in their cartons and has a small sliding door. This tester display is furnished free of charge with the first order of 150 tubes and may be kept as long as the dealer continues handling the Zetka line satisfactorily.



The above counter display stands 22 inches high and contains a tube tester made up of Weston instruments mounted on a small bakelite panel. A rheostat located in one corner controls the filament voltage, and the push button in the center operates a safety circuit, so that in case the tube elements are short-circuited no damage will be done to the meters.

A Gold Seal Display

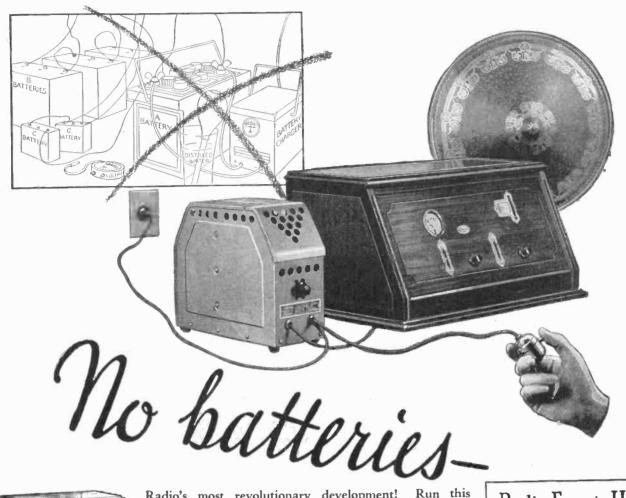


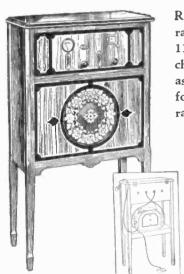
These mammoth reproductions of the Gold Seal vacuum tube are available to New York City retailers who carry this line manufactured by the Gold Seal Electrical Company, 250 Park Avenue, and may be secured on special occasions by dealers located in other sections of the country.

The Ward Leonard Electric Company, Mount Vernon, N. Y., has published as a dealer help a very complectittle booklet entitled, "How to Use Resistance in Radio," which is available to retailers for sale at 15 cents per copy to customers. The booklet gives a comprehensive treatment of the uses of resistance in radio receivers and power units, containing photographic illustrations, circuit diagrams and calculation tables of value to the experimenter. The Ward line of Vitrohm resistors is used throughout to illustrate the various uses of resistance and the booklet also contains a complete catalog of the company's products with full specifications and list prices.

The De Forest Radio Company, Jersey City, N. J., is furnishing its dealers with an interesting booklet which tells briefly the proper tubes to be used in the various stages. The booklet, intended for counter display, is entitled "Replace Your Tubes with Genuine Audions by De Forest." The various types of De Forest tubes and their uses are briefly described. The booklet also contains a De Forest Specialist Audion Chart. The De Forest company is also supplying a sticker advertising its new Type D-01A general purpose radio tube.

The Amrad Corporation, Medford Hillside, Mass., is sending without charge to its dealers on eight-page folder, entitled "Amrad Advertising Material." This folder contains reproductions of dealer advertisements for publication in local newspapers. The company will send a mat or cut of any of these advertisements gratis.





Radio's most revolutionary development! Run this radio direct from house current outlet. Ordinary 110 volt 60 cycle domestic electricity transformed mechanically into smooth, quiet radio A, B and C power as you use it. Radio power supply annoyances ended for all time. A snap of the switch is the only demand radio will make upon you from NOW ON.

No more batteries to fuss with.

No more trickle chargers to watch.

No more keeping something filled with water.

No batteries to renew or recharge.

No upsetting the home to have the radio

See these wonderful sets at any Crosley dealers, or write Dept. 130 for descriptive literature.

The Crosley Radio Corporation

Powel Crosley, Jr.

Cincinnati, Ohio

Radio Energy Unit

Crosley Radio Energy Unit weighs only 13 lbs., is only half the size of an ordinary "A" storage battery—operates without interfering hum and with the certainty of an electric motor.

\$50

6-tube AC Receivers
for use with Crosley Radio
Energy Unit

Crosley radios designed for use with this marvelous power supply are the AC-7, a 6-tube table model at \$70, and the AC-7-C, a 6-tube console at \$95.

Crosley sets are licensed under Armstrong U. S. Patent No. 1,113,149, or under patent applications of Radio Frequency Laboratories, Inc., and other patents issued and pending.

Prices slightly higher west of the Rocky Mountains

GROSIE RADIO

CROSLEY ULTRA MUSICONE \$9.75 Improved Raytheon Service



To give Raytheon manufacturers and distributors every possible assistance in the sale and servicing of Raytheon-equipped units, several distinct improvements have been made in the arrangements for handling Raytheon service problems.

1. The Chicago Service Branch

Raytheon now has a Chicago Service Branch at 2007 South Michigan Avenue, with Mr. W. Van Benschoten, well known Chicago radio engineer, in charge. Any service problem from points west of Detroit, should be referred directly to the Chicago Service Branch.

2. Field Service.

Raytheon now has in operation a Field Service planned to put at the disposal of Raytheon dealers and jobbers the wealth of information on radio power problems acquired by Raytheon in its 4 years' exclusive study of this subject. The practical information and service which will be given you by Raytheon Field Representatives will help you make sales and satisfied customers.

3. The Test Laboratory.

Raytheon's new Test Laboratory is constantly testing and studying all types of radio power equipment, and their practical application. The results will be given you by the Raytheon Field Representatives and by correspondence on request. They will help you to select and concentrate on power equipment that has been tested and approved for you, and that is sure to give satisfaction and build good will.

These changes and improvements in the facilities for giving service are but indications of the general expansion of the Raytheon organization. The need for greater production, and the extension of all activities have forced a continuous physical growth of the company's quarters until a total of 39,400 square feet is now occupied. With this foundation, Raytheon is prepared to maintain its unquestioned leadership in the rectifier field.

RAYTHEON MANUFACTURING COMPANY, Cambridge, Mass.



Merchandising Radio Parts

A Section of Radio Retailing

April, 1927



What Is the

Average Parts Buyer Worth to the Retailer?

Cooper-Hotchkiss, Albany, N. Y., retailer, has as a nucleus for its business 50 set builders. each of whom buys on an average \$200 worth of parts per year. 30-day charge account has built large Capitol district business

THE question has often been asked, THE question has often been and the "Does the profit obtained from the sale of radio parts really pay the retailer for his time and investment?"

Obviously the maintainance of a representative stock of parts calls for considerable of the dealer's time and total investment in the radio business. Moreover, many more sales must be made and many more customers must be handled than if the retailer concentrated on sets and accessories selling for several hundred dollars.

"Success in the parts business de-pends fundamentally on how much each retail customer is worth to the dealerhow much repeat business the dealer can secure from each customer," according to Philip Hotchkiss of Cooper-Hotchkiss, 46 Green Street, Albany, N. Y. "A one-sale proposition would be even more deadly in the parts business than in the sale of sets where profit is much greater per sale—especially so in the small town."

Hotchkiss' parts business is probably the largest in the Capitol district; successful because of his faculty of holding customers, coupled with careful stock selection. The nucleus of his business is a group of approximately 50 set builders and experimenters who have dealt with his company for 3 years or more, each buying on an average \$200 worth of radio parts and accessories per vear.

Parts sales during 1926 grossed \$10,000 to these "stand-bys" alone and is worth as much to Hotch-

a good deal of Hotchkiss' set and accessory business is attributed to good-will advertising obtained from these customers. Total absence of service, installation and deferred payment requirements counterbalances the cost of handling a large number of accounts and each one of these steady customers

kiss as if he had sold them

of gross sales. Hotchkiss rarely permits his investment in parts to exceed \$3,000 at wholesale.

Good Service Necessary

"Good service is just as necessary for the retention of parts customers as it is essential in holding set and accessory buyers," said Hotchkiss. "Of course, parts service does not mean fre-



"This year we'll stock only Faradon equipped sets!"



Faradon

78

Electrostatic condensers for all purposes

quent calls at the customer's home or periodic inspections of his apparatus and batteries. Yet the parts dealer, in my opinion, must assume definite obligations for the satisfaction of the cus-

tomer in order to succeed.

"I assume this obligation when I stock parts. If I carry an article which does not do exactly as is represented in its advertising, its sale is not only detrimental to the customer but to me as well, for my future business is largely dependent on the maintenance of his good-will. The average parts buyer is forced to lean more heavily upon the advice of the retailer than if he contemplated the purchase of a set or accessory. Sets and accessories can be demonstrated. Parts cannot be.

'In order to guard against misrepresentations, no part is recommended or sold to a customer unless it has been first tested and performs to our satisfaction. This not only insures customer satisfaction but prevents overstocking of slow selling articles.

"Next, when we entered the parts business, somewhat more than 5 years ago, we decided that someone was necessary in the parts department who had a thorough knowledge of radio set building. Our parts salesman has followed new circuits and other developments closely since this time in 'fan' magazines and is thoroughly familiar with the problems encountered by set building customers. More than any other thing, knowledge that Cooper-Hotchkiss 'knows something about set building' has induced parts buyers to become steady customers."

"Drill Your Own Panel"

Another instance of Hotchkiss' service to the parts buyer is his maintenance of an electric drill press in the testing and repair department of his shop. Customers who have been dealing with the company regularly and have become fairly well known to him are permitted to drill panels on this press when these are purchased in the store. Old customers may very often be found trying out the latest circuit right in the company's work shop, where every facility is provided for such work.

Hotchkiss permits steady customers to purchase radio parts and then pay for them in 30 days. This 30 day charge account system is, of course, confined to customers personally known to the store manager. The company has maintained a steady flow of business through this inducement alone and has not suffered a credit loss in 5 years.

Though it was thought necessary to cut prices on parts when the company first entered the business in order to compete with chain stores and job-lot buyers, Hotchkiss now maintains full list price on all articles in stock unless these become so obsolete as to be un-salable at other than very low prices. He has noted a very definite demand of late for quality parts. This condition is due more than anything else to the fact that much of the present parts business obtained is "replacement." Builders who were satisfied with comparatively cheap instruments when conducting tests are gradually replacing with those of better grade.

A Year's Sales to a Single Customer

		8	
March 3 1926		Dec. 13 1926	
1 set Browning Drake		1 Tungar charger	\$18.10
Coils	22.50	1 Aerial eliminator	.90
1 Sangamo condenser	.40	Dec. 17	
1 Pair of battery clips 1 .0001 Sangamo con-	.10	1 Bremer-Tully Micro- mike condenser	.90
denser	.40	mike condenser	.50
2 Benjamin tube sockets.	1.80	Jan. 3 1927	
May 12		2 Benjamin cushion	
1 Centralab modulator plug	2.50	sockets	1.35
1 UX 200-A tube	5.00	Jan. 13	
July 1		1 Ceco 201-A tube	$\frac{2.25}{2.00}$
1 Bradleyleak and .00025 condenser	2.00	1 Ceco 199 tube Feb. 12	2.00
1 Centralab modulator	2.00	1 Detector tube	2.25
plug	1.80	3 R.F. coils	12.00
1 No. 770 Eveready B		3 Variable condensers	21.00
battery	3.95	2 Panel brackets 2 Hard rubber panels	.70 2.00
10 ft. bus bar	.30 .15	Feb. 5	2.00
1 Dubilier .002 condenser.	.50	1 Ceco 201-A tube	1.75
1 Dubilier .006 condenser	.60	Feb. 7	
Aug10		Feb. 7 1 Yaxley rheostat and	
1 Bremer-Tully Micro-		Switch	1.75
mike condenser 1 Set of charger points	.90 .90	Feb. 10 2 Benjamin cushion	
1 Ambassador Neutraliz-	.50	sockets	1.35
ing condenser	1.45	Feb. 11	
Aug. 14		1 Sangamo condenser	.35
1 Sangamo condenser	.45	Feb. 14 1 phone plug	.90
dozen Dejur clips	1.00	Feb. 21	.50
1 Daven 6 megohm grid leak	.45	1 Sampson neutralizing	
	.10	condenser	1.58
Sept. 3 3 UX 112 tubes	16.50	Feb. 23	1.00
Sept. 22		1 Dial	.30
8 ft. bus bar	.48	March 1	.00
Sept. 25 1 Fixed condenser .002	.45	1 Yaxley plug jack, No.	
Oct. 25	.40	650	3.50
1 Sampson R.F. choke coil		1 Yaxley rheostat	1.35
No. 85	1.35	1 400 ohm potentiometer. 8 Sockets	$\frac{1.75}{6.00}$
Oct. 26		1 Binding post strip	.15
1 4 mfd. filter condenser.	3.25	March 2	
1 Soldering joint 1 Solder strip	.05	2 Ceco tubes	4.00
Nov. 19	.20	March 4 1 General Radio Trans-	
3 Double duty Eveready		former, 285-D	5.40
B batteries	11.25	March 5	0.10
Nov. 20	.15	3 Yaxley 20 ohm rheo-	
5 feet of connection wire. 1 Roll, bell wire	.30	stats	7.69
Nov. 24	.00	1 Box soldering lugs	40
1 Spool d.s.c. wire	1.00	4 Yaxley plugs	.60
Dec. 4		March 9	0.44
2 coils of Antenna wire,	2.70	1 Yaxley cable and plug.	3.44
insulated	4.70	2 Binding posts	$\frac{.25}{3.08}$
3 Audio Frequency choke		. I mid. condensers	0.00
coils	5.10	\$	199.62

The accompanying list is an accurate record of sales to a single customer over a period of one year from March, 1926, to March of this year. The items were copied from Cooper-Hotchkiss' sales ledger and include small accessories as well as items which are purely component parts. Hotchkiss has between 45 and 50 steady customers of this kind on his books in addition to regular transient customers. Parts sales represent & of the store's total sales each year.

\$1 Package Sale Moves **Odd-Lot Merchandise**

A Rock Island, Ill., radio dealer outlines a plan by which he moves odd lots of small accessories and parts. Packages are made up from odds and ends of radio supplies which have accumulated and are priced at \$1 each. These are placed in the window and advertised in newspapers several days prior to a sale. The purchaser "buys blind" but is guaranteed over \$1.50 worth of merchandise for a one dollar bill.

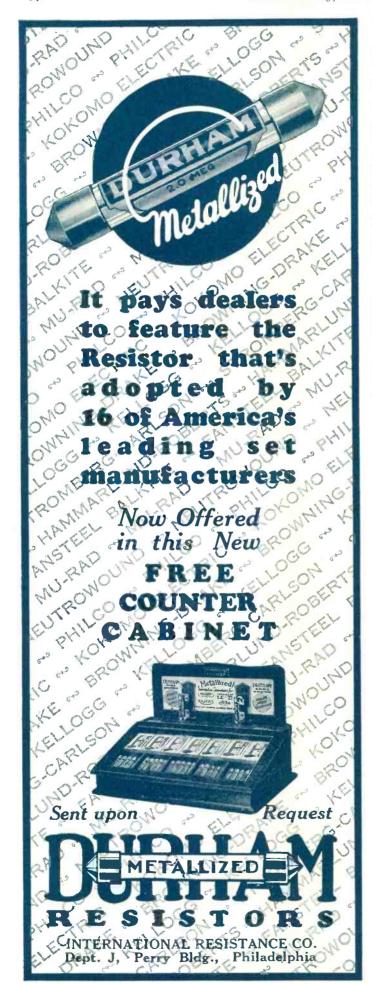
The firm sold ninety-three packages during the first Saturday morning's sale and almost duplicated this volume three weeks later. A quantity of binding posts which had accumulated were also sold by mounting them on strips of insulating material. Eight binding posts were mounted on a strip and sold for 50c. per unit.

Sells Filter Condensers to **Local Power Company**

Every power company has a radio problem. That problem is the reduction of interference with radio reception due to the operation of motors or

electrical appliances on its lines.

Lyn Smith, Dallas, Texas retailer, stocks 2,000 volt, 4 mfd. filter condensers and sells them to his local power company. Such companies are generally consulted whenever an electrical installation interferes with radio reception. Filter condensers and suitable choke coils are usually the solution.





Trade Mark Reg'd U. S. Pat. Office

TINYTOBES

Shown here actual size, complete. the TOBE line,-keep up recognized quality. Good for use on voltages up to 1000 volts D.C., they will have been tested to 2300 volts A.C. before breakdown. Phase-angle is very low.

TINYTOBES are recommended in resistance-coupled-amplifiers using the New UX-240 and CX-340 HIGH MU TUBES.



TINYTOBES are used in the OFFICIAL BROWNING-DRAKE KIT-SET and Matched TINYTOBE-TWINS are used in the SAMSON Band-Pass Filter. Individually packed in transparent envelopes. Prices .00007 Mfd. to .005 Mfd.—35 cents each, .001 and .002 Mfd.—40 cents, .005 and .006 Mfd.—45 cents, .01 Mfd.—55 cents, .02 Mfd.—60 cents.

Matched TINYTOBE TWINS-.001 Mfd. each, per pair \$1.40.

Send for Price List R-4

Tobe Deutschmann Co.

ask Your Neighbor

Type 880 Super Variable



FROST-RADIO

A new FROST-RADIO precision unit made to meet the demand for variable high resistance in receiving sets. Works smoothly and noiselessly. Does not heat up to any extent due to large area of resistance element. Movable arm makes smooth, positive contact without causing wear. It is finely made, like a good watch, and all metal parts are nickel plated and hand buffed. Knob is genuine Bakelite.

Mail Coupon for Literature.

We want every dealer to have a supply of our folders describing Frost-Radio Super Variable Resistance Units giving complete data for the consumer on use and application of these remarkable new units. To secure a generous supply of this literature fill out and mail the coupon below TODAX. Place these folders on the counter and build up a profitable business in this Frost-Radio apparatus. Meanwhile, order a stock from your jobber.

HERBERT H. FROST. INC.

New York		LaSalle Street, Chi									
Herbert H. Frost, Inc., 160 North LaSalle Street, Chicago.											
Please send me : Units as adverti customers.	supply of clused in Radio	culars describing your S Retailing and I will	uper Variable Resistance distribute them to my								
Address											
City		Sta	te								

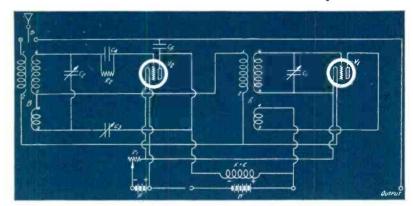
Previewing the New Circuits

May "fan" magazines will tell how to build the apparatus pre-viewed on this page

THE "Pre-Selector," to be featured in the May issue of *Popular Radio*, employs two type UX-199 tubes and may be used in conjunction with any radio receiver without change of wiring by connecting it between the antenna and the antenna binding post of the set. It operates as a frequencychanger, transferring any incoming stations's wave to some better amplified frequency above the broadcast band. Its use is said to improve selectivity without impairing the sensitivity of the receiver to which it is attached. Tuning is accomplished by means of the "Pre-Selector's" two dials, those on the receiver remaining untouched regardless of the wavelength of the station being received. Parts used in its construction are:

A and B—Plug-in tuning coils.
C1 and C2—Variable condensers, .00035
mfd.
C3—Midget balancing condenser.
C4—Fixed condenser with grid-lead clips,
.00025 mfd.
C5—Fixed condenser, .0001 mfd.

A "Pre-Selector" for Selectivity

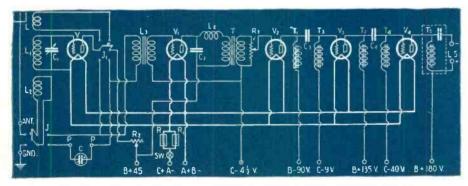


Placed in series with the antenna, before any standard broadcast receiver, this unit increases selectivity. It acts as an "acceptor" circuit for wavelengths to which it is tuned.

R1—Rheostat, 30 ohms. R2—Grid-lead, 4 megohms.

RFC—Radio frequency choke coil. S—Jack-switch, single-pole, double-throw.

The "Phono-Radio" Has Several Uses



Double-pole, double-throw switches permit this receiver to be converted into a quality amplifier for use with a phonograph and a radio speaker.

THE "Phono-Radio" receiving set, to be featured in the May issue of Radio News, is fitted with an efficient audio amplifying system which may be

used to amplify the output of an ordinary phonograph by merely throwing two switches. Used either as a selective radio set or a phono-amplifier

the circuit provides a single stage of high-quality transformer coupled audio, three of modified double-impedance audio and an output filter for the When used in conjunction speaker. with a phonograph, a condenser or capacity type of microphone is used. Parts, keyed to the schematic diagram on this page, are:

L, L1 and L2—Oscillator coupler. C1—Variable condenser, .0005 mfd. C2—Variable neutralizing condenser. J1 and J—Jack-switches, double-pole, J1 and J-Jack-switches, double-pole, double-throw.
L3-Untuned radio-frequency transformer.
L4-Radio frequency choke coil.
T-Audio transformer, 4½ to 1 ratio.
C-Capacity pick-up microphone.
R, R1-Ballast resistances.
R3-Potentiometer, 500,000 ohms.
T1, T2 and T5-Choke coils, 200 henrys.
T3, T4-Choke coils, 2,000 henrys.

The microphone which adapts this receiver to use as a phono-amplifier is placed at terminals P and the same batteries which operate the set on broadcasting operate it as a phonograph-amplifier.

H OWARD RHODES describes the "B Reservoir" socket power supply device illustrated on this page, in the May issue of Radio Broadcast. The unit is designed for use on 60 cycle a.c. current and utilizes a full-wave rectifier tube and a special glow tube which stabilizes the unit's voltage output and prevents "motor-boating." The power device is constructed of the following

T-Step-up transformer.

R-Full-wave rectifying tube

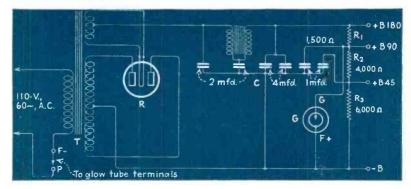
L-Filter choke coils.

C-Filter condenser block

G—Glow tube, type CX 874. R1, R2 and R3—Voltage tap resistances,

Radio Retailing, April, 1927

B Socket Power Unit with Voltage Regulator





A Penny Saved is a Penny Earned"

Benjamin Franklin

-Electrical Engineer

N Franklin's day, mass production was not an economic problem. The demands of the people were simple and few, and factory supply easily kept pace with them. Present day requirements demand manufacturing economies—and "a penny saved" on each unit of factory production means many dollars "earned" in total volume. SPRAGUE MIDGET CONDENSERS—quarter the weight and half the size—bring about circuit wiring and assembly economies and actually increase the efficiency of the set.

Flexible—adaptable to every wiring requirement. MID-GETS that have the electrical hearts of giants. They are factory tested at 1500 volts. They have a higher uniform breakdown—(3550 volts A.C. in recent tests) and insure constant capacity.

Time-saving, pre-soldered lugs of new type, insures quicker, easier and safer connection and allows for an almost unlimited variety of hook-ups which brings about a saving of screws, nuts, bolts, drilling and wire which more than covers their cost.

Let us tell you, without obligation on your part, how MIDGET condensers will "save the pennies" in set assembly. Your address will bring the whole story.

Our service department will welcome the opportunity of studying your individual wiring and condenser problems. Write them for samples and some money saving assembly ideas.



SPRAGUE MIDGET CONDENSERS

MADE BY

SPRAGUE SPECIALTIES CO., QUINCY, MASS.

Address Dept. R

New Parts Announced This Month

For additional new parts, sets and accessories see pages 68-72



Radio Retailing, April, 1927

Radio Retailing, April, 1927

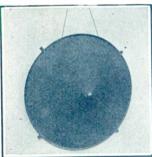
Known as No. 222 is the new output tone filter being made by Silver-Marshall, Inc., 846 West Jackson Blvd., Chicago, Ill. This new product is identical with the original 221 except for the tipjacks and phone cord with which it is provided. The secondary impedance is approximately 1,500 ohms at 30 cycles. The primary impedance is such that the maximum undistorted power will be obtained from a 171 type tube, and at the same time the impedance is entirely satisfactory for use with types 112, 210 or 201A. It is housed in one piece, black enamelled drawn steel case, providing complete shielding. drawn stablelding.



36-In. Cone Speaker

Radio Retailing, April, 1927

Complete parts for a 36-in. cone speaker are made by the Engineers' Service Company, 25 Church Street, New York City. The kit is complete in detail consisting of the "Ensco" driving unit, small parts for assembling cone and unit, special material of latest type for 36-in. cone showing five types of cone and roll speaker construction, full printed instructions. It can be mounted on a frame suspended from wall or ceiling, or made in the form of a floor stand or book type. Intended retail price complete \$10.



Double Impedance Audio Unit

Radio Retailing, April, 1927

Radio Retailing, April, 1927

The Ford Radio & Mica Corporation, 111 Bleecker Street, New York City, manufactures a double-impedance audioamplification unit under license from E. E. Hiler, patentee. The unit, mounted in a metal shield, contains two high impedances of low d.c. resistance, and is employed in a circuit similar to that of standard impedance or "choke" coil amplification with the exception that an impedance is substituted for the conventional grid-leak used in such systems. High amplification, with a minimum of distortion is claimed. It is said that any number of units may be used without interstage howling.



Interference Eliminating Filter Unit

Unit

Radio Retailing, April, 1927

Known as "Radio Interference Filter No. 1," is the unit being made by the Tobe Deutschmann Company, 11 Windsor Street, Cambridge, Mass. This is designed to be used with all a.c. or d.c. motors up to one-quarter horsepower and in connection with any other small devices creating radio interference. The connections are plainly indicated on the case of the filter so that no error should be made. Care should be taken with d.c. motors so that the polarity is properly connected in order that the motor will operate in the right direction. Intended retail price is \$15. Other units will be made upon order for larger motors up to 500 kw. and for operating voltages up to 1,000.



Straight Line Frequency Condenser

Radio Retailing, April, 1927

Radio Retailing, April, 1927

An improved, small and rugged straight line frequency condenser is announced by Benjamin Electric Manufacturing Company, 120 South Sangamon Street, Chicago III. The new condenser has a true straight line frequency curve. Insulation is provided by two especially prepared bakelite discs. Plates are brass. Wide spacing of plates insures accurate matching in multi-stage sets using single control. Mounting plate is effective shield against hand capacity. Ball bearings give smooth turning and positive control of rotor. Over-all length with blades wide open 4½ in., closed 3½ in. Depth of .00025, .00035 and .0005 mfd., sizes, is 1½ in., 1½ in. and 2½ in., respectively.

Antenna Connector

Radio Retailing, April, 1927

Radio Retailing, April, 1927

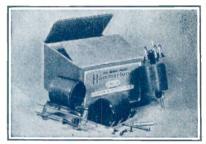
The Park Metalware Co., Inc., Orchard Park, Buffalo, N. Y., is making a connector, known as "Gillett," designed for making a quick, permanent connection between the antenna and the lead-in. Each clamp consists of two parts held together by means of a screw in the center. According to the manufacturer the grip of these clamps is so tight that corrosion at the point of contact cannot take place.

Loftin-White Coils

Radio Retailing, April, 1927

Radio Retailing, April, 1927

The L. W. 3 coils made by the Hammarlund Manufacturing Company, 424
West 33rd Street, New York City, are intended for use in the new Loftin and White "Constant Coupling" receiver. The antenna tuning coil is provided with a means for mounting it horizontally on a sub-panel and has a fixed primary. Soldering lugs for making connections are carried on a bakelite strip in a convenient position on the coil. The two radio frequency coils are equipped for mounting vertically on the front panel. They are provided with a semi-variable primary which may be locked in position when the proper setting has been found. Connections to the primary are made through phosphor bronze pigtails and soldering lugs which are mounted on a bakelite distributing board. The 3 coils are securely packed in one box with the necessary mounts, screws and nuts. Price per set \$10.



Metal Art Radio Panels

Radio Retailing, April, 1927

Radio Retailing, April, 1927

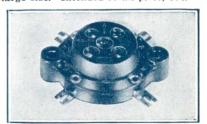
The Van Doorn Company, Quincy, Ill., is manufacturing metal radio panels under the name of "Vee Dee," for all types of popular circuits. By means of the Photo-Litho process, it is possible to reproduce etching, escutcheon plates, and the most delicate art work. The metal used is selected, patented, levelled, re-squared steel of 18 gage. Undrilled panels are carried in all sizes, listing from \$2.15 for a 17 by 18 in. panel to \$3.55 for a 7 by 30 in. panel. Steel chassis are also made.

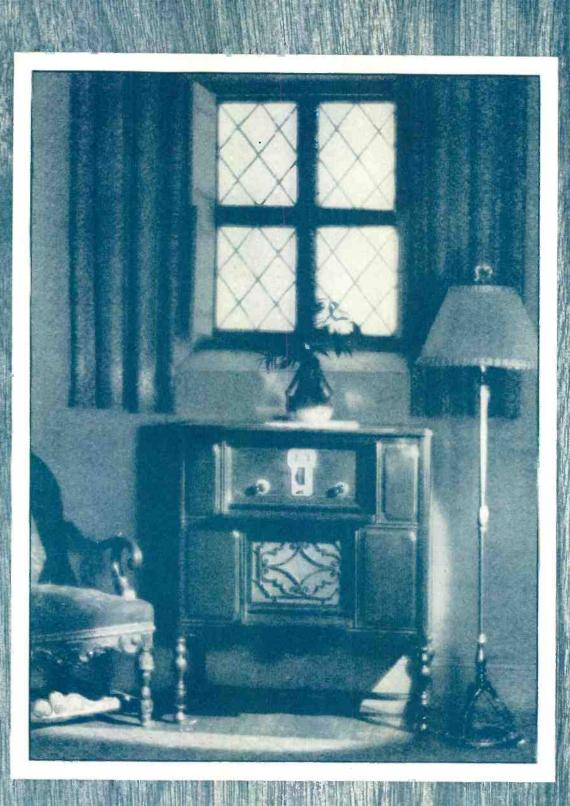


UX Type Tube Socket

Radio Retailing, April, 1927

The illustrated tube socket, manufactured by the Klosner Radio Corporation, 1022 East 178th Street, New York City, is small in size, convenient to mount and its phosphor bronze contacts provide certain connection with tube prongs. The terminal lugs are tinned and the unit is designed for use with UX type and UV type tubes of the large size. Intended retail price, 35c,





CELORON

Beauty... That Can Be Seen and Heard

CELORON is responsible for so much that is beautiful in radio.

Exquisitely grained Celoron panels that glow with the same soft lustre as finely finished cabinet woods, not only lend their subdued richness to the appearance of the modern radio receiver but they also ensure clear full tone quality by protecting delicate radio voltages from surface leakage, absorption and resulting distortion.

Celoron panels have the same desirable characteristics as Celoron Radio Insulation, the new insulating material developed expressly for the peculiar requirements of the radio industry. Celoron panels are guaranteed to the same exacting laboratory specifications, regarding dielectric strength, tensile strength and resistance to surface leakage under extreme atmospheric conditions.

Celoron has been adopted as standard by leading manufacturers and by the U.S. Navy and the U.S. Signal Corps.

You, too, will want to know more about this easily machined, laboratory tested and guaranteed material that removes the guess work from the buying of radio insulation and assures uniform high quality throughout volume production.

LABORATORY TESTED and GUARANTEED

over 100 meg. resistance after four day's exposure to humidity of 90% at 95° a dielectric constant below 6 a tensile strength (½ inch material) of 10,000 lbs. per sq. inch

THE CELORON COMPANY

Division of Diamond State Fibre Co.
BRIDGEPORT, PENNSYLVANIA

LAMINATED PRODUCTS, MOULDING POWDERS AND VARNISHES

Fabricating Service in New York City, Cincinnati, Chicago, Kansas City, San Francisco, Los Angeles, Bridgeport, Pa. In Canada, at 350 Eastern Ave., Toronto

RADIO INSULATION

Silvertown

The Radio Panel Supreme!

- 1 Easier to drill and machine.
- 2 Better color, lasting lustre.
- 3 Lower free sulphur no discoloration.
- 4 Higher softening point—no warping.

Goodrich V.T. Sockets Spaghetti Tubing
Radiophone Ear Cushions
Battery Mats
Hard Rubber Tubes for Coils

The B. F. Goodrich Rubber Company
Established 1870 Akron, Ohio



Sell Table-Taps for Radio Use!

Have you ever watched a newly converted radio "bug" try to get his set hitched up?

Only one wall outlet on hand—but a battery charger, a "B" Eliminator and a portable lamp, for example, all waiting to be plugged in!

Keep on hand a supply of Hubbell Table-Taps No. 6900 to relieve this problem—and incidentally to bring you an exceptionally large margin of profit.

The Table-Tap when plugged into a single outlet provides three convenient Te-Slot connections. Can be screwed to the wall baseboard as illustrated, fastened to the back of the radio cabinet, placed on the floor or located elsewhere.

HARVEY HUBBELLING ELECTRICAL SPECIALTIES

PROVIDES 3 OUTLETS FROM



Made of "ALCOA ALUMINUM"

MEETING the highest radio standards—shipped to you in the most convenient knocked-down form for easy assembly. These Box Shields are made of heavy Aluminum (.080-in.—No. 12 B. & S.) and are supplied 5-in. x 9-in. x 6-in. which will cover most requirements. If the size does not meet your exact needs, change it—Aluminum is easy to work.

Manufacturers can obtain these shields made to their exact specifications or they can secure the necessary corner-post moulding and sheet to manufacture under their own supervision.

Those who use Aluminum have ample proof of its advantages. Insist on "Alcoa Aluminum," ask your dealer or write us.

"ALCOA ALUMINUM" Box Shields

Consist of: Top, Bottom, Sides

4 Extruded Corner Posts

8 Aluminum Screws



"ALCOA ALUMINUM" is furnished to manufacturers in the following forms:

Sheet: for shields, chassis, variable condensers, cabinets.
Panels finished in walnut and mahogany.
Die and Sand Castings.
Screw Machine Products.
Foil for fixed condensers.
High Purity Rods for rectifiers.
Stamping, rod, wire, rivets.

ALUMINUM IN EVERY COMMERCIAL FORM

ALUMINUM COMPANY of AMERICA 2322 Oliver Building, Pittsburgh, Pa.



MAGNET WIRE AND WINDINGS

The Coil's the Thing That Makes Radio!

RADIO manufacturers using Dudlo Coils for Transformers, Chokes, Reactances and Impedances are obtaining an efficiency reflected in increasing sales and satisfaction.

Like the hairspring of a watch, these delicate coils control the power which does the work. They make or break a radio unit or receiving set. Let them be the best the world affords.

In the winding of Tuning Coils, successful radio manufacturers are using Dudlo silk covered or cotton covered and enameled magnet wire. Dudlo Litzendraht wire and other small flexible cables are made to specifications.

The engineering and experimental departments are at your service without obligation. You are invited to send your specifications for samples and estimates.

A partial view of the immense DUDLO plants at Fort Wayne

150 NORTH LA SALLE STREET CHICAGO, ILL.

> 56 EARL STREET NEWARK, N. J.

274 BRANNAN STREET SAN FRANCISCO, CALIFORNIA

> 4153 BINGHAM AVENUE ST. LCUIS, MO.

DUDLO MANUFACTURING CORPORATION FT. WAYNE, IND

"B" Eliminators—Tubes—Rheostats

For "B" Eliminators and Rheostats

"TOPHET"—660 ohms per circular milfoot [slightly magnetic]

"SOLAR"—620 ohms per circular mil-foot [non-magnetic]

"CUPRON"—290 ohms per circular milfoot [non-magnetic]

These wires can be furnished bright, oxidized, enameled, silk covered and cotton covered.

For Radio Tubes

PURE NICKEL WIRE, RIBBON & STRIP RESISTANCE WIRE, SMALL TUBING

GILBY WIRE COMPAN

Manufacturers of a complete line of resistance wire for every purpose

Chicago: The Fleig Corporation Cleveland: C. E. White & Co. San Francisco: Baker-Joslyn Co. Boston: Frank Booth

We are supplying many of the

large radio manufacturers. Let

us send samples and quote on

Newark, N. J.

Seattle: Woodard Co. Tokio: Jay W. Myers Paris: Edgar Sidi-Leon

The New Constant-coupled

CONSTANT COUPLING

is one of the outstanding successes of the season. Designed by well known engineers, along distinctly new, scientific lines, it has unusual power, selectivity and tone that appeal strongly to the "build-your-own" fan.

It is going BIG. Are you stocked to supply the demand?

We can now supply the complete L-W Kit at a popular price that sells. Descriptive literature on request.

The Loftin-White is one of eighteen new circuits for which Hammarlund Precision Products are officially specified.

HAMMARLUND MFG. CO. 424-438 W. 33rd Street, New York





Set Manufacturers!

Standards of radio reception are becoming higher with each new year. 1927 models must be an improvement over those of 1926, and they will be.

Correct coils are vital to good reception. We specialize in such coils. We are producing regularly the most advanced types, built with the famous "Diamondweave" construction.

Write us concerning your own requirements. We are prepared to furnish better coils for the new sets,

THE F. W. SICKLES COMPANY 140 Union St., Springfield, Mass.

SICKLES

DIAMOND-WEAVE COILS



The St. James Transformer

The highly efficient vacuum-treated, dehydrated air core transformer which has been so successfully used in the well-known St. James Super-Het.

A mighty good article with good profits for parts dealers. Very complete and simple working plans available.

Send for our Folder

St. James Laboratories, Inc. 845 Washington Blvd., Chicago, Ill.

Plate Voltage Aplenty

for Big or Little Sets



Type 405
PLATE SUPPLY

Write for Bulletin 926 containing full information and prices on all G-R parts and accessories.

GENERAL RADIO CO., Cambridge, Mass.

The Type 405 Plate Supply delivers ample plate power to permit its use with multi-tube sets where there is a heavy current drain as well as with receivers having small current demands.

The Type 405 Unit operates on 110-volt (60 cycle) A.C. and provides voltages of 45, 90, 130, and 200.

Voltages are readily adapted to plate requirements of standard tubes in popular use by means of fixed resistances. These resistances are tightly sealed from dust and moisture, thus eliminating bothersome and noisy tendencies of variable resistance voltage controls.

The Unit is contained in a metal case with attractive black crystalline finish and has a conveniently located A.C. switch.

Price with type BH Raytheon Tubes \$46
Type 400 Power Amplifier and Plate Supply \$68
Power Amplifier and Plate Supply Kits
Type 390 for UX-213 or CX-313 Tubes \$47.50
Type 395 for BH Raytheon Tubes \$50

GENERAL RADIO

PARTS AND ACCESSORIES

"Windham" Condensers

Conserve Your Working Capital



DO NOT fritter away your working capital by purchasing goods below the standard demanded by the trade. It costs money to trade an old customer for a new one.

"Windham" condensers are low in price when you consider durability and efficiency. They will retain the good will of your customers.

Manufactured by

THE GOYER COMPANY

Willimantic, Conn.



Complete Aerial Kits



List \$1.75 To \$4.50

Include everything necessary for aerial, ground and hook-up requirements.

"Corwico" complete aerial kits simplify the buying of antenna equipment for the set owner and make it easier and more profitable for the dealer to handle antenna equipment.

The six kits in the "Corwico" line list from \$1.75 to \$4.50 to meet the demands of all classes of trade. The higher priced kits contain a Brach Storm King Lightning Arrester with the Brach \$100 guarantee against damage by lightning.

TO DEALERS AND JOBBERS
Write or wire today for full particulars.

CORNISH WIRE COMPANY
30 CHURCH STREET, NEW YORK CITY

BOSTON CHICAGO KANSAS CITY
80 Federal St. 326 W. Madison St. 208 Baltimore Bld
SAN FRANCISCO: 585 Mission Street



CONDENSER TISSUES

Famous for their High
Di-electric and
Tensile Strength

RADIO Battery Eliminators should not be judged entirely by the condensers used in their construction. However, the condensers are often to blame for the eliminator defects. The trouble arises from the use of faulty condenser papers. That is why many of the foremost eliminator manufacturers have standardized on Dexstar Condenser Paper, which is always up to specifications in quality and di-electric strength.

DEXSTAR Condenser Paper is made to withstand the most severe service and will make the best of condensers better. Quality of stock and long experience in manufacture of thin papers guarantees this uniformly high grade Condenser Tissue. It is closely formed, free from pin holes or conducting particles and possesses high di-electric and tensile strength. It is carefully wound, accurately slit, and in every way measures up to the exacting requirements for which it is especially manufactured.

RADIO Jobbers and Dealers everywhere recognize that sets using Dexter Tissues in their eliminator construction are the best to merchandise, because of the little servicing required.

C. H. DEXTER & SONS, Inc.

Highest Grade Thin Papers

WINDSOR LOCKS, CONNECTICUT



The Contact Radio Relies On!

for a sure, safe and fool-proof electrical connection and the one you can count upon to make a worth-while profit.

EBY Binding Posts are the choice of eight out of ten radio manufacturers and most circuit designers. Complete sets are ready in separate boxes to build these receivers—Browning-Drake, Cockaday LC 27, Hammerlund-Roberts, Infradyne, LaCault LRA, St. James, Varion, Kenneth Harkness KH 27, Victoreen.

Look over your stock and see to it that you are ready to sell EBY Binding Posts

H. H. EBY MFG. CO., Incorporated 4710 Stenton Ave., Philadelphia, Pa.





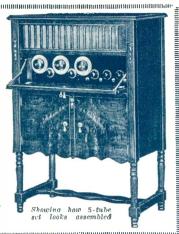
More Radio Cabinet Sales

This Standard No. 401 Radio Cabinet was designed to be highly attractive and to be most practical. Users find that it fully meets their needs.

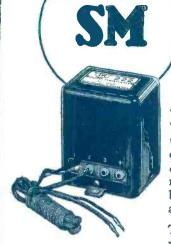
A number of features including wood horn, make this a cabinet you should consider at once.

Made in Antique Brown Mahogany or Antique Burl Walnut finish, Write for dealers' transportation allowance and discount list.

STANDARD PIANO BENCH MFG. CO. 1221-1227 W. Lake St. Chicago, Ill.



Yes—June is the R. M. A. Issue



It Adds **PUNCH!**

The S-M 222 Output Transformer is unusual - unlike all others-for it actually adds volume to low notes when connected between any set and any loud speaker.

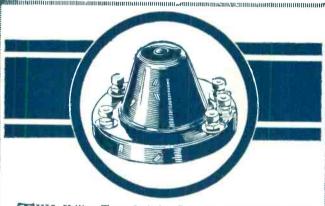
There's profit in it for you, for you can sell

it with a money-back guarantee that it will make a startling improvement in tone quality, bring any last year's set up to the minute for only \$8.00.

It's furnished with cord and tip jacks, all ready to attach. Why not try one and "sell" yourself on S-M-on a money-back guarantee?

SILVER-MARSHALL, Inc.

870 W. Jackson Blvd., Chicago, U. S. A.



THIS Utility Type Switch oners the convenience safety of positive, automatic power control for radio sets. It retails at an astonishingly low price but is elected. HIS Utility Type Switch offers the convenience and trically the equal of switches much higher in price. Turns on or off either or both Trickle Charger and B Eliminator as required.

Rigid tests during and after assembling insure perfect operation. Easily connected by even a novice.

Model 13 shown above, retails at \$2.00 and is adapted for Type 201-A tubes. Model 14 for Type 199 tubes, retails

Write for dealers' discounts and full information.

Made by

THE RELIABLE PARTS MFG. CO.
WELLINGTON, OHIO
Also manufacturers of Convenience Type Switch

RELIABLE **Automatic Power Control** Switch



New Consoles that sell sets!

Feature Radiola 20 sets in one of these cabinets and watch your sales increase!



No. 927 27-in, wide, 18-in, deep, 60-in, high — solid Mahogany beautiful antique brown finish —English Antique finish hard-ware.

Here are the splendid new Watsontown Consoles for the most popular set of the season—Radiola 20! Console No. 927 also provides a rich setting for the famous Radiola 100 speaker.

Display your sets in these fine cabinets—provide a setting for them that will show them to advantage—that will increase sales of both sets and cabinets! Ventilated compartment for battery will take any standard battery or eliminator combination.

The inside as well as outside of these models is solid mahogany. Pigeonholes large enough for head-sets, Radio-log, etc.

Installation of set and speaker can be made in a few minutes with no change in wiring required! Speaker padded to absorb vibration.

To insure immediate deliveries on these models get order in at once! Or write for full particulars and complete illustrated catalog.

Watsontown Table & Furniture Company

Watsontown, Pa.

No. 926 27-in. wide. 18in. deep, 40in. high — solid Mahogany same finish as No. 927. Both models shipped in Plywood

2 Charging Rates and Automatic Control—



R-104 with automatic control and "B" Eliminator connection, C o mbination ½ and 2 amp. rate. List Price less bulb

\$13.50

R-103 with automatic control, without "B" Eliminator connection, complete current control from switch on charger. Combination ½ and 2 amp. rate. List Price less bulb

\$10.00

add greatly to the salesability of this ever-popular Sterling Trickle Charger.

HEN ½ amp. isn't quite enough, change over to 2 amp.—with a snap of the switch... That's one feature of this Sterling 2-rate Trickle Charger that enables you to sell the man who wants trickle charger convenience plus the higher charging rate.

And the Automatic Control Unit provides complete light-socket "A" power. Combined with a "B" Eliminator or "B" batteries the entire "A" and "B" current control and broadcast reception are centered in the filament switch on the receiver.

2 sterling

TRICKLE CHARGER

THE STERLING MFG. CO. 2831 Prospect Ave., Cleveland, O.



THE PANEL OF BEAUTY AND SERVICE

No Finger Prints or Smudges.
Distinctive Appearance—Very Popular.
Plain Finish on Reverse Side.
Quick Turnover—Highest Quality—Low Price

HOOD RUBBER CO., WATERTOWN, MASS.



Increased Production



World's most astounding radio in a ruggedly constructed genuine mahogany cabinet. \$49.50



A remarkable value is this console, paneled entirely of genuine mahogany. Contains built-in cone speaker. Spacious battery compartment. \$79.50 Model 7-F-3



"The Masterpiece of Masterpieces" is this distinctively beautiful radio. Contains a 12-inch cone speaker built right in the cabinet and a spacious compartment for all accessories. Paneled in genuine mahogany. \$99.50 Model 7-F-5.....

permits us to consider a limited number of additional Dealers at Points where our representation is not complete at this time

Six tubes ~ One Control FRESHMAN ASTERPIECE

Advantages of the Most Profitable Franchise in Radio

- ¶ Protective policy to enable franchised dealers to operate without fear of unfair competition.
- ¶ Consistent profits on installment sales.
- ¶ National and co-operative sales producing advertising and publicity.
- ¶ Elaborate dealer service facilities.

You do business direct with the manufacturer whose interests are your interests

Wire, write or phone for detailed information on Freshman merchandise and dealer policy.

CHAS. FRESHMAN CO., Inc.

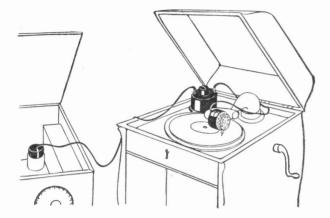
Freshman Bldg., New York 2626 W. Washington Blvd., Chicago 800 N. Spring St., Los Angeles, Cal.

THANK You!

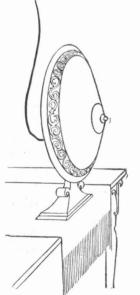
THE wholesome recognition accorded statistical data prepared by McGraw-Hill Publications is due in large measure to the readers of McGraw-Hill Publications, who reply with painstaking care to McGraw-Hill questionnaires.

This is a word of appreciation to you readers who are called upon from time to time to give McGraw-Hill basic information of a more or less confidential nature.

THE PUBLISHERS







It converts an old phonograph into one of the marvelous new electric reproducing machines

Radio dealers can make a good profit by selling this remarkable instrument. Besides the profit on the device itself, there will be additional profits on tubes, batteries, etc. as a result of more frequent use of the radio set. A demand will be stimulated for the finer cone speakers.

And best of all, its biggest sales naturally come during radio's "off" season.

WHAT THE ELEC-TRU-TONE DOES

It utilizes the radio set, transforming the old phonograph into an electric reproducing machine.

The improvement in reproduction is nothing short of astonishing. You hear instruments and delicate shading that you never knew "caught" in the making of records.

No alterations are necessary in either the phonograph or the radio set. The Elec-Tru-Tone is simply slipped on the tone arm of the phonograph, and the Elec-Tru-Tone plug inserted in the detector socket of the radio. The speaker is plugged in as usual.

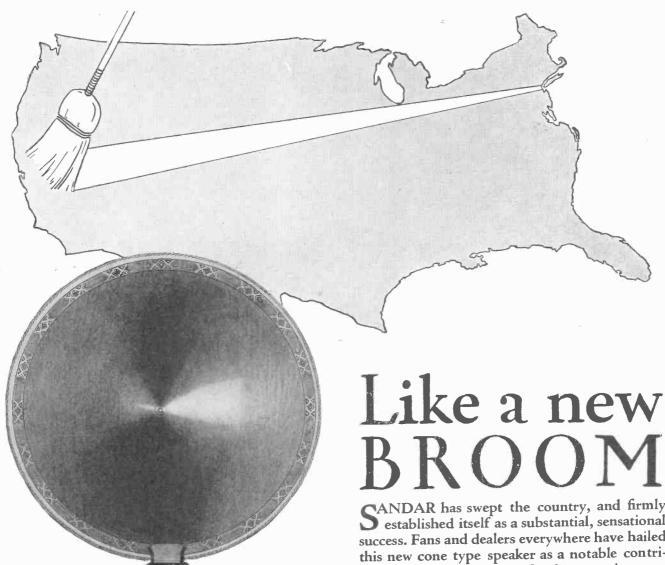
Shall we send you complete details of the device, the profit and proposition behind it?

ELEC-TRU-TONE

Manufactured under Leishman Patents Pending by

THE ELEC-TRU-TONE CORP. Hibernian Bldg., LOS ANGELES, CAL.

Distributed Nationally by BAKER-SMITH CO., INC., Call Bldg., San Francisco



West of the Rocky Mountains, \$30

Licensed Under Lektophone Patents SANDAR has swept the country, and firmly established itself as a substantial, sensational success. Fans and dealers everywhere have hailed this new cone type speaker as a notable contribution to the refinement of radio reception.

Sandar's remarkable ability to bring out with full value each sound within the scope of the set, its unusually attractive design, and the fact that it is the lowest priced licensed speaker of its sizeretailing at \$27.50 - have made it a universal favorite, and our main problem since the introduction of Sandar a few months ago has been to keep the supply proportionate to the demand.

Join the list of those progressive dealers who are reaping rich rewards by associating with Sandar. There is still some territory available, but prompt action is essential—so write us TO-DAY for territory and full information.

SANDAR CORPORATION / Crescent Plaza Building / Long Island City, New York

HEY, THERE!

Listen to Slagle

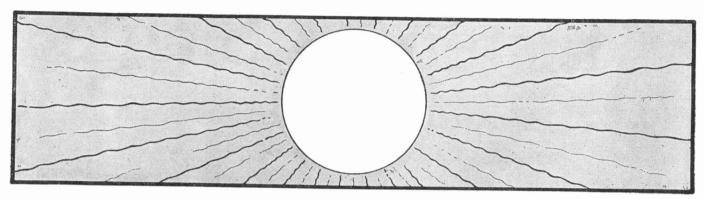
Have you been keeping an eye on Slagle the past five or six years?

If you have, you know we'll soon be coming along now, with some more hot stuff in the way of progress. Just as we have every year. Thinking ahead and acting ahead of the thundering herd has built a darn satisfactory business for us and our dealers. Not the biggest—don't want to be, at the sacrifice of our present standards; but if a nice volume of clean. profitable business, steadily increasing each year, is of interest to you, why—Listen to Slagle. He'll tell you how it's been done before and can be done again.

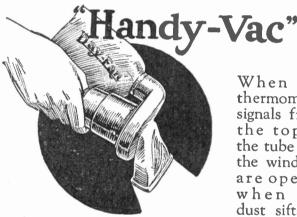
SLAGLE RADIO COMPANY, Ft. Wayne, Indiana



Summer Heat and Dust Make Sales for These Two Day-Fan Products



TALES slow in summer? Business dull in "dog days"? Not if you pick the right products that sell because it's summer. Make money on the heat, humidity and dust of summer days and nights. Read about these two Day-Fan products (one of them is new) then let us give you more information.

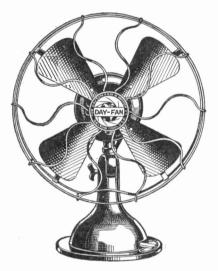


When the thermometer signals from the top of the tube and the windows are openwhen the dust sifts in

and powders the furniture-when it's hot and women want to do their house-work with the least amount of effort—sell the Day-Fan Handy-Vac. "Handy-Vac" is a small sized vacuum cleaner with a full suction - "A Handful of Help." It has a busy nose for dust and finds it out in corners and crannies where a big vacuum cleaner never goes. It fits in the hand -used to clean fabrics, clothes, upholsteryand scores of other uses. Weighs less than 3 lbs.—retails for \$18.75. Not like any other cleaner because it is equipped with the famous Day-Fan Motor. Write us today.

Day-Fan Fans

When the pavements give off heat like a pancake griddlewhen perspiration runs collars to wilts—when the weather takes first place in conversation above politics-sell Day-Fan Fans. Day-Fan Fans have many talking points to help the dealer. They



are Heat Proof—Dirt Proof—Damp Proof—therefore nobody has to coddle them. They run on little current—therefore they can be used for long steady runs-insulation is extra heavy-therefore they can be expected to run for many years. Sold at various prices in various sizes. Write today.

DAY-FAN ELECTRIC COMPANY Dayton, Ohio



DAY-FAN RADIOS Nationally known as the radio receiver used by great broadcasting stations to listen to their own programs.

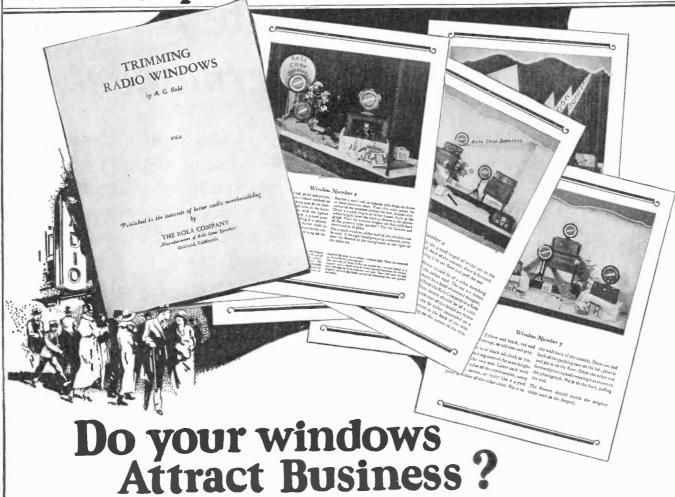


For More Than 38 Years Manufacturers of High Grade Electrical Apparatus



DAY-FAN MOTORS Used as the standard equipment motor to drive the products of 15 leading manufacturers of labor saving devices.

better displays of Radio Merchandise



HERE is a window trimming manual which will assist you in making better displays of radio merchandise, an aid to more sales during the spring months. Prepared by A. G. Rohl, a nationally-recognized authority on window trimming, this booklet has just been published by The Rola Company in the interest of better radio merchandising. It is FREE to radio dealers. Send for your copy NOW as this advertisement is being published only once. In this manual eight easily-installed radio windows are fully described and illustrated, showing how to display all kinds of radio merchandise. Your copy is waiting for you. Write for it on your business letterhead, addressing the Advertising Department of

THE ROLA COMPANY

Manufacturers of Rola Cone Speakers
Oakland, California



The New Balkite Charger MODEL J. Has a low trickle charger MODEL J. Has a low trickle charge rate and a high rate for rapid charging and heavy duty use. Can thus be used either as a trickle or as a high rate charger and combines their advantages. Noiseless. Large water capacity. Visible electrolyte level. Rates: with 6-volt battery, 2.5 and .5 amperes; with 4-volt battery, .8 and .2 ampere. Special model for 25-40 cycles with 1.5 amperes high rate. Price \$19.50. West of Rockies \$20. (In Canada \$27.50.)



Balkite Trickle Charger

MODEL K. For those who require a charger of limited capacity only. Can be left on continuous or trickle charge thus automatically keeping the battery atfull power. Converts the "A" battery into a light socket "A" power supply. Charging rate about .5 ampere. Over 350,000 in use. Price \$10. West of Rockies \$10.50. (In Canada \$15.)



Three New Balkite "B"s

Three New Balkite "B"s
Balkite "B" eliminates "B" batteries
and supplies "B" current from the
light socket. Noiseless. Permanent.
Employs no tubes and requires no replacements. Three models: "B".W at
\$27.50 for sets of 5 tubes or less requiring 67 to 90 volts. Balkite "B".X,
(illustrated) for sets of 8 tubes or less;
capacity 30 milliamperes at 135 volts—
\$42. Balkite "B".Y, for any radio set;
capacity 40 milliamperes at 150 volts—
\$69. (In Canada "B".W \$39; "B".X
\$59.50; "B".Y \$96.)



Balkite Combination

Balkite Combination
When connected to the "A" battery supplies automatic power to both "A" and "B" circuits. Controlled by the filament switch on the set. Entirely automatic in operation. Can be put either near the set or in a remote location. Will serve any set now using either 4 or 6-volt "A" batteries and requiring not more than 30 milliamperes at 135 volts of "B" current—practically all sets of up to 8 tubes. Price \$59.50. (In Canada \$83.)
All Balkite Units oberate from 110-120

All Balkite Units operate from 110-120 volt AC current with models for both 60 and 50 cycles. The new Balkite Charger and Balkite "B". W are also made in special models for 25-40 cycles.

The profit you make on Balkite is clean and permanent

The final profit you make on radio depends on more than the volume of sales you reach. It depends even more on whether or not the devices you sell stay sold. One device returned loses the profit not only on that sale, but eats up the profit on several others.

Balkite Radio Power Units stay sold. They have come to be known not only as the leaders in the radio power field, but as one of the most reliable products in radio. Every Balkite unit is a permanent piece of equipment, with nothing to wear out or replace. You can sell it with the certainty that it will render satisfactory service to your customers for years to come. The profit you make on it is clean.

At this time of year Balkite is always one of the few live lines in the entire radio field. Balkite is one of the few year-round radio lines. Take advantage of this by concentrating your sales-efforts on it and keep the profits of your radio department at the maximum.

FANSTEEL PRODUCTS COMPANY, Inc. North Chicago, Illinois

Balkite Radio Power Units

To the Radio Trade:

THE Latour Corporation desires to call to the attention of the radio trade that it is the owner of the following issued U. S. Letters Patent of Marius C. A. Latour, which are now being widely infringed by manufacturers of radio receiving apparatus:

U. S. Letters Patent No. 1,405,523
granted February 7, 1922
Reissue Patent No. 16,461
granted November 9, 1926
U. S. Letters Patent No. 1,607,466
granted November 16, 1926

U. S. Letters Patent No. 1,614,136 granted January 11, 1927

The Latour Corporation has expended large sums of money in perfecting its patent situation, and intends to enforce its legal rights thereunder against infringers.

Among those who have already acquiesced in and acknowledged the patent rights of Latour by acquiring simple non-transferable licenses are the American Telephone & Telegraph Company, the Western Electric Company, and the Radio Corporation of America.

The Latour Corporation hereby gives notice of its intention to promptly and vigorously prosecute all direct or contributory infringers of the above-identified Latour Patents.

It also directs the attention of the Radio trade to the fact that it is the owner of the following issued U. S. Letters Patent of Brillouin and Beauvais:

U. S. Letters Patent No. 1,404,573 granted January 24, 1922

U. S. Letters Patent No. 1,404,574 granted January 24, 1922

U. S. Letters Patent No. 1,405,267 granted January 31, 1922

U. S. Letters Patent No. 1,465,250 granted August 21, 1923

Infringers of these patents will also be promptly and vigorously prosecuted.

LATOUR CORPORATION

15 EXCHANGE PLACE, JERSEY CITY, N. J.



Million dollar baby for adoption



Magnavox NON-MICROPHONIC TUBES

Now made in wide range of types. Amazing performance and extra long life. Anti-noise feature gives you individual selling point. THIS youngest member of the Magnavox family—Stanford Model Cone Speaker—has a rich heritage of public good will. A million dollars has been spent for advertising Magnavox Speakers—untold millions of dollars worth of publicity in publications have made the name Magnavox literally a synonym for radio speakers. No speaker name is better known or more favorably.

The sales value of this good will is focused upon your store the minute you stock and display Magnavox Cone Speaker. This goes for Magnavox sets and tubes also. Write us for money-making sales plan.

THE MAGNAVOX COMPANY General Offices & Factory, Oakland, Calif. Chicago Sales Office, 1315 S. Michigan Ave.



Magnavox CONE SPEAKER UNIT

Fits any cabinet. Only four screws to turn for installation. Takes wall op from biggest set. Matches quality of the best sets.

AGNAVOX Sets · Speakers · Tubes Modern Retail Merchandising



This training available after March 15, 1927

A GREAT many announcements are printed in this paper in the course of a year in the hope that they will be read by every merchant.

But occasionally a really important announcement appears — so important that every live merchant who is in business to make a profit, and who has made storekeeping his life's work, should read it carefully.

This is such an announcement—for it touches the very progress of retail merchandising and is probably the first important step along this particular line that has ever been taken.

For eighteen years the Alexander Hamilton Institute has been offering an Executive Training to business men thru its Modern Business Course and Service. It has enrolled in this Course of training over 300,000 men, among whom are many of the leading business executives of the country.

Meeting the Retailer's Needs

It is not an exaggeration to say that there is hardly a manufacturing, industrial, or financial organization of any size which has not at least some of its important executives enrolled with the Alexander Hamilton Institute. As one prominent business man said, "The list of subscribers to the Institute Course reads like a list of Who's Who in Big Business in America."

As a result of its unusual success in training business men in all fields the Alexander Hamilton Institute has, because of the frequent demands of retailers, finally developed a Course of training in Retail Merchandising.

It will be a one year's Course and will be known as

The Modern Merchandising Course and Service

This training available after Marh 15, 1927, will be given in exactly the same way and follow the same successful methods that have made the Modern Business Course so helpful and so highly regarded by leading business men—this method is a carefully directed course of reading designed to fit into your spare time, supplemented by personal service in response to inquiries.

With the co-operation of the leading authorities in every field of Retailing, the Alexander Hamilton Institute has assembled the fundamental facts and principles of Modern Merchandising in this new Course and Service. Every man ambitious for success in retailing—every owner, every general executive, every buyer, every controller, every merchandise manager—all men who must think and decide will find sound guidance here.

A booklet called "Progress and Profits," giving interesting details about the Modern Merchandising Course and Service, is on the presses now; the first edition will be quickly exhausted. For a complimentary copy write at once.

ALEXANDER HAMILTON INSTITUTE

Among the authors of the Texts, Written Lectures, Modern Merchandising Reports and other material, are the following men:

DR. PAUL H. NYSTROM, Director of the Associated Merchandising Corporation; DR. LEE GALLOWAY, First Director of the School of Retailing, New York University, a well-known authority on Store Management; EDGAR J. KAUFMANN, President of Kaufmann's, Pittsburgh; J. C. PENNEY, Chairman of the Board, J. C. Penney Company; JOSEPH CHAPMAN, President, L. S. Donaldson Company, Minneapolis; PERCY H. JOHNSTON, President, Chemical National Bank of New York;

JOHNBLOCK, Kirby, Block & Fischer, Resident Buyers; AMOS PARRISH, Director, Amos Parrish & Company, Store Promotion Counselors; COLDAVID MAY, Chairman of the Board, May Department Stores; CLAYTON POTTER, President, United States Stores; W. T. GRANT, Chairman of the Board, W. T. Grant Company; WILLIAM N. TAFT, Editor, Retail Ledger; JOSEPH HUSSON, President, Eleto Company, New York;—and many others.

INSTITUTE
teret de la companya
16 Astor Place New York City
ress and Profits; which tells all about the Modern Merchandising Course and Service.
spergraph Position
pp.
Business Address

One Minute After you read this Advertisement—

YOU can have a live resident merchandising office in New York City for \$2.00 a month. You can have stenographic service, all the facilities of a modern office, a place to show your merchandise. This office will be directed for you by MARK MAX, the outstanding figure in retail merchandising of radio, phonographs and pianos. Mr. Max actively heads this service, known as Radio Merchandisers, Inc.

What Radio Merchandisers, Inc., Can Do For You

RETAIL OUTLETS—MARK MAX has a record of sales achievement in radio equalled by no other individual in the business. His sales counsel has been purchased by individual concerns for sums in excess of \$50,000. His advice and counsel on any particular sales problem, on securing retail outlets and increasing business, comes within the scope of the service rendered to manufacturers.

TREMENDOUS SALES CHANNELS—Department stores, dealers, large buyers, throughout the country know MARK MAX and value the proposition he sponsors.

CONVENIENCE—To have an office in the new Equitable Life Building, directly opposite the Pennsylvania Station, is a valuable adjunct to the sellng facilities of every manufacturer. This office can be considered as your office with telephone and stenographic service as well as space to show merchandise and private offices in which specific plans may be discussed without interruption.

12 MONTHS' TRIAL OFFER

Radio Merchandisers, Inc., Room 1310, Equitable Life Insurance Bldg., 32nd St. and Seventh Ave., Opposite Penn R. R. Station, New York, N. Y.

Gentlemen:

I will avail myself of R. M. I. Service for 12 months. I enclose \$24.00 to cover the cost of this service.

Every Manufacturer

Should Be Linked Up with R. M. I.

Surely any manufacturer will find the value of this worth many times the nominal charge made. Have your secretary send the coupon below at once.

One Minute After you read this Advertisement—

YOU can have an active resident buying and merchandising office in New York for \$1.00 a month.

This office will be directed for you by MARK MAX, the outstanding figure in retail merchandising of radios, phonographs and pianos. In his twenty-five years' merchandising experience, MARK MAX has sold thirty-five million dollars worth of radios, pianos and phonographs. You can use such experience to immediate advantage in your own store. MARK MAX actively heads this service, which will be known as Radio Merchandisers, Inc.

What Radio Merchandisers, Inc., Can Do For You

REPRESENTATION—On any line of radio or musical goods which you want to carry, we can secure the best terms for you.

TREMENDOUS BUYING POWER—You can buy merchandise through R. M. I. with a buying power equivalent to the largest department stores.

CONFIDENTIAL INFORMATION—Any question you may have about any manufacturer or distributor or the condition of retail sales or the market in general, will be accurately and promptly answered. (All such inquiries should be accompanied by a stamped, addressed envelope.)

MERCHANDISING SUGGESTIONS—There will be always available to you a consulting service in merchandising and sales promotion ideas.

PRESTIGE—The prestige and convenience that come from having a buying office in New York.

Be The First Store

In Your Territory To Avail Yourself of The Advantages of This Service.

This service means immediately increased profits—better terms—more sales. Waste no time in using it. Mail the coupon today.

SIX MONTHS' TRIAL OFFER

Radio Merchandisers, Inc., Room 1310, Equitable Life Insurance Bldg., 32nd St. and Seventh-Ave., Opposite Penn R. R. Station, New York, N. Y.

Gentlemen

Service for six months, I enclose \$6.00 to cover the cost of this service.

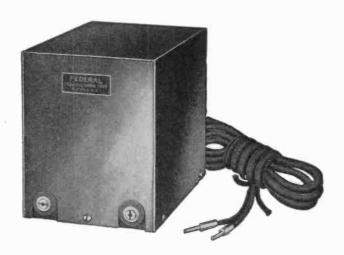
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FARRAND MFG. CO., INC. · LONG ISLAND CITY, N. Y.

The Sign of the Designated Federal Retailer





Federal Ortho-sonic Speaker Coupler

This is the latest Federal contribution to better radio. The one development needed to achieve perfection of tone reproduction.

Its sales possibilities can be convincingly measured by these selling points:

- 1. Tone enhanced beyond the point of merely good reproduction, and now more beautiful than ever.
- 2. Protection for the loud speaker from the effects of heavy battery voltages.
- 3. Unlimited use, with any type of set or tube, and especially recommended where the power tube, such as UX112 or UX171, is used in the receiver.
 - 4. Applicable to any set installation

and particularly well suited to Orthosonic.

- 5. Finished in satin black with black silk cord, really an added appointment to the finest set arrangement.
 - 6. Attached in less than two minutes.

The quality of the Federal Orthosonic Speaker Coupler is in keeping with that of Federal Orthosonic receivers.

This device, and all other new Federal developments, are available only to Designated Federal Retailers.

If you have not investigated Federal Ortho-sonic Designation, do so today. Write to the Federal Wholesaler in your territory. If you do not know his name, write us.

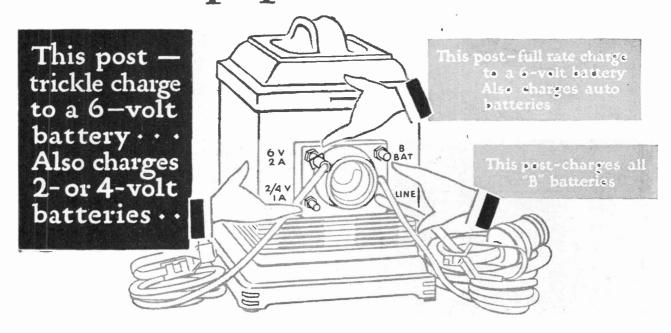
FEDERAL RADIO CORPORATION, Buffalo, N. Y.
(Division of Federal Telephone and Telegraph Co.) Operating Broadcast Station WGR at Buffalo

ORTHO-SONIC*

The fundamental exclusive circuit making possible Ortho-sonic reproduction is patented under U.S. Letters Parent No. 1.582.470

Federal Radio

The 2 ampere Tungar is now more popular than ever



Since dealers have told their customers, and since General Electric has advertised to the millions, the fact that the 2-ampere Tungar can be used as a Trickle Charger, too, sales have made surprising gains.

Stress this point. It pays. Just point out the posts on the back of the Tungar and show your customers how attaching to one post gives a 6 volt "A" battery a trickle charge and attaching at another gives it a full rate boost.

The 2-ampere Tungar will also charge 2 or 4 volt "A" batteries, all "B" batteries, and automobile batteries, as well.

There are important sales helps available—why not ask your jobber for them?

East of the Rockies

2 ampere Tungar - - \$18 5 ampere Tungar - - \$28 Trickle Charger - - \$12

Merchandise Department General Electric Company Bridgeport, Connecticut



Tungar—a registered trademark—is found only on the genuine. Look for it on the name plate.

GENERAL ELECTRIC

MERCHANDISE DEPARTMENT

GENERAL ELECTRIC COMPANY

BRIDGEPORT, CONNECTICUT



ARGEABL

The TAB Rechargeable Dry Cell "A" enjoys the same rechargeable features as the famous TAB "B" Battery. Longer original life, longer shelf life—and can be recharged from 6 to 8 times.

The success of TAB Rechargeable Dry "B" Batteries is ample proof of how the radio trade will welcome this new product. Its success is assured from the start. Furthermore, the market for TAB Rechargeable "A's" is greatly enlarged by the fact that they are highly desirable for ignition and all general uses.

Write for Literature and Prices

 $1\frac{1}{2}$ Volts—Retails at 65c.

DRY STORAGE BATTERY CORP.
213 South Broad Street,
Philadelphia, Penna.



Exceptionally Clear and Resonant— Volume without Distortion

Every desirable quality the radio listener wants—and demands—is embodied in this fine instrument.

A tone that is mellow, resonant and clear, reproducing exactly all the finely shaded notes of voice or musical instrument.

A range capable of reaching high up the scale and catching those flutelike notes of violin so often lost and, without adjustment, reproducing with equal fidelity the deep rumbling tones of the bass viol.

Volume sufficient to fill a hall without blasting, without harshness and without distortion. The ideal reproducer for use with powerful sets, yet equally serviceable with any set having loud speaker volume.

Gracefully designed along simple artistic lines that meet every requirement of good taste. Finished in a neutral brown shade that will harmonize with any furnishings.

And with all these fine qualities—qualities that are quickly evident upon demonstration—there is the price—unusually low for an instrument of this character—\$20—no greater than you are obliged to charge for speakers that belong on a much lower plane.

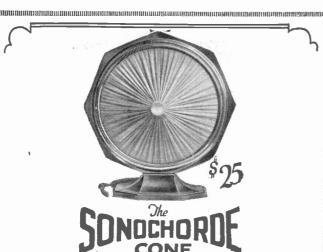
Get in touch with your jobber at once.

He will allow you the usual radio discount.



5239 Greene St., PHILADELPHIA, PENNSYLVANIA

Makers also of Wirt Radio Lightning Arrester, Wirt Radio Wall Insulator and the Wirt Dim-a-lite



EQUIPPED with super-powered unit that does not blast or distort on power tube amplification. Reproduces with equal clarity on voice and music,—both high and low tones. Beautiful rich wine-colored silk front. Many exclusive features.

Set manufacturers recommend Sonochorde for quality.

Order a sample and see why.

Factory Sales Agents

Hastings Electric Co., 42 Binford St., Boston

Manufactured only by

Boudette Mfg. Co., Chelsea, Mass.

A New Sonatron

for B ELIMINATORS

SONATRON'S latest achievement holds rich possibilities for dealers! A great new field of sales is opened by the SH 85, a Gas-Filled Rectifier Tube which will give superlative service in any B eliminator. Delivers an unusually smooth, uniform and dependable flow of current. And this new tube is fully backed by the famous Sonatron Guarantee!

Write for the Sonatron Proposition!

Sonatron's nationwide prestige, Sonatron's position as the manufacturers of the world's largest tube line, make the Sonatron proposition of vital importance to you. Sonatron's 30 distinct types—one for every radio need—means more sales and greater profits for 1927.



TYPE SH 85
Surface-Cooled GasFilled Full - Wave
Rectified Tube No
Filament.
Maximum Output 85
Milliamperes, 200 volts.

SONATRON TUBE COMPANY

108 W. Lake St., 16 Hudson St., 320 Lafayette Bldg.,
Chicago New York Detroit
Newark, N. J. Windsor, Ont., Can.

SONATRON

Nationally SONATRON Standard





A clip that will attract attention on your counter

Hartung Clips are so much better than the ordinary type that they attract attention.

Their one piece construction allows a continuous current flow. Their extra heavy lead coating makes crystallizing impossible.

Just place this selling carton on your counter. Customers quickly notice the difference between these clips and ordinary clips.

Quantity price on single carton orders.

Order from your jobber or write us direct for samples.

C. F. HARTUNG 728 E. 61st St., Los Angeles, Cal.



00 07:10 000 000 12 0 000 0 270 GARANTAR ALDOO 000 : 070 025 ECCO SACCASTAR ACTORES DE CO

Instantly converted from trickle charge to fast rate charger by throw of toggle switch. Thus the charging rate is changed from $\frac{1}{2}$ ampere to $2\frac{1}{2}$ amperes, permitting immediate strengthening of any battery. Dealers and users everywhere recommend this triumph by Interstate. Has no moving parts to wear or get out of order. No chemicals to spill. Quiet. Fits any radio cabinet that has provision for "A" Power unit. Size, 5-in. x $5\frac{1}{2}$ -in. x $7\frac{1}{2}$ -in. Weight only $9\frac{1}{2}$ pounds. Almetal case finished in beautiful Brewster green.

Ask Your Jobber or Send Direct

I N T E R S T A T E ELECTRIC COMPANY

4351 Duncan Ave., ST. LOUIS, MO.

For that vital thing, Selectivity— NEUTRODYNE!

GET a Neutrodyne set and prove to yourself that its selectivity is proper. Here is the simple way to do it: Listen late in the afternoon, before the majority of stations have come on, or late at night, after the majority have signed off. Run up and down the dial. Find two distant stations separated by 10 kilocycles. Several such couples should be available. Note that one such station is heard perfectly, without a trace of its neighbor only 10 kilocycles away in frequency.

Such is Neutrodyne's proper and satisfactory selectivity.

Many sets are not nearly as sharp as that, and so they admit unwanted signals. Others are sharper, or can be so controlled as to be so—which is wholly undesirable, as then the side bands are shaved off and quality of reproduction is ruined, in the attempt to split the unsplittable.

Don't let the present chaos in the air fool you. It will not last, for the new Radio Commission will end it, and it need not spoil radio enjoyment for your customers now any more than in the future. Hundreds of thousands of Neutrodyne owners find their sets meeting even the jumble of unbridled broadcasting and they are looking forward, not impatiently, but interestedly, to the early day when proper separation between broadcast stations will increase the number of available programs.

The period of chaos is but adding to Neutrodyne's reputation, for the public today is having a convincing demonstration that Neutrodyne's absolutely accurate, scientifically correct selectivity separates stations with no sacrifice in tone. With radio once more under Government control the reputations created during these difficult times will carry Neutrodyne sales to heights never before reached.

GET A NEUTRODYNE

HAZELTINE CORPORATION

(Sole owner of Neutrodyne patents and trade-mark)
15 Exchange Place, Jersey City, N. J.

All correspondence relating to the Hazeltine patents and trade-mark should be addressed to

INDEPENDENT RADIO MANUFACTURERS, INC. (Exclusive licensee of Hazeltine Corporation)

331 Madison Avenue, New York, N. Y.

LOOK for this trade-mark

LICENSED BY

LICENSED BY

RADIO MANUFACTURESS, ANC.

RADIO MANUFACTURESS, AN

It is your protection against patent infringement liability

A Beautiful Console Table—

A Special "Buy" Appeal that opens up new sales in summer work

A cabinet selling opportunity you have never had before—and it comes in the summer months, when you most need sales!

A well made, beautifully finished console that you can sell at an astonishingly low price. It harmonizes with most of the popular table sets being sold today, including the Radiola 20.

Your inspection calls on customers, give you a splendid opening for selling such a piece of furniture at this price. The profit you make is more than generous.

The panelled top is of beautifully figured selected gum veneer while the posts and rails are of solid gum. A loud speaker shelf draws out from either side. Size-30-in. high, 21-in. wide, 18-in. deep. Cabinet Makers Since 1848 Producers of Radiola Cabinets



Aimone Furniture Company 1565 Boulevard, Jersey City, N. J.

Eagle Multiple 16B Gang Charger



Tube type rectifier for service station work. Charges one to sixteen auto or radio batteries at six (6) ampere rate.

ampere rate.

Will charge sixteen batteries in same length of time as one. Equipped with accurate ammeter showing charge and discharge, double throw switch and is fused in the A.C. line and in Battery circuit.

110 volts—60 cycle

NET price, \$85.00 with bulb.

220 volts—60 cycle

220 volts—60 cycle NET price \$105.00 with bulb.

EAGLE CHARGER CORPORATION 121 N. Eighth Street, Philadelphia, Pa.



Quality reproduction is a powerful sales force



AMPLION PATRICIAN
AA18 List \$50
AMPLION CONE
AC12 List \$30
AMPLION GRAND
AC15 List \$135

SE a Patrician in your demonstrations. The deep, mellow tone of this 48-in. aircolumn model will help you to close many a sale.

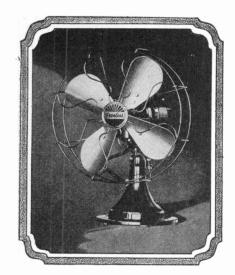
Customers desiring a cone will find complete satisfaction in this splendid instrument famous for its natural tone.

This Amplion leader employs a new principle of reproductioncombining air-column, cone and sound-board. Handsome walnut cabinet.

Write for details of the complete Amplion Line, models \$12 to \$135



THE AMPLION CORPORATION of AMERICA Dept. E, 280 Madison Ave., New York City





Your Ship can't come in without a breeze— Peerless Fans for Summer Slump

Radio dealer and jobber business in summer is in many cities like a sail boat in a calm—there's nothing to make it go.

But expenses—rent—overhead, etc., go on just the same. The sales either must be carried over dull months, or broken up and expensively rebuilt in autumn.

Obviously, the radio trade in its present stage of development, needs something which sells exclusively in summer—something which can be sold by the same men, from the same stores.

And that is a job just suited to the electric fan. As the weather warms—choking radio sales—demand for electric fans jumps.

They are easily sold by the same people in satisfying volume. Radio prospects are just as good for fan sales.

Peerless Fans present the quality—the price—the appearance which exactly suit the market. Silent, powerful, durable—built for the man who wants to give his customers a real article for their money.

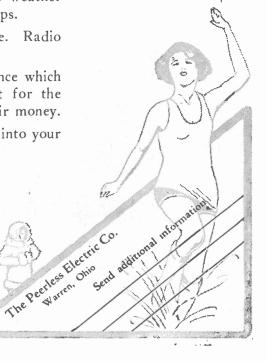
Send for our proposition. Prepare to get some extra wind into your sales next summer.

THE PEERLESS ELECTRIC CO. WARREN, OHIO

Deerless Forn

Radio for Winter—

Peerless Fans for Summer





GOLD SEAL ELECTRICAL CO., Inc.

GOLD SEAL ELECTRY York, N. Y.

GOLD SEAL ELECTRICAL CO., Inc.

GOL

CITY

Address

Name

Jobbers-A few at-

tractive territories still open, — write for details at once.



MAXIM HORSHOY

248 Greenwich St., N. Y. City

A B C 5th Edition, Bentleys And Western Union 5 Letter Codes Cable Address: "HERSHEYMAX, N. Y."

Exclusive Export Agent for YANKEE—WESTERN—SUPREME—ELDREDGE

voltmeters, hi-dro METERS AUTO AMMETERS, **AUTO LOCKS, Etc.**

RETRON-MUSIKTRON-WESTERN REGAL-MITCHELL 201A, 199, UX112, 200A, WD12, WD11, UX171, HIMU

RADIO TUBES

SUPERETTE-NEWTONE **Cone Speakers and Head Phones**

I also can offer to advantage standard merchandise such as Brandes Phones, all kinds of Coils, Jacks, Sockets, Condensers, Plugs, "A," "B," "C" Dry Batteries, Loud Speaker Units, Vernier Dials, Hydrometers, etc.

> I can also act as your Buying Agent on a commission basis

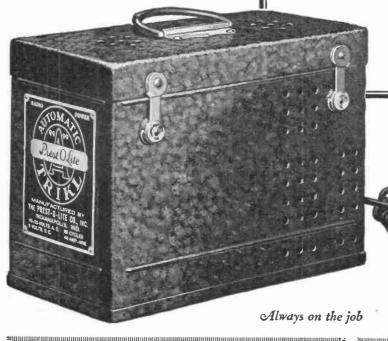
Write Me At Once WITH FULL DETAILS

Prest-O:Lite

TRIKL-"A" POWER UNIT

Just plug into a light socket and forget it.

The charger in this unit has no bulbs . . no liquid . . no moving parts . . no noise.



A Message to Retailers:

Dealers who have sold this unit have nothing but the highest praise for it. They tell us that it turns chronic

kickers into satisfied customers. because it eliminates so many sources of dissatisfaction. The charging unit is automatic and practically fool-proof. The battery is built for unfailing service

and there is real profit in it. Write for complete details.

THE PREST-O-LITE CO., Inc. New York INDIANAPOLIS San Francisco Unit of Union Carbide and Carbon Corporation

A Real Sales Maker

Made of selected genuine
Mahy, or Amer. Walnut Plywood. Finished two tone
Antique Brown Mahy. or
American Walnut. Battery
Compartment, High grade
Loud Speaker Wood Horn and
UTAH LOUD SPEAKER
UNIT COMBINED, 30-in,
High, 32-in. Wide, 15-in,
Deep. Average shipping
weight 62 lbs. Frice Antique
Brown Mahy, \$35.00. Price,
Antique Amer. Walnut \$36.75.

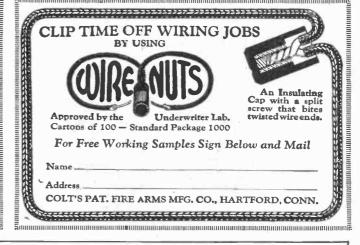
Write for tideral jobber and dealers discounts.

Exclusive United States Sales Representatives Radio Console No. 505

SANFORD BROS.

CHICAGO, ILL.

CHATTANOOGA, TENN.
615 Broad St.
SAN FRANCISCO, CAL.
311 Minna St.



ALL METERS FULLY **GUARANTEED**



Yankee Hi-Dro-Meter For testing 6 volt radio storage bat-teries. YANKEE METERS

Complete line of pocket and panel meters.

Here is an indispensable new line of meters for both radio and automotive trade. Handy, compact, correctly priced! Radio panel meters in three styles—volts, amperes, or milliamperes.

JOBBERS AND DEALERS: If you are not now handling 0-10 Volts-0-100 Volts YANKEE METERS write for prices and discounts.

N. Y. and Export Office, M. Hershey; 248 Greenwich Street, N. Y., N. Y.

LUNDQUIST TOOL & MFG. CO., 144 GREEN ST., WORCESTER, MASS.

The original Portable Radio Set

OPERADIO

More Operadios sold than all Other portables combined

The greatest Operadio ever built at the lowest price ever offered

\$112.00

LIST
(without tubes or batteries)

A radical price reduction of \$48 on the model-7 Operadio—the unchallenged leader for five years in the portable field—offers dealers an unequalled opportunity to swell their profits during the Spring and Summer months.

This new 7-tube set is the greatest Operadio ever built. Greatest in power, in tonal quality, in range and selectivity! It is the result of five years concentrated effort in developing a practical, long-lived portable. Old timers in the industry know the supremacy of Operadio.

Operadio portable sales will be big in spring and summer

The demand for the only available, reliable, standard portable—Operadio—is tremendous in Spring and Summer.

Its desirability for outings, camps, tourists, etc makes it a big seller at this time. You can do a very profitable

business on Operadio in the months just ahead—and make a good profit.

Operadio engineers have developed a new A and B eliminator which may be completely self contained in the cases of all Operadio models. Ask us about it and—

Write or Wire for terms of our new franchise Operadio Manufacturing Co., 700 E. 40th St., Chicago, Ill.



Write for Complete Data Sheet

MFG. CO. Inc. . . . PROVIDENCE

The Enchanter Radio Cone Speaker

A RICHLY decorative radio cone speaker capable of reproducing the entire tonal scale with true, full fidelity. Operates equally well without or with power tube.

THIS strikingly beautiful radio cone speaker makes an instantaneous appeal to the eye. The cast metal galleon is hand decorated in polychrome colors of silver grey, green, yellow and red.

Sells at \$30 list.

National Distributors

Baker-Smith Co., Inc. Call Bldg., San Francisco, Calif.



Height 15 in., Diameter 13 in.

ANNOUNCING The New WESTON Model 519 Radio Set Tester



A Complete Trouble Shooter For Any Radio Set

Tests all battery and battery eliminator voltages.

Tests conditions of tubes.

Tests circuit continuity.

(No auxiliary batteries needed other than in set.)

Providing for Every Servicing Need

For use with any set.

Has three voltage ranges 200, 80 and 8, and a 20 Milliampere range.

Resistance 1000 ohms per volt.

Only 1 Milliampere for full scale deflection.

Rotary range-changing switch.

The Best Instrument so far developed to Reduce Your Radio Servicing Overhead

(Weston Instruments will be displayed at the R. M. A. Trade Show, Chicago, July 13-18, 1927)

WESTON ELECTRICAL INSTRUMENT CORPORATION
25 Weston Avenue, Newark, N. J.





Licensed Under Pats. Granted and Pending
The "Truphonic" Six

++\$||\$++

Will It Pay To Tie Up Early With The



With the big "Truphonic" Senior Six at \$125, for those who think of fine workmanship first and price last:

- —with the new "Junior" Six at \$80, for those who want the high standards of Elkay engineering in a lower priced receiver;
- —with both of these models now being electrified for socket connection;
- —with a complete line of high-grade Consoles to fit all Elkay models, available through the cooperation of The Pierson Co., Rockford, Ill., noted designers;
- —with list prices and discounts that make it well worth while to become identified with the line;
 and
- —with a real exclusive franchise, backed by intelligent service;
- -well! We'll leave it to your judgment.

A hig Elkay year has just come to a close. Another is just starting. If you are looking for a line that is always on the forward move, get in touch with us while your territory is open.

THE LANGBEIN-KAUFMAN RADIO CO. Dept. M. 62 Franklin St., New Haven, Conn.



The New "Junior" Six

You BENEFIT

EVERY person in industry and trade who answers a McGraw-Hill questionnaire directly contributes to the welfare of the particular business with which he is identified.

McGraw-Hill makes it a rigid policy not to send you a questionnaire unless the information which you possess can be made of vital interest to American business.

The success of McGraw-Hill Publications in obtaining basic information is due to general recognition of the fact that a McGraw-Hill questionnaire is accepted in this spirit everywhere in industry and trade.

THE PUBLISHERS

SEARCHLIGHT SECTION

SURPLUS STOCKS—BUSINESS OPPORTUNITIES

UNDISPLAYED—RATE PER WORD:
Positions Wanted, 6 cents a word, minimum
\$1.25 an insertion, payable in advance.
Positions Vacant and all other classifications,
10 cents a word, minimum charge \$2.00.
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INFORMATION:

Box Numbers in care of any of our offices count 10 words additional in undisplayed ads. Discount of 10% if one payment is made in advance for four consecutive insertions of undisplayed ads (not including proposals).

DISPLAYED—RATE PER INCH:

1 to 3 inches......\$6.65 an inch
4 to 7 inches.........6.20 an inch
5 to 14 inches.........6.20 an inch
Rates for larger spaces, or yearly rates, on request.
An advertising inch is measured vertically on
one column, 3 columns—30 inches—to a page.

Radio Retailing

SALESMEN WANTED

Valuable Territory Open

Large company offers salesmen calling on hardware, electrical and radio trade good side line proposition on complete dry cell line. Real opportunity. The Comet Company, Department D, 5100 Superior Ave., Cleveland, O.

CASI

We want your

SURPLUS RADIO STOCK

Send us your list and lowest cash price

EMPIRE RADIO CO. 216 Washington St., Boston, Mass. CASH

BAKELITE PANELS

Make offer, all or part of 9000 Bakelite panels $^{3}_{78}x8x21,$ one side standard Black finish, other side dull black finish. Box

FS-31, Radio Retailing 7 So. Dearborn St., Chicago, Ill.

"SEARCHLIGHT" Opportunity Advertising

—to help you get what you want.

—to help you sell what you no longer need.

Take advantage of it-For Every Business Want

"Think SEARCHLIGHT First"

HELPING Manufacturers to serve YOU More Efficiently

THROUGH McGraw-Hill questionnaires we have been able to give manufacturers facts which have helped them standardize on sizes most acceptable in a particular industry.

We have also through McGraw-Hill questionnaires been able to convince manufacturers that they have been delinquent in rendering service.

So when you receive a McGraw-Hill questionnaire you can fill it out, confident that it will return to you in the form of better service to your business.

THE PUBLISHERS

Power Tubes MUST Have Power

There's trouble ahead for the dealer who equips a set with a 171 Power Tube and then fails to make sure that the "B" supply actually does deliver the required 180 volts. Ordinary "Eliminators" will not hold up to 180 volts on high current consuming sets. A special "B" supply is vital. The Kellogg "B" Power Unit is made to fill this want.



180 Volts Guaranteed With 40 Milli-ampere draw

(and 110 volt A. C. supply)

Here's the "B" supply that will make your high current consuming set perform 100%. How it will cut down your service expense! How it will solve those mysterious complaints that arise when you trust to rated voltages and fail to check up the "B" supply with a high resistance volt meter, when in actual use on the set.

Dealers! Jobbers! Investigate!

This matter of equipping your sets with adequate "B" voltage is vital to your business. Look into it at once. Mail the coupon for full details.

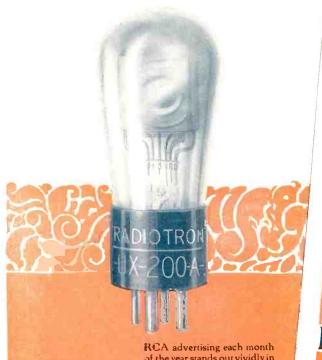
Kellogg Switchboard & Supply Company
Chicago

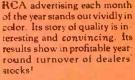
KELLOGG SWITCHBOARD & SUPPLY CO., Dept. RR-1, Chicago, Illinois.	
Please send me full details concerning your "B" Power Unit for supplying adequate voltage for high current consuming sets Power Tubes.	designed especially equipped with 171
Name	
Address	

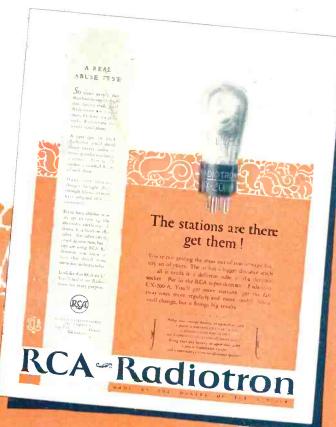
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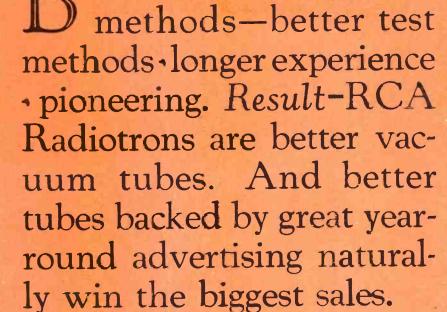








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